

## CERTIFIED HOMEOPATHIC ONLINE COURSE - SESSION 10:

### • Clinical Studies

Homeopaths point to the nearly two hundred years of clinical experience of convinced doctors and satisfied patients. Homeopathic remedies are believed to be effective in treating a wide variety of illnesses: infectious diseases such as flu and colds; chronic conditions such as allergies, asthma, migraines, and PMS. Conventional medicine has not had much of success in treating many of these conditions.



Several clinical studies exist that show the effectiveness of homeopathic remedies. Many of these studies employed double blind studies, accepted by scientists. Recent clinical trials suggest that homeopathic medicines have a positive effect on allergic rhinitis, asthma, treatment of dermatological complaints, fibrositis, influenza, and for the treatment of migraines.

In 1994, the first study that involved homeopathy was published in a peer-reviewed American scientific journal. Jennifer Jacobs, M.D., led the study, which was conducted in Nicaragua and included eighty-one children with acute diarrhea. All the children received standard anti-dehydration treatment for diarrhea, consisting of water containing salt and sugar. In addition, half the children received homeopathic treatment and half received a placebo. The study confirmed homeopathy's effectiveness: the recovery time for children receiving homeopathic treatment was 20 percent faster than those receiving the placebo, reducing the bout of diarrhea by one day. These results are heartening because diarrhea is the leading cause of death in developing countries such as Nicaragua.

In 1991, the British Medical Journal published an analysis of 107 clinical studies published between 1966 and 1990. The authors found that in 81 of the experiments, the homeopathic treatments were successful. Even when they included only the 23 studies that they considered to be of the highest quality, the vast majority of these (15) showed positive results. Here's how the results broke down: 13 out of the 19 trials of respiratory infection treatment were effective, 6 out of 7 were positive for other infections, 5 out of 7 were positive for digestive system treatment, 5 out of 5 were successful for hay fever, 5 out of 7 showed accelerated recovery after surgery, 4 out of 6 helped in rheumatological disease, 18 of 20 were beneficial for pain or traumatic injury; and 8 out of 10 worked for mental or psychological problems.

In one study published in Lancet by Dr. David Taylor Reilly and his colleagues compared the effects of a homeopathic hay-fever remedy with a placebo. In this double-blind controlled study, Dr. Reilly found that those who received the homeopathic remedy had six times fewer symptoms and were able to cut their use of antihistamines in half.

Another study published in 1989 in the British Medical Journal dealt with fibromyalgia. The double-blind, controlled trial was also "crossed over," meaning the treatment lots were switched after one month so the subjects could be compared, not only with each other, but also with themselves. The results were evaluated by a rheumatology professional who was not a homeopath. The study found that the homeopathic remedy provided highly statistically significant improvement in both subjective and objective symptoms.

In a double-blind controlled study conducted in Britain in 1980, 82 percent of those receiving the homeopathic remedy enjoyed improvements in rheumatoid arthritis versus 21 percent of the control group on placebo. The subjects in this study received remedies that were individually prescribed.

Other significant positive studies show homeopathy helps in pain following tooth extraction (76 percent versus 40 percent for a placebo); reduces vertigo and nausea; reduces labor time in pregnant women (5.1 hours versus 8.5 hours); and reduces risk of abnormal labor (11.3 percent versus 40 percent).

Two double-blind studies compared Quietude, a combination of homeopathically prepared plant extracts that has been very popular in France, with diazepam (Valium). The subjects were adults and children who were nervous and suffered from sleeplessness. The results showed that the homeopathic product increased sleep time, reduced interruptions during sleep, and reduced nervousness. Both products relieved insomnia and minor nervous tension 63 percent of the time. However, the homeopathic remedy produced no side effects: there was no daytime dizziness, as opposed to 13 percent of the diazepam group. Homeopathic remedy group suffered no daytime drowsiness, but 53 percent of the diazepam group felt drowsy. In addition, Quietude was better at reducing children's nightmares, and 74 percent of the Quietude patients said the product was better than other treatments, as opposed to 48 percent of the diazepam group who felt this way.

A study, conducted in 1985, found that patients who took the homeopathic product Oscillococcinum, derived from duck heart and liver, experienced reduction in their fever much rapidly (in two days ) than those who took placebo. Shivering disappeared by day four. In another controlled study, published in 1989 in the British Journal of Clinical Pharmacology, 66 percent more of the Oscillococcinum group recovered within forty-eight hours as compared to the placebo group.

Clinical studies show the effectiveness of homeopathic remedies in treating infectious diseases. In a French study published in 1987, silica, prepared homeopathically to the 10c potency, stimulated macrophage activity by nearly 70 percent. Macrophages are white cells belonging to the immune defense system that destroy harmful cells and microorganisms. Homeopathic remedies were also shown to be effective in correcting immunological disorders in mice. In other studies, eight out of ten homeopathic remedies tested were able to inhibit the growth of viruses (in chicken embryos) by 50 to 100 percent.

Other studies show the usefulness of homeopathic remedies in treating diabetes. A 1992 study examined sixty people with retinal problems due to diabetes. In approximately half of the patients taking the homeopathic remedy (Arnica), the eye condition improved; only 1 percent of the subjects receiving placebo improved a like amount. The subjects were evaluated using objective measuring instruments, indicating that homeopathy may prove valuable in helping this group of diabetics preserve their sight.

Conventional physicians often belittle homeopathic remedies and their effectiveness to placebo effect. However, several studies on animals and infants show that homeopathic remedies do work. Obviously, animals and infants are less likely to be influenced by placebo. In Germany, poultry farmers are treating their hens with homeopathic remedies instead of antibiotics for coughs, colds, and digestive problems. Farmers also treat their cats, dogs, horses, cattle, and birds homeopathically.

Other animal studies add to the evidence. A 3x potency of Chelidonium lowered cholesterol in rabbits by 25 percent. Micro doses of Arsenicum (10x up to 30x; and 5c up to 15c) helped rats eliminate toxic doses of arsenic from their systems, a study that has important implications for humans who are increasingly exposed to many heavy metals in the environment. And pigs given Caulophyllum had half as many stillbirths as those who received a placebo. Homeopaths have been reporting good results when treating infants for common health problems such as teething, colic, eczema, and fever.

## Names of Homeopathic Medicines

Most of the Homeopathic medicines are referred to by their Latin names. The table below shows some of the common Homeopathic medicines and their Latin names. (Source: Natures Cures, by Michael Castleman)

Table: Latin Name and Common Names of Homeopathic Medicines

Latin Name	Common Name
<i>Allium cepa</i>	Onion
<i>Apis</i>	Crushed bee
<i>Arnica</i>	Mountain daisy
<i>Belladonna</i>	Deadly nightshade
<i>Bellis perennis</i>	Daisy
<i>Berberis</i>	Barberry
<i>Bryonia</i>	Wild hops
<i>Calcarea carbonica</i>	Calcium carbonate
<i>Calendula</i>	Marigold
<i>Cantharis</i>	Spanish fly
<i>Caulophyllum</i>	Blue cohosh
<i>Chamomilla</i>	Chamomile
<i>Cimicifuga</i>	Black snakeroot
<i>Colocynthis</i>	Bitter cucumber
<i>Cuprum metallicum</i>	Copper
<i>Euphrasia</i>	Eyebright
<i>Ferrum phos</i>	Iron phosphate
<i>Gelsemium</i>	Yellow jasmine
<i>Hepar sulph</i>	Hahnemann's calcium sulphide
<i>Lachesis</i>	Venom of the bushmaster snake
<i>Ledum</i>	Marsh tea

<i>Magnesia phosphorica (Mag phos)</i>	Magnesium phosphate
<i>Mercurius</i>	Mercury
<i>Natrum mur</i>	Salt
<i>Nux vomica</i>	Poison nut
<i>Oscillococcinum</i>	Duck heart and liver
<i>Pulsatilla</i>	Windflower
<i>Rhus tox</i>	Poison ivy
<i>Sarsaparilla</i>	Wild licorice
<i>Sepia</i>	Cuttlefish
<i>Sulphur</i>	Sulphur
<i>Urtica urens</i>	Stinging nettle
<i>Zincum</i>	Zinc

## **Which Problems Respond Well to Homeopathic Treatment?**

Ailments such as colds, constipation, vomiting, and diarrhea respond well to homeopathic treatment. It can help in the treatment of rheumatoid arthritis, fibrositis and psoriasis. Homeopathy also helps in the emotional, mental or physical complaints. For example, there is a remedy available to help people to stop smoking. The following are a list of conditions for which Homeopathy has a known remedy:

1. Abdominal Pain and Indigestion
2. Acne
3. Allergies: Contact Dermatitis {Skin Rash}, Eczema, Hives, Upper-Respiratory- Tract Allergy {Hay Fever}
4. Anxiety and Fear
5. Asthma: Allergic, Reactive, Psychogenic
6. Back and Neck Problems: Stiff Neck, Lower Back Pain, Sacroiliac Sprain, Coccyx Injury,
7. Sciatica
8. Bedwetting {Enuresis}
9. Bladder Infections {Cystitis} Boils
10. Canker Sores and Cold Sores
11. Chicken Pox
12. Colds
13. Conjunctivitis {Eye Inflammation or Pinkeye}
14. Constipation
15. Coughs
16. Diaper Rash
17. Diarrhea
18. Earaches: Otitis Media, Otitis Externa
19. Fever
20. Flu
21. Food Poisoning
22. German Measles
23. Grief and Sadness
24. Headaches: Muscle Contraction (Tension) Headache, Vascular {Migraine} Headache,
25. Other Headaches
26. Hemorrhoids
27. Hepatitis
28. Herpes Simplex
29. Herpes Zoster {Shingles}
30. Impetigo
31. Insomnia
32. Irritability and Anger
33. Laryngitis
34. Measles
35. Menstrual Cramps and Premenstrual Syndrome (PMS)
36. Mononucleosis
37. Motion Sickness
38. Mumps
39. Nausea
40. Neck Pain
41. Poison Oak or Ivy
42. Prostatitis
43. Ringworm and Other Related Fungal Infections
44. Sciatica

- 45. Sexually Transmitted Diseases
- 46. Sinus Problems (Sinusitis)
- 47. Sore Throats: Noninfectious, Viral, and Strep
- 48. Styes
- 49. Teething
- 50. Thrush
- 51. Urethritis
- 52. Vaginitis: Yeast Infections, Bacterial Infections, Trichomonas Infections, and Noninfectious Vaginitis
- 53. Vomiting
- 54. Warts

## Angina

Approximately three million Americans experience angina pain. The cause of this is the accumulation of fatty deposits in the arteries, a condition called arteriosclerosis. Blood and oxygen passage through the arteries are severely depleted due to these constrictions. When times of exertion or stress, this becomes critical. Heart does not get enough of the oxygen and blood and the result is an onset of angina.

Angina can be manifested in different ways. Some people may get pain so mild that it is often mistaken for indigestion. For others, the pain can be excruciating. If you are in doubt, contact your doctor or go to the nearest emergency room. It may mean the difference between life and death. For immediate relief during an acute attack, *Cactus grandiflorus* (30c) may be used. Homeopathic practitioners may also recommend long-term remedies such as *Nux vomica* and *arsenicum album*.

### Symptoms of Angina:

- Pain that is crushing, constricting, strangling, suffocating, sharp, or burning. It is normally felt in the chest but may also occur in the peripheral areas such as the jaw or abdomen. Where you feel the pain may differ from person to person.
- Dull pain, pressure, or squeezing in center of chest that may feel like indigestion or heartburn.
- Pain that occurs with exertion and recedes with rest.
- Weakness, sweating, shortness of breath, anxiety, palpitations, nausea, light headedness.

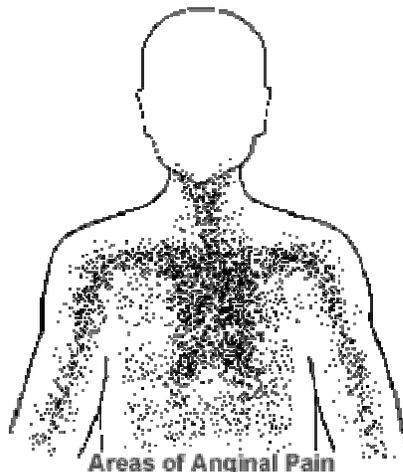
### IMPORTANT:

Call your doctor or emergency room immediately if

- If the attack lasts more than 15 minutes. You may be experiencing a heart attack.
- Attacks have become more intense, frequent, prolonged, and unpredictable. These are signs of unstable angina.

### Identifying Angina Pectoris or Angina

Angina pectoris is a precursor to a heart attack. Usually, what happens is this: During physical exertion, during stress or an emotionally charged situation, in cold weather or after a big meal, the heart beats faster. Heart requires more oxygenated blood flow to the heart muscle to maintain the beating. But if the channels by which the blood and oxygen flow to the heart are narrowed, not enough nutrients get to the heart muscle tissue. It suffers oxygen deficiency, and the heart tells you about this with a pain called angina pectoris.



The pain is quite distinct. It is described as: "a heavy, strangulating, suffocating experience-far more intense than anything like indigestion, chest wall injuries, pleurisy or spasms of the esophagus that you are familiar with. The pain may seem to start under the breastbone,

on the left side of the chest, and sometimes radiates out to other places: throat, neck, jaw, left shoulder and arm and, occasionally, on to the right side.

Angina is an intense, scary episode. But with rest and calm (or by placing nitroglycerin or another kind of nitrate under the tongue), angina attacks usually go away in about 15 minutes or so. If they last longer than that, go to the hospital and have a thorough check up. Long-lasting angina attacks may be the prelude to heart attacks.

If you have never been diagnosed with heart disease but develop any of the following symptoms, consider the possibility that you have angina. Make an appointment with your doctor, and arrange for a cardiac screening as soon as possible.

- Chest pain that comes with physical exertion and eases with rest.
- Chest pain that is brought on by emotional stress.
- New or unusual shortness of breath-if you suddenly find you're winded after climbing a flight of stairs when you used to be able to take the same flight of stairs in stride, for example.
- Indigestion, particularly if indigestion is unusual for you, if it does not respond to antacids, or if you do not associate its occurrence with eating.

The statistics show that half of those with angina pectoris suffer sudden deaths, a third have heart attacks, and most victims are older men. And an estimated 350,000 new cases of angina occur each year.

### **Conventional Treatments for Angina**

Maintaining an overall healthy life style is very important. This includes proper diet, exercise, weight management, and no smoking.

There are three classes of angina drugs- nitrates, beta-adrenergic blockers, and calcium channel blockers. Often a combination of the three medications is used to treat angina.

**Nitrates** cause arteries to expand and allow for greater blood flow. Nitroglycerin (Nitrostat) is the most widely nitrate. Relief is normally obtained within a few minutes after taking the medication. Some users may develop headaches, flushing and dizziness as a result of taking this medication. People who have frequent attacks may require longer lasting preparations. Drugs such as isosorbide dinitrate (Isonate, Isordil, Sorbitrate) and the new isosorbide mononitrate (Ismol) are examples of longer lasting preparations. These help prevent attacks from occurring. One problem with these preparations is that your body may develop tolerance as you use it for a while. They also are more likely to cause side effects such as headache and dizziness. It is also important to use fresh medications. Nitrates lose their effectiveness very quickly. Store them in a dark, tightly closed bottle.

**Beta-adrenergic blockers** lower blood pressure and reduces the cardiac oxygen consumption. They work by inhibiting the transmission of nerve signals to the heart. This slows the heart and hence the heart consumes less oxygen. Usually beta blockers are given to reduce the heart rate and is effective in combination with nitrates or alone. Examples of prescription drugs that fall under beta blockers are: metoprolol (Lopressor) and propranolol (Inderal). Beta blockers are considered quite safe. But some patients may experience insomnia, nightmares, and fatigue. It may cause a slight rise in cholesterol levels, possibly leading to more angina pain. A new generation of beta blockers (e.g., acebutolol (sectral)) can help stop anginal pain without causing rise in cholesterol levels.

**Calcium channel blockers** work by relaxing muscles that surround the blood vessels. This causes the vessels to widen, allowing more blood and oxygen to reach the heart. Prescription medications such as diltiazem (Cardizem), nifedipine (Adalat, Procardia) and verapamil (Calan, Isoptin, Verelan) are all Calcium channel blockers. Some patients may feel dizzy and light headed after taking calcium channel blockers. Some have reported ankle swelling.

Patients with severe unstable angina are often treated with the anticoagulant heparin in conjunction with aspirin, nitrates, and beta blockers. If drug therapy does not work, or is not enough, coronary artery angioplasty or bypass surgery may be required.

### **Common Sense Care for Angina**

**IMPORTANT:** If you experience any symptoms of angina or heart attack, contact your doctor immediately or go to the nearest emergency room or call. Time is of essence. Many victims die within three to four hours of the onset of heart attack. Hence heart attacks require immediate attention. The alternative treatments described here can be used after your condition has been stabilized to prevent an onset of angina in the future, but **NOT FOR THE TREATMENT OF AN ANGINA IN PROGRESS.**

Follow the steps below to minimize your chances of getting an angina.

- Forfeit fat: avoid all foods that are high in saturated fats and cholesterol. Research has documented tremendous improvement in heart patients who stuck to a diet containing only 10 percent of calories from fat. Increase your daily intake of fresh fruit and fresh vegetables and eat more whole grains such as whole wheat, rice, and oats.
- Cease smoking. This may be the best thing you can do for your heart. Studies have found that angina patients who quit smoking cut their death rate in half compared to those who continue to smoke.
- Add your intake of Omega-3 fatty acid. One of the best sources of this is fish (mackerel, cod, tuna).
- Take an aspirin a day - aspirin makes your blood less sticky, so there is less chance of it clotting.
- Get exercise- A suitable exercise program is essential to maintain a healthy heart. Aerobic exercises such as cycling or jogging is particularly good. (If you had angina consult with your doctor before you start an exercise program).
- Reduce stress: Sudden stress, whether it is from exertion or from emotional excitement, can bring on an attack of painful angina. Spend 15 to 20 minutes everyday practicing some form of stress management such as meditation or relaxation.

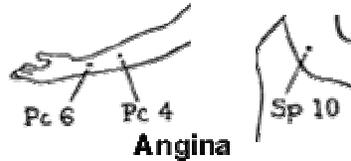
### **Acupressure for Angina**

Applying pressure for at least one minute to several acupressure points may relieve angina symptoms.

#### **1. (Pc 6, Inner Gate)**

This point is located on your wrist at the palm side. It is located two thumb widths above the wrist crease in the center of the arm. According to oriental medicine, the inner point (Pc 6) regulates ch'i as well as blood in the chest. Hence, it is the point of choice for any pain or discomfort of the chest.

Start with applying medium pressure. Build it up gradually. Hold about a minute, and gradually release the pressure. Do it on both wrists.



## 2. (Pc 4, Cleft Gate)

This point is also located on the palm side of your wrist. To locate it, find the midpoint between the wrist crease and elbow crease. From this point, go down one thumb width toward the wrist. Pc 4 is located right in the center. Cleft gate (Pc 4) is very powerful for any discomfort in the chest area. When the pain is intense or acute, this is the point of choice for acupuncture. In Chinese medicine, cleft gate is also used for heart palpitations and arrhythmia. Use medium pressure for about a minute. Repeat applying the pressure several times if pain is acute. Make sure that you work on both arms.

## 3. (Sp 10, Sea of Blood)

To locate Sp 10, find a point about 2 thumb widths above the top edge of the knee. Here you will feel a bulge in your thigh muscles on the top of your leg, toward the inside. Apply pressure to the point by pressing firmly for a minute with your thumb or the knuckle of your middle finger.

## Ayurvedic Treatment of Angina

An Ayurvedic mixture of herbs and minerals known as Abana may significantly reduce the frequency and severity of angina attacks. Consult a qualified practitioner. Ayurvedic herb Guggul is shown to reduce the serum cholesterol levels. There are many other Ayurvedic herbs that have shown to be important in maintaining cholesterol levels.

## Chelation Therapy for Angina

Chelation Therapy is sought by thousands of angina sufferers. The proponents claim that it is less costly and as effective as conventional treatments.

## Diet Therapy for Angina

The principal goals of nutritional therapy for angina are to improve the blood flow to the heart and the energy metabolism of the heart so that it requires less oxygen.

- The first step is to consume less saturated fat and cholesterol.
- Magnesium in your diet will improve the energy metabolism. Include plenty of leafy green vegetables, such as spinach, kale, mustard greens and turnip greens. These are good sources of magnesium.
- Studies have shown that when people follow a diet that includes no animal sources except for skim milk, egg whites, and low fat yogurt, angina pain diminishes in a few weeks.
- Eat a diet that is well balanced and contains plenty of fiber. Eat plenty of raw foods. For protein, eat broiled fish and skinless turkey and chicken, which are low in fat.
- Include in the diet garlic, onions, and lecithin. They are shown to reduce serum cholesterol levels.
- Add raw nuts (except pea nuts), olive oil, pink salmon, trout, tuna, Atlantic herring, and mackerel to your diet. These foods contain essential fatty acids.
- Do not consume stimulants such as coffee and black tea, that contain caffeine. Also avoid tobacco, alcohol, chocolate, sugar, butter, red meat, fats (especially hydrogenated oils and animal fats), fried foods, and processed and refined foods.

## Herbal Medicine for Angina

- **Green Tea** - may help keep cholesterol from clogging arteries.
- **Garlic** - prevent the oxidation of LDL cholesterol, may prevent the liver from producing excess fat and cholesterol.
- **Hawthorn**- dilates coronary blood vessels, improving the flow of blood to the heart. It also strengthens the heart muscle and works to help the body rid itself of excess salt and water.
- **Turmeric**- lowers blood cholesterol levels by stimulating the production of bile. It also prevents the formation of dangerous blood clots that can lead to heart attack.
- **Ginkgo biloba**- improves the flow of blood throughout the body. It is also an antioxidant.
- **Alfalfa**: Alfalfa leaves and sprouts help reduce the blood cholesterol levels and plaque deposits on artery walls.
- **Ginger**- reduces cholesterol. It also reduces blood pressure and prevents blood clots.
- **Citrin** - an extract from the plant *Garcinia cambogia*, inhibits the synthesis of fatty acids in the liver.
- **Guggul** - This ayurvedic herb is shown to reduce cholesterol
- Other herbs that are beneficial for cardiovascular disorders include barberry, black cohosh, butcher's broom, cayenne (capsicum), dandelion, ginseng, and valerian root.

**Caution:** Do not use barberry or black cohosh during pregnancy. Do not use ginseng if you have high blood pressure. Also avoid the herbs ephedra (ma huang) and licorice, as they cause a rise in blood pressure.

## Homeopathy

Heart disease is a manifestation of a chronic condition that should not be treated by homeopathy alone. A homeopath, on the other hand, may be able to provide you some complementary medication. Some homeopathic remedies useful for cardiovascular conditions include:

**Aconitum napellus:** Useful when you are anxious and impatient. You imagine the worst happening. You feel that a strong pain envelops the heart and left arm. The problem is worse at night and when you are warm, and feel better with rest and fresh air.

**Argentum nitticum:** Useful when you are impulsive and fearful. Chest pain is stronger at night, after eating and with stress.

**Aurum metallicum:** Indicated when you are depressed, feel worthless and are very sensitive to pain. Other symptoms include depression and night-time chest pain.

**Baryta carbonica:** Useful when you are suffering from hypertension, palpitations and confusion, made worse with exposure to dampness or cold.

**Cactus grandiflorus:** When you are sad and in great pain. The pain seems to be "squeezing" the chest, making it difficult to breathe. You feel worse around noon and with exertion, but better with fresh air.

**Carduus marianus** Useful for cases with a history of alcoholism and a propensity for drinking beer. This remedy helps regulate the heart and can slowly reverse symptoms.

**Crataegus** A general remedy that helps regulate the heart. Should a heart attack occur, you should go to the emergency room and seek help immediately. Time is of essence. There are some homeopathic first-aid remedies that may be useful while you are waiting for EMT or while on the way to the doctor. These include:

**Aconitum napellus:** When you have difficulty breathing. You are anxious, but feels better sitting up.

**Cactus grandiflorus:** When the hear attack strikes between approximately noon and midnight. You feel as if something is "squeezing" the heart or the pain is severe enough to make you cry, shout or whimper.

**Digitalis:** When your symptoms include blue skin, numbness and weakness of the left arm, a slow pulse and great fear.

### **Juice Therapy for Angina**

Take two eight ounce glasses of cantaloupe juice a day. Cantaloupe contains adenosine, that may help heart patients to thin blood and prevent angina attacks.

### **Reflexology for Angina**

To help relieve acute angina pain, grasp the tip of the little finger of your left hand (the area above the first joint) with your right thumb and forefinger, and hold it tightly. Grasping the little toe in the same way also helps. Then work on the heart reflex area in either your left hand or left foot. This is located on the sole of the left foot between the diaphragm line and the base of the toes. Work the entire area, thumb walking up, down, and across. Take your time and work this area thoroughly. You can also work on the corresponding areas on the palm of your left and right hands, instead of or in addition to working your feet.

### **Relaxation and Stress Management**

These techniques are especially useful if you have difficulty controlling your emotions or if you are under tremendous stress. A variety of techniques from biofeedback to yoga may be useful in relaxation. See our section on Stress Management for more information on these alternative therapies.

### **Shiatsu for Angina Pain**

Angina pain follows the path known as Heart Meridian as defined in Oriental medicine. This meridian goes from the armpit down the arm to the tip of the little finger. To relieve angina, apply pressure to points along the route of the pain. Note: The points along this meridian may be quite tender and painful when pressed.

1. Search out sore or tender areas in the chest above the nipple line. Press for a few seconds, using a slightly vibrating, rotating pressure. (Caution: Don't press on the breasts of women. Press only on points above or below.)
2. Feel under the left armpit for more tender spots, and use gentle repeated pressure of 5-10 seconds duration.
3. With the palm of your left hand facing up, use your right hand to follow the line of the heart meridian from the armpit down to the little finger, tracing along the inside of the upper arm and forearm to the hand. When you find tender spots, press and vibrate the sore areas until they feel eased.

Now, start again at the top of your arm and trace the same line again, except move an inch or so closer to the top of the bicep. This will now trace the Heart Protector or Pericardium meridian. Look for and press any tender spots. When you reach the elbow crease, press a few extra times on the point just to the inside of the biceps tendon which is located in the center of the crease. Continue tracing down the center of the forearm across the palm to the little finger. Give particular attention to the area on the lower half of your forearm. This area has several useful points. After working your left arm, switch and repeat this for the right arm.

### **Sound Therapy for Angina**

Listen to at least 10 to 20 minutes of relaxing music each day can be helpful to ease the pain of angina. Turn on the music, then sit or lie comfortably, close your eyes and take a deep breath. While the music is playing, let your breath slow down and become steady. Try to listen to the entire music, the notes as well as the silence in between the notes. This will help you get a more deeper relaxation.

### **Vitamin/Nutrition Therapy for Angina**

Take appropriate supplements of L-carnitine (500 mg twice daily, on an empty stomach. Take with 50 mg vitamin B6 and 100 mg vitamin C for better absorption.) and coenzyme Q10 (50-100 mg 3 times daily). L-Carnitine reduces fat and triglyceride levels in the blood, thus increasing the oxygen uptake and stress tolerance. Coenzyme Q10 increases the oxygenation of heart tissue. Studies have shown that it has prevented recurrences in individuals who had heart attacks.

- Calcium 1,500 to 2,000 mg daily - important for the proper functioning of the cardiac muscles.
- Magnesium - 750-1,000 mg daily.
- Garlic - Lowers blood pressure and thins the blood.
- Lecithin granules - 1 tbsp. 3 times daily - acts as the fat emulsifier.

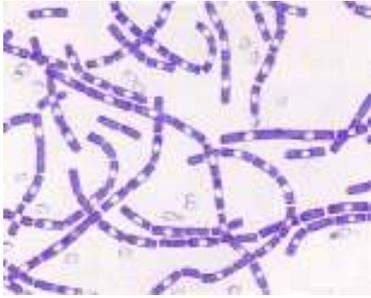
### **Yoga**

Gentle yoga stretching can improve circulation to the heart, thus helping to reduce the cause of angina. Recommended poses/asanas are:

- The Sun Salutation
- Cobra
- Locust
- Savasana
- Gentle Spinal Twist
- Yoga Nidra for relaxation

## Anthrax

*Bacillus anthracis*, the etiologic agent of anthrax, is a large, gram-positive, non-motile, spore-forming rod-shaped bacteria. The three virulence factors of *B. anthracis* are edema toxin, lethal toxin, and a capsular antigen. Human anthrax has three major clinical forms: cutaneous, inhalation, and gastrointestinal. If left untreated, anthrax in all forms can lead to septicemia and death.



### What does anthrax look like?

In its most destructive form -- an aerosol sprayed into the air -- it is invisible and odorless. Anthrax spores can only be seen through a microscope that magnifies 50 to 100 times.

### What is the difference between exposure to *B. anthracis* and disease caused by *B. anthracis*?

A person is exposed to *B. anthracis* when he or she comes in contact with the anthrax bacteria or is present in an environment that contains *B. anthracis*. A person can be exposed without having disease. Disease caused by *B. anthracis* occurs when there is some sign of illness, such as the skin lesion that occurs with cutaneous anthrax. A person who is exposed to *B. anthracis* but given appropriate antibiotics can avoid getting anthrax.

### How much anthrax does it take to make someone sick?

According to CDC, roughly 8,000-10,000 spores are needed to be inhaled to make a fatal exposure. However, other experts claim that there is no such thing as a "safe exposure limit" for today's dry, fine anthrax powder. According to them even few spores may make you sick.

### How is anthrax diagnosed?

Anthrax is diagnosed by isolating *B. anthracis* from the blood, skin lesions, or respiratory secretions or by measuring specific antibodies in the blood of persons with suspected cases.

### What are the signs and symptoms of anthrax?

Anthrax exposures can be classified into three types based mainly on the route of entry of the anthrax into the human body and some of the clinical manifestations or the symptoms. Symptoms of disease vary depending on how the disease was contracted, but symptoms usually occur within 7 days.



**Cutaneous anthrax**, where your skin surface is exposed to anthrax and you develop a skin lesion. The incubation period ranges from 1-12 days. The skin infection begins as a small papule, progresses to a vesicle in 1-2 days followed by a necrotic ulcer. The lesion is usually painless, but patients also may have fever, malaise, headache, and regional lymphadenopathy. Most (about 95%) anthrax infections occur when the bacterium enters a cut or abrasion on the skin.

Skin infection begins as a raised bump that resembles a spider bite. It really looks like a swelling on the skin. It can appear anywhere on your body; but often appears on the arms or hands. Lymph glands in the adjacent area may swell. The swelling then develops a central area of ulceration of a depression, and then a scab or eschar, a very dark, blackish-brown scab (1-3 cm in diameter) forms over that central area. It can be painless and it may or may not be accompanied by a fever.

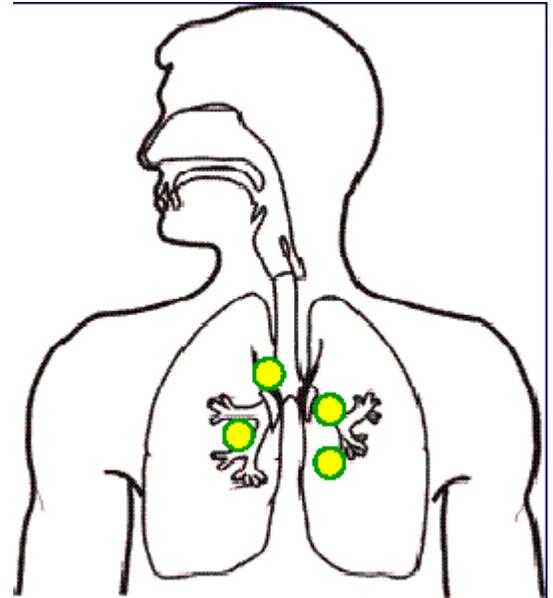


About 20% of untreated cases of cutaneous anthrax will result in death. Deaths are rare if patients are given appropriate antimicrobial therapy.

**Inhalational anthrax** is the most lethal form of anthrax and results from inhaling spores of the bacteria. The

incubation period of inhalational anthrax among humans is unclear, but it is reported to range from 1 to 7 days, possibly ranging up to 60 days. When a person inhales the spores, it become lodged in the lungs. There, they are picked up by immune-system cells called macrophages, which carry them to the lymph nodes. On the way, the spores mature into bacteria. The bacteria multiply in the lymph nodes and then enter the bloodstream. They produce a poison that causes the immune system to produce lethal doses of chemicals that are ordinarily useful to the body.

Initial symptoms of inhalational anthrax may resemble those of a common cold, such as sore throat, mild fever, muscle aches, and malaise. After several days, the symptoms may progress to severe breathing problems and shock, with meningitis frequently developing. Inhalation anthrax is often fatal.



**Gastrointestinal anthrax** usually follows the consumption of raw or undercooked contaminated meat and has an incubation period of 1-7 days. Gastrointestinal anthrax is associated with severe abdominal distress followed by fever and signs of septicemia. It is characterized by an acute inflammation of the intestinal tract. Initial signs of nausea, loss of appetite, vomiting, and fever are followed by abdominal pain, vomiting of blood, and severe diarrhea. Intestinal anthrax results in death in 25% to 60% of cases. The disease can take an oropharyngeal or abdominal form. Involvement of the pharynx is usually characterized by lesions at the base of the tongue, sore throat, dysphagia, fever, and regional lymphadenopathy. Lower bowel inflammation usually causes nausea, loss of appetite, vomiting and fever, followed by abdominal pain, vomiting blood, and bloody diarrhea.

### **What are the fatality rates for the various forms of anthrax?**

According to CDC, early treatment of cutaneous anthrax is usually curative, and early treatment of all forms is important for recovery. Patients with cutaneous anthrax have reported fatality rates of 20% without antibiotic treatment. But the fatality rates drops to less than 1% with antibiotic treatment. So, it is very important that you get prompt treatment is you suspect exposure to anthrax bacteria. Unfortunately, the fatality rate, in this case, is extremely high even when appropriate antibiotics are given. We also do not know the impact of the delay in post-exposure prophylaxis or treatment on survival in this type of exposure. For gastrointestinal anthrax, the fatality rate is estimated to be 25%-60%. We do not know how early antibiotic treatment affects that fatality rate.

### **What is the average risk of contracting anthrax?**

The risk of any average individual in the USA contracting anthrax is infinitesimal. The risk is for people who have been in a place of known exposure. So far, the known places of exposures are one business place in Florida, a couple of locations in New York City, and a governmental office building in Washington. Few postal processing centers near Washington, DC are also affected. Persons who have not been in these circumstances are not at-risk.

### **If anthrax is on the ground, can I get it from kicking up dust?**

Probably not. The spores tend to clump together, so even if inhaled, they do not get deep into the lungs. Some of the terrorist-manufactured anthrax, however, is very fine and may be chemically treated to prevent them from clumping together. In this case, the anthrax from the ground can be inhaled under optimum conditions. (Similar to what happened to the postal workers. If you were in the vicinity of anthrax contamination, you should immediately seek medical attention.

### **What can the average person do to protect himself/herself?**

According to Dr. Jeffrey P. Koplan, Director of the Centers of Disease Control and Prevention in the USA, the best approach to take in dealing with anthrax, is to know a little bit more about anthrax. Here are some salient facts:

- Anthrax is not contagious.
- Anthrax doesn't spread from person-to-person.
- It's a disease that, once exposed to, is treatable. A number of different antibiotics can be used to treat it.
- Antibiotics are also very effective in preventing a person from ever getting the disease once exposed.
- Cutaneous anthrax is readily treatable. Inhaled anthrax is more deadly.

The best defense is to have a good defense system in our body that wards off infections and entry of unwanted organisms into our body such as bacteria. We recommend that you take steps to boost your immune system. Nothing is going to prevent you from getting the intentional inflicting of biological agents such as is the case in bioterrorism. However, you may be able to buy enough time for you to seek medical treatment and also prevent you from having other complications.

### **Can a person get screened or tested for anthrax?**

According to Dr. Jeffrey P. Koplan, Director of the Centers of Disease Control and Prevention in the USA, there is no screening test for anthrax. There is no test that a doctor can do that says a person has been exposed to anthrax or is carrying it. The only way that anthrax exposure can be determined is through a public health investigation. And in those circumstances, for example, where people work in a given office or on a given floor have been exposed, the public health officials will inform people whether they have been exposed or not. They will also advise you whether you need the treatment with antibiotics. You may have read, heard or seen reports of blood tests or nasal swabs or other tests for anthrax. According to Dr. Koplan, these are not tests to determine whether an individual should be treated. These nasal swabs and environmental tests are used to determine the extent of exposure in a given building or workplace.

### **Is anthrax contagious?**

Anthrax cannot be spread from person-to-person. One person is not contagious to another person. We can only get it from the mechanisms of exposure to the skin, breathing it, or eating it.

### **What should an individual do about suspicious mail?**

A suspicious envelope may be one that you are not used to getting regularly with a known return address. They may have stains on them. Other characteristics of suspicious mail include: You may feel like they have contents including powder that you can feel inside; a different postmark address than the return address; any other kinds of items inside wires or protruding elements. Here are some tips to identify suspicious packages or letters:

- Excessive postage
- Handwritten or poorly typed addresses
- Incorrect titles
- Title, but no name
- Misspellings of common words
- Oily stains, discolorations or odor
- No return address
- Excessive weight
- Lopsided or uneven envelope
- Protruding wires or aluminum foil
- Excessive security material such as masking tape, string, etc.
- Visual distractions
- Ticking sound
- Marked with restrictive endorsements, such as "Personal" or "Confidential"
- Shows a city or state in the postmark that does not match the return address

If you find something suspicious in your mail be it a package or a letter, be calm. If you've picked it up, put it down. If you have a plastic bag or envelope handy, garbage bag, something for food small enough, just slip it in it and close it. If you don't have such a plastic item available, cover it with a towel or some cloth or even a newspaper --- just cover it so that it is protected over its borders. Wash your hands with soap and water. Call local law enforcement and describe what you've got and can they come and help you.

### **If a patient is suspected of being exposed to anthrax, should he or she be quarantined or should other family members be tested?**

There is no need to quarantine people suspected of being exposed to B. anthracis or to treat contacts (e.g., household contacts, friends, or coworkers) of people ill with anthrax, unless the contacts were also exposed to the same source of infection.

### **Treatments**

#### **What drugs are FDA approved for PEP and treatment?**

Ciprofloxacin and doxycycline are FDA approved for PEP, and ciprofloxacin, doxycycline, and amoxicillin are FDA approved for treatment. In the current situation of intentional anthrax distribution, doxycycline and ciprofloxacin as the recommended drugs for prophylaxis

#### **What is ciprofloxacin?**

Ciprofloxacin is a broad-spectrum antibiotic agent active against several bacteria. It is one of the antibiotics used in the treatment of anthrax. But there are several others. The use of ciprofloxacin is warranted only under the supervision of a physician. Ciprofloxacin is one antibiotic often recommended to prevent anthrax after a person has been exposed to B. anthracis.

### **What are the side effects of ciprofloxacin?**

Ciprofloxacin is a broad spectrum fluoroquinolone indicated for use in reducing the incidence or progression of inhalational anthrax. Adverse health effects include vomiting, diarrhea, headaches, dizziness, sun sensitivity and rash. Central Nervous System effects occur in <1% of patients and may be accentuated by caffeine or theophylline-containing medications.

### **What is doxycycline?**

Doxycycline is a broad-spectrum antibiotic agent active against several bacteria. The use of doxycycline is warranted only under the supervision of a physician.

### **What are the side effects of doxycycline?**

Adverse side effects may include nausea, vomiting, or diarrhea; sensitivity to the sun; dark "furry" tongue, black tongue, or swollen tongue; or vaginal yeast infection. Serious side effects may include an allergic reaction (swelling of your lips, face, or tongue, difficulty breathing); a severe headache; vision changes; confusion; liver damage (yellowing of the skin or eyes, nausea, abdominal pain or discomfort, unusual bleeding or bruising, severe fatigue); blood problems (fever, fatigue, easy bruising or bleeding); or genital sores or itching.

### **What are the alternative drugs that may be effective against anthrax attacks?**

Ciprofloxacin, or Cipro, is the antibiotic most commonly recommended to prevent sickness among people exposed to anthrax. It works well against most types of anthrax in the lab. In addition, Cipro is a drug that most people can take without having too many side effects. However, for some people, Cipro is a bad choice. If you have had an allergic reaction to Cipro, you should not take it again. Also, Cipro is not generally recommended for pregnant women or small children. Fortunately, there are alternatives.

The Centers for Disease Control and Prevention have recommended the following antibiotics for people exposed to anthrax. For each group, several options are provided. In the event of an exposure, healthcare professionals should consider a person's medication allergies and potential drug interactions before prescribing an antibiotic.

#### **Adult males (ages 18-65):**

- Ciprofloxacin (500 milligrams by mouth twice a day for 60 days) or
- Doxycycline (100 milligrams by mouth twice a day for 60 days) or
- Amoxicillin (500 milligrams by mouth three times a day for 60 days)

#### **Nonpregnant adult females (ages 18-65):**

- Ciprofloxacin (500 milligrams by mouth twice a day for 60 days) or
- Doxycycline (100 milligrams by mouth twice a day for 60 days) or
- Amoxicillin (500 milligrams by mouth three times a day for 60 days)

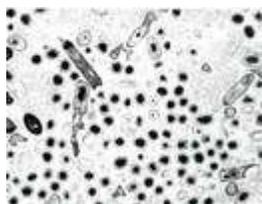
#### **Pregnant adult females**

- Amoxicillin (500 milligrams by mouth three times a day for 60 days) or
- If allergic to penicillin or amoxicillin, consult with your doctor or a specialist in infectious diseases

#### **Adults over age 65:**

- Doxycycline (100 milligrams by mouth twice a day for 60 days) or
- Ciprofloxacin (500 milligrams by mouth twice a day for 60 days) or
- Amoxicillin (500 milligrams by mouth three times a day for 60 days)

In case of anthrax epidemic, homeopathic practitioners will point out that the main problem we need to manage is the fear of contracting the disease and the paranoia in the population. This is because the risk of a person coming in contact with a lethal dose of anthrax is very small. Several homeopathic remedies are available that help you to manage your fear, panic and anxiety. Take some rescue remedy and do not panic. If you suspect that you are exposed to anthrax, you should consult a professional and do not try to self-medicate. Anthrax exposure requires prompt intervention and the time is of essence.



Homeopathic practitioners generally treat the symptoms of the disease. They can also give you a constitutional remedy that will help you to strengthen your immune system. Prophylactics and vaccinations are also sometimes given, although all homeopaths do not necessarily agree with these approaches.

It has been shown again and again that homeopathic medicines given intelligently and conforming to homeopathic principle of 'like cures like' do not only cure infectious disease speedily and easily without the development of any complications, but they also prevent these same diseases.

When looking for aggressive homeopathic remedies to treat anthrax, we come across terms like nosodes and sarcodes.

Nosodes are medicines prepared from products of diseases or diseased tissues of human beings, animals and plants. Sarcodes are medicines prepared from the secretions or healthy tissues including endocrine glands. Typically these are ground and diluted as per homeopathic procedures. The end result is a medication which has a very low concentration that can help activate body's defenses.

Several homeopathic preparations are useful for anthrax. The most important one is perhaps a remedy called anthracinum. Homeopathic practitioners claim that anthracinum can prevent anthrax from infecting human beings. Anthracinum is prepared by triturating (grinding) the puss from anthrax. It is a very effective prophylactic against anthrax, according to homeopaths. This nosode has a long history. It was made & used during the days of Hahnemann, father of modern homeopathy, by a vet surgeon called Lux. Homeopaths claim that "anthracinum works like magic. They claim that "if a person just takes a dose (of anthracinum) for two days in succession, he would be immune from anthrax for at least three months." Anthracinum can be used when word of an outbreak occurs in one's proximate geographical area. Homeopaths believe that this remedy help protect you from contracting the disease and/or mitigating its effects.

#### **Anthracinum is indicated when:**

- Black/blue blisters.
- Septic fever with chills, and painful, hard swelling of lymph glands.
- Intolerable burning with offensive pus.
- Black blood oozes from all orifices.
- Restlessness.
- Exhaustion.
- Excessive thirst but can hardly swallow.
- Succession of boils.
- Sloughing ulcers and gangrene.

### **How to Take Anthracinum**

A healthy adult may take one dose of 30X (or whichever potency is available/selected) once a day for up to three days. Stop taking after 3 days. Children may take one dose once. Debilitated individuals, those with compromised immune systems, or people being treated for a sickness: Contact a qualified homeopath before taking additional medicines.

### **Symptoms Indicated for Anthracinum**

- Terrible, intolerable burning, as if on fire; with great exhaustion.
- Black or blue blisters that slough and ulcerate with rapid decomposition.
- Black blood oozes from any orifice.
- Vomiting with chill followed by painless, bloody diarrhea.
- Rapid loss of strength with sinking pulse, delirium and fainting.
- Succession of boils.
- Large boils and malignant ulcers with discharge of offensive pus.
- Gangrene.
- Septic fever with sweat all over and great weakness.
- Swelling of painful lymph glands.
- Severe pain in limbs and joints with spasms, especially of upper limbs.
- Abdominal swelling with enlarged organs and swollen glands.
- Diminished appetite.
- Excessive thirst but can hardly swallow.
- Restlessness.

## Anxiety Disorders

Chronic anxiety disorders can benefit by treatment from a trained homeopath. But for short episodes of transient, self-limited anxiety, you can use the appropriate remedies.



Aconite is the medication of choice if your anxiety is the result of a sudden fright or shock. If you are grief stricken (such as when one of your loved ones die), the homeopath may give you ignatia. In situations such as stage fright and other anticipatory and performance anxiety, gelsemium is recommended. If you have anxiety accompanied by diarrhea, gelsemium is the preferred choice. Other homeopathic remedies are described below.

Begin with a 6x potency and take two tablets every two to four hours depending on the severity, or acuteness, of the illness. Once you begin to notice improvement, increase the intervals between dosages, and when it seems that improvement is well on its way, discontinue the treatment. If you use a remedy longer than necessary, it might tend to cause the symptoms to recur. Take your remedy with a clean mouth free from drink, food, tobacco, toothpaste, or mouthwash. Allow the tablet or granules to dissolve in your mouth rather than swallowing them with water, and do not ingest anything except water for fifteen minutes after taking the remedy.

### Homeopathic Remedies for Anxiety Disorders

The following remedies may be useful to you in treating symptoms of anxiety.

- Aconite
- Argentum nitricum
- Arsenicum album
- Calcarea carbonica
- Gelsemium
- Ignatia amara
- Kali phosphoricum
- Lycopodium
- Natrum muriaticum
- Phosphorus
- Pulsatilla
- Silicea

### Aconite (*Aconitum napellus*)

A panic attack that comes on suddenly with very strong fear (even fear of death) may indicate this remedy. A state of immense anxiety may be accompanied by strong palpitations, shortness of breath, and flushing of the face. Symptoms:

- Anxiety and restlessness with complaints.
- Eye pain and injuries
- Faintness or dizziness upon waking up.
- Fears that do not subside.
- Intolerance of pain.
- Painful urination with anxiety
- Pains followed by numbness and tingling.
- Sudden fever with one cheek red, the other pale
- Sudden, intense ailments from fright.
- Throbbing headache
- Unquenchable thirst.

### **Argentum nitricum (Arg-n)**

This remedy is indicated when anxiety develops before a big event. (Examples: an interview for job, an exam, a public speech, social engagement, marriage, etc.). Symptoms:

- Anxiety
- Craving for sweets and salt. Craving for strong flavors.
- Diarrhea
- Dizziness
- Emotional upset
- Enthusiastic and suggestible, with a tendency toward peculiar thoughts and impulses.
- Extended period of unusual or continued mental exertion
- Fear

### **Arsenicum album (Arsenicum, Ars)**

This remedy is recommended for people who are deeply anxious about their health, and extremely concerned with order and security. Panic attacks often occur around midnight or the very early hours of the morning. The person may feel exhausted yet still be restless-fidgeting, pacing, and anxiously moving from place to place. These people may also have digestive problems or asthma attacks accompanied by anxiety. They are typically obsessive about small details and very neat. They may feel a desperate need to be in control of everything. Symptoms:

- Anxiety associated with later stages of head cold, with sneezing
- Anxious
- Asthma worse after midnight, fears suffocation while lying down
- Desires air but sensitive to cold
- Fearful
- Irritable
- Restless
- Sleepiness but insomnia
- Thirsty for frequent small drinks
- Vomiting with or without diarrhea after eating and drinking
- Weak and exhausted

### **Calcarea carbonica (Calc)**

People who benefit most from this remedy have a chilly constitution. The slightest cold "goes right through them." They have trouble keeping themselves warm. They have a craving for sweets, and are easily fatigued. They are dependable, solid people who become overwhelmed from physical illness or too much work and start to fear a breakdown. Their thoughts can be muddled and confused when tired, which adds to the anxiety. Worry and bad news may agitate them, and a nagging dread of disaster (to themselves or others) may develop. Fear of heights and claustrophobia are also common. Symptoms:

- Aversion to fats
- Cold hands and feet
- Craving for eggs
- Dizziness
- Eyes sensitive to light
- Increased perspiration
- Large appetite with slow digestion
- Nausea
- Night sweats
- Pale face
- Ravenous hunger

### **Gelsemium (Gels)**

This remedy is indicated when you have feelings of weakness, trembling, and mental dullness (being "paralyzed by fear"). It is also useful when a person experiences anxiety about an upcoming event such as stage-fright about a public performance or interview, or anxiety before a test, impending visit to the dentist, or other stressful events. Chills, perspiration, diarrhea, and headaches will often occur with nervousness. Fear of crowds, a fear of falling, and even a fear that the heart might stop are other indications for Gelsemium. Symptoms:

- Anxiety prior to an examination or public performance
- Apprehension
- Dizziness, trembling, fatigue, dullness
- Fatigue and aching of whole body
- Headache
- Lack of thirst
- Limbs, head, eyelids heavy
- Nervousness
- Scalp sore to touch
- Sore throat

### **Ignatia amara (Ignatia, Ign)**

A sensitive person who is anxious because of grief, loss, disappointment, criticism, loneliness (or any stressful emotional experience) may benefit from this remedy. The primary factor for this remedy is emotional stress, especially disappointment or grief. Other indications are a defensive attitude, frequent sighing, and mood swings. The person may burst unexpectedly into either tears or laughter. Symptoms:

- Brooding
- Chills relieved by warmth
- Chills with fever
- Cramping pains in the abdomen or back
- Disappointed
- Eating intensifies hunger
- Grieving
- Headaches that feel like a nail driven into the side of the head
- Insomnia from emotional distress
- Introspective
- Nausea relieved by eating
- Rejects company
- Sad
- Sensation of a lump in the throat
- Skin very sensitive to drafts
- Tearful
- Thirst during chills
- Vomiting

### **Kali phosphoricum**

Indicated when a person has been exhausted by overwork or illness. Feels a deep anxiety and inability to cope. Jumpy and oversensitive. May be startled by ordinary sounds. Hearing unpleasant news or thinking of world events can aggravate the problems. Insomnia and an inability to concentrate may develop, increasing the sense of nervous dread. Eating, warmth, and rest often bring relief. Symptoms:

- Backaches
- Deep anxiety and inability to cope
- Exhaustion
- Headaches
- Jumpy and oversensitive
- Nervous digestive upsets
- Startled by ordinary sounds

### **Lycopodium (Lyc)**

Lycopodium patients attempt to cover an inner sense of inadequacy by putting up fronts, by pretending to be something they are not. They feel anxiety from mental stress and suffer from a lack of confidence. They can be self-conscious and feel intimidated by people they perceive as powerful. They can feel a deep anxiety and fear of failure, when they take on responsibility. They usually do well, once started on a task. Symptoms:

- Breaking down under stress
- Bullying tendency
- Claustrophobia
- Cranky on waking
- Craves sweets, warm food and drink
- Digestive upsets with gas and bloating
- Facial contortions
- Fear of failure
- Gassy, constipation or diarrhea
- Irritability
- Night cough
- Shakes head without any apparent cause
- Sour belching
- Wants to be alone

### **Natrum muriaticum (Nat mur)**

The primary candidates for this remedy are personally aloof but have a social conscience and a desire to help others. Deep emotions and a self-protective shyness can make these people seem reserved, aloof, and private. Even when feeling lonely, they tend to stay away from social situations, not knowing what to say or do. Easily hurt and offended, they can brood, bear grudges, dwell on unhappy feelings, and isolate themselves. They refuse consolation even when they want it. They are often sympathetic listeners to other people's problems. Claustrophobia, anxiety at night (with fears of robbers or intruders), migraines, and insomnia are often seen when this remedy is needed. Symptoms:

- Angry from isolation
- Claustrophobia
- Consolation aggravates them
- Craves salt and dry foods
- Depressed
- Fright, grief, anger
- Insomnia
- Migraine headache
- Mucous membranes dry
- Nausea
- Nervous, discouraged, broken down
- Pains around eyes
- Tongue feels dry
- Vomiting
- Weepy but won't let others see it. (Wants to be alone to cry.)

### **Phosphorus**

Indicated when the victims are openhearted, imaginative, excitable, easily startled, and full of intense and vivid fears. Strong anxiety can be easily triggered just by thinking of almost anything. They are nervous and sensitive to others. They can overextend themselves with sympathy to the point of feeling exhausted and "spaced out" or even getting ill. They need a lot of company and reassurance. They often feel better from conversation or a back-rub. Easy flushing of the face, palpitations, thirst, and a strong desire for cold, refreshing foods are other indications for Phosphorus. Symptoms:

- Anxious
- Associated with hoarseness
- Burning pains in stomach, abdomen, between shoulder blades
- Dry rasping cough
- Fearful
- Nausea
- Night sweats
- Thirst for cold drinks that are vomited
- Tight heavy chest
- Weak

### **Pulsatilla (Puls)**

People who need this remedy often express anxiety as insecurity and clinginess, with a need for constant support and comforting. They fear being alone. They are easily discouraged, moody, tearful, whiny, even emotionally childish. Getting too warm or being in a stuffy room often increases anxiety. Anxiety around the time of hormonal changes (puberty, menstrual periods, or menopause) often is helped with Pulsatilla. Symptoms:

- Changeable symptoms and moods
- Craves open air
- Delayed menstrual period with scanty flow
- Dry mouth with lack of thirst
- Head colds
- Insomnia from recurring thought
- Loose cough, worse at night
- Rich food upsets stomach
- Sensitive
- Sensitive to heat
- Wants attention and sympathy
- Weepy

### **Silicea (Silica)**

Indicated for those who are capable and serious, yet are also nervous, shy, and subject to bouts of temporary loss of confidence. Anxiety can be extreme when they are faced with a public appearance, interview, examination, or any new job or task. Worry and overwork can bring on headaches, difficulty concentrating, and states of exhaustion, oversensitivity, and dread. Symptoms:

- Difficulty concentrating
- Exhaustion,
- Frequently catch colds, sore throats, or other illnesses.
- Headaches
- Low stamina
- Overreact and devote attention to tiny details
- Oversensitivity
- Overwork
- Worry

## Arthritis

About 50 million people in the United States suffer from some form of arthritis. For more than 20 million of these people, the symptoms are severe enough to cause them to seek medical attention.



Arthritis is not a single disease. The name arthritis means an inflammation of one or more joints. Arthritis is an inflammation of the joints usually caused by wear and tear; injury, or infection. Some are genetic. Its causes and consequences are many and varied. The inflammation is often accompanied by pain, swelling, redness and motion limitation. X-rays may show horrifying damage to the joints of

people who feel no pain at all, or they may show relatively little damage in people who feel great pain.

There are more than 100 types of arthritis. There's osteoarthritis, rheumatoid arthritis, gouty arthritis, psoratic arthritis, juvenile rheumatoid arthritis, bursitis, systemic infectious arthritis, arthritis associated with a venereal disease and many others. The most common types of arthritis are osteoarthritis, rheumatoid arthritis, and gout.

**Osteoarthritis**, also known as degenerative arthritis or wear-and-tear-arthritis, refers to the pain and inflammation that can result from the systematic loss of bone tissue in the joints. It is the most common form of arthritis especially in the elderly.

**Rheumatoid Arthritis**, also known as rheumatism or synovitis, tends to affect people over 40. Women get this two to three times as frequently as men. It is characterized by inflammation and pain in the hands, especially the knuckles and second joints, as well as in the arms, legs and feet, and by the general fatigue and sleeplessness. Organs such as the eyes and lungs may become inflamed as well.

**Gout** usually occurs in men over 40 and is caused by the elevated blood levels of uric acid, which forms crystals in the joints. The immune system reacts to these crystals as if to a foreign invader. The joint, as a result, becomes inflamed and painful.

The four "cardinal signs" of arthritis are:

1. Pain
2. Swelling
3. Redness and
4. Limitation of motion.

All four don't have to be present at once, although they may be. Other possible warning signs of arthritis include:

- Early morning stiffness
- Warmth in a joint
- Weakness combined with joint pain
- Increased pain when the weather changes
- Unexplained fever
- "Cracking" sounds when moving joints

### **Osteoarthritis:**

- Joint pain that is made worse by movement.
- Stiffness in the morning
- Knobby growths on the joints of the fingers
- Pain and progressive stiffness without noticeable swelling, chills, or fever during normal activities probably indicate the gradual onset of osteoarthritis.

### **Rheumatoid arthritis:**

- Painful, red, swollen joints that may feel warm.
- Low fever, loss of appetite, and weight loss; feeling "sick all over".
- Stiffness in the morning.
- Skin lumps, usually on the elbows, fingers and buttocks.
- Dry eyes and mouth.
- Painful swelling, inflammation, and stiffness in the arms, legs, wrists, or fingers in the same joints on both sides of the body, especially on awakening, may be signs of rheumatoid arthritis.

### **Gout:**

- Severe, sudden pain in a joint, often the wrist, big toe, or knee.
- Redness, swelling around joint.
- Fever.

### **Infectious Arthritis:**

Fever, joint inflammation, tenderness, and sharp pain, sometimes accompanied by chills and associated with an injury or another illness, may indicate infectious arthritis.

### **Juvenile Rheumatoid Arthritis:**

In children, intermittent fever, loss of appetite, weight loss, anemia, or blotchy rash on the arms and legs may signal juvenile rheumatoid arthritis.

Arthritis is caused by a variety of factors, including:

- Joint instability
- Age-related changes
- Altered biochemistry
- Hormonal factors
- Genetic predisposition
- Environmental factors
- Psychological factors
- Stress - Stress disrupts the body's hormonal balance. Stress-induced cortisone deficiency can be a factor in some forms of arthritis. When stress occurs, body systems release adrenalin and cortisone, a process that weakens the immune system. As a result, bacteria and other detrimental organisms such as *Candida albicans* spread throughout the body.
- Arthritis And Dental Amalgams - Arthritic symptoms are often found to be associated with mercury dental amalgams. It was found that once the amalgams are removed, the symptoms of arthritis usually disappear.

Arthritis can lead to severe pain, loss of joint mobility, joint deformation, shrinkage of muscles that are unused because of pain and sometimes an inability to perform daily activities as simple as getting dressed. Arthritis of the spine can cause pain in the upper back, neck, head, arms and chest. And the drugs used to treat arthritis may have side effects as well, some of them severe.

Proper diagnosis is important, so be sure to see a physician before beginning any treatment. See your doctor if experience any of the following:

- The pain and stiffness come on quickly, whether from an injury or an unknown cause; you may be experiencing the onset of rheumatoid arthritis.
- The pain is accompanied by fever; you may have infectious arthritis.
- You notice pain and stiffness in your arms, legs, or back after sitting for short periods or after a night's sleep; you may be developing osteoarthritis or another arthritic condition.
- Your joints are stiff in the morning but loosen up later in the day.
- Your stiffness lasts for more than six weeks.
- You have severe joint pain that doesn't respond to heat, ice packs or aspirin.
- Your joint is hot, red, swollen and very painful.
- You experience stiffness after an injury to the joint.
- Your joints remain swollen even after you take aspirin or ibuprofen.
- You have chills or fever as well as swollen joints.
- You have already been diagnosed with arthritis but notice a new or different type of swelling in your joints.

Osteoarthritis afflicts the weight-bearing joints: the knees, hips, and spine. It causes the cartilage in the joints to degenerate. It often manifests after an injury or from repetitive physical tasks that place excess stress upon joints.

Rheumatoid arthritis is the most severe type of inflammatory joint disease. It is an autoimmune disorder in which the body's immune system attacks and damages joints and surrounding soft tissue.

There is no cure for arthritis, especially if the bone or cartilage has deteriorated. While arthritis medications may help many people, they can have severe side effects, including immune system suppression, intestinal bleeding, nausea, abdominal pain, diarrhea, depression, headaches and elevated blood pressure.

Standard Western medical treatment for arthritis consists of:

- Nonsteroidal anti-inflammatory drugs (NSAIDs), such as aspirin, Advil (ibuprofen) and Orudis (ketoprofen).
- Oral steroids, such as prednisone and hydrocortisone.
- Powerful painkillers, such as codeine, and synthetic narcotics, such as Vicodin.
- Antirheumatic medications, such as gold injections, an immune system suppresser named Methotrexate and an antimalaria drug called Plaquenil. (See details below.)
- Ultrasound.
- Heat therapy.
- Surgery to "clean up" ends of bones.
- **Supervised exercise program:** For mild to moderate arthritis, a supervised exercise program may be prescribed to improve joint function without aggravating the situation.
- **Injection of synthetic corticosteroids** into the most affected joint spaces. This helps to minimize the use of oral forms of these drugs, which have a greater risk of causing such systemic effects as fluid retention and suppression of adrenal and immune function.
- **Joint-replacement surgery:** If destruction progresses to the point that pain or lack of mobility becomes unbearable, joint-replacement surgery may be recommended.
- For rheumatoid arthritis, alternating applications of heat and cold, alternating rest and exercise therapies, and splints and other assistive devices may be prescribed

■ **Methotrexate (Rheumatrex)** is a cancer chemotherapy drug that inhibits the synthesis of DNA, thus interfering with cell replication, particularly in fast-growing cells. Why it helps people with rheumatoid arthritis is not known, but it can be effective within about a month of treatment, sometimes highly so.

**Caution:** Methotrexate is highly toxic. It can cause bone-marrow suppression, liver damage, and severe lung damage, and other serious side effects. Its use must be very closely monitored by a physician experienced with this kind of therapy.

■ **Gold salts:** These are most often administered by injection. They are sometimes used to treat rheumatoid arthritis if other drugs have failed.

**Examples:**

- aurothioglucose (solganal)
- gold sodium thiomalate (Myochrysine)
- auranofin (Ridaura).

Mode of action is unknown. About half the people who receive this treatment experience improvement, but they rarely improve completely, and side effects are not uncommon.

**Caution:** This may cause side effects such as suppression of the bone marrow resulting in blood abnormalities, kidney damage, liver damage, lung damage, colitis, rashes, skin pigment changes, itching, nausea, and nerve damage.

■ The antimalarial drug **hydroxychloroquine (Plaquenil)** also is used in some cases of rheumatoid arthritis. The reason for this drug's effect on rheumatoid arthritis is not understood. It results in improvement in fewer than half the cases treated and can take up to 6 months for effect; however, it is considered less toxic than some other drugs used for this condition.

**Side effects:** skin rash, itching, hair loss, skin pigment changes, nausea, weight loss, blood abnormalities, and irreversible vision damage.

■ **Penicillamine (Cuprimine, Depen)** - A chelating agent that may be prescribed for some people with severe rheumatoid arthritis.

**Side effects:** Side effects are common. Up to half of those who take penicillamine may experience adverse effects, including blood abnormalities, kidney damage, autoimmune disorders, rashes, mouth ulcers, and loss of the sense of taste.

■ **Sulfasalazine (Azulfidine)** is a common second-line drug tried for rheumatoid arthritis due to its potential toxicity. Blood counts should be taken frequently, as blood abnormalities are frequent.

■ **Experimental treatments deliberately aimed at suppressing the immune system:** These involve the use of such agents as cyclophosphamide (Cytoxan) or chlorambucil (Leukeran). These are cancer chemotherapy drugs with extremely powerful and serious effects. Side effects can be severe, including blood abnormalities, bone-marrow suppression, serious lung disease, and cancer.

■ Fish-oil and oral cartilage supplements.

■ Some women experience arthritic symptoms around the time of menopause. If this happens to you, consult with your gynecologist or other health-care practitioner. Often, balancing a woman's hormones can quickly reduce these aches and pains.

Heat and rest-traditional remedies for arthritic pain-are very effective in the short term for most people.

## **Glucosamine**

For osteoarthritis, try taking glucosamine. Research is suggesting that it can be very helpful. The current recommended therapeutic dose is 500 mg 3 times a day. A combination of glucosamine and chondroitin is recommended.

### **Slim down, if necessary**

Although obesity does not cause arthritis, it certainly doesn't help painful, inflamed joints in the hips, knees or ankles if they are forced to carry excess weight. Take a load off your joints by slimming down to your ideal body weight. Weight control is important especially when arthritis strikes the lower back and legs.

If arthritic pain comes on unexpectedly, supplement an over-the-counter painkiller with dry heat from a heating pad or moist heat in the form of a hot bath or a hot-water bottle wrapped in a towel. However, do not use heat if you have infectious arthritis.

### **Eat Carefully**

Certain foods seem to aggravate arthritic conditions. Many experts recommend that you avoid the nightshade family of foods (tomato, white potatoes, eggplant, and peppers), greatly reduce or eliminate dairy products, and stop eating red meat. Try a vegetarian or largely vegetarian diet. If your arthritis tends toward inflammation (not all types get inflamed) and is very painful, avoiding spicy foods and citrus fruits may help.

### **Strengthen the body with good nutrition**

Adopting a healthful diet based on fresh vegetables and fruits, plus whole grains and small amounts of protein and dairy products is a good way to begin strengthening the body. Nutritional supplements are useful for general health and strength. The regimen may include:

#### **Recommended Nutrition for Arthritis**

- Beta carotene. Plenty of beta carotene from yellow and orange vegetables and fruits and green leafy vegetables. At least one serving of a beta-carotene-rich food every day.
- B complex. Use one that contains 50 mg of the major B vitamins. Take twice a day. B vitamins can also be found in whole grains, dried beans and legumes such as split peas and lentils.
- Niacin. 25 mg of this form of vitamin B3, three times a day. Food sources include barley, buckwheat, split peas and whole grains.
- Vitamin C. Up to 1,000 mg three times a day with meals, to start. Good sources of vitamin C include citrus fruits, cantaloupe, broccoli and Brussels sprouts.
- Vitamin E. 400 mg of vitamin E in the form of D-alpha tocopherol with breakfast, and the same with lunch. Vitamin E can also be found in wheat germ, nuts and green leafy vegetables.
- Selenium. 200 micrograms a day. Selenium is also found in almonds, barley and oranges.
- Zinc. 220 mg of zinc sulfate a day. Take twice a day if arthritis is flaring up. Sources of zinc include turnips, corn and oysters.

### **Keep your joints flexible**

For all types of arthritis, regular exercise is important to keep the joints mobile. The exercises can be as simple as walking or riding a bicycle. Other simple exercises include lifting your arms above your head several times to the front and several times to the sides, rotating your arms in circles at your sides, twisting at the waist from side to side and reaching over to touch your knees or toes. Many simple but beneficial exercises can be done while sitting in a chair or lying in bed. Yoga also helps to improve flexibility.

### **Massage**

A gentle massage with some warm oil over the affected joints once or twice each day for a few minutes can help relieve pain,

## **Vitamin C**

Some experts believe vitamin C can help heal arthritis. Try taking about 500 mg. over the course of the day for a week or so, preferably not on an empty stomach, and see if it helps. If you feel it might be aggravating your condition, discontinue.

## **Visualize your joints move**

Use the power of the mind/body connection to "see" your pain go away. Practice "seeing" yourself healthy for 20 minutes, three times a day.

## **Relax**

Pain tends to worsen with stress and tension. Most pain can be lessened by relaxing. Sit with eyes closed and take five slow, deep breaths. Keep your eyes closed and allow your breathing to return to normal, but follow it with your attention, "watching" the inhalation and exhalation. Sit quietly watching the breath for 10 to 20 minutes. Open your eyes but sit another minute or two before standing up.

Wash painful areas with apple cider vinegar water. Mix 1 part apple cider vinegar to 6 parts water. Spread quark on the painful area and cover with gauze.

Heat coarse salt in a frying pan (no oil), put in cotton cloth and place warm on the painful area.

Mix three boiled potatoes (in skin) with 2 tbsp. bran. Place on joints for fifteen minutes.

Cornmeal porridge is excellent as a poultice since it remains hot for a long time. Apply as hot as you can bear it.

- Mix clay with hot water to make a thick paste and place on the painful area for thirty minutes.
- Fill a soap dish with water, and place in the freezer to make an ice-block to rub on painful areas.
- Diet plays an important role in arthritis. A diet high in proteins and saturated fats aggravates arthritis. A vegetarian diet is often beneficial for arthritis sufferers. Food allergies and sensitivity to environmental toxins are problems in individual arthritis cases. Avoid toxins of all kinds including alcohol, cigarettes and coffee.
- Some people find that copper bracelets are effective against rheumatoid arthritis.
- With osteoarthritis, do gentle exercises to strengthen muscles to hold joints in place.
- At night use a linen comforter (duvet) cover filled with equal parts of dried thyme, hyssop, sage and rue.

Do not sleep in feather beds. Feathers do not breathe, and retain dampness. Use sheep fleece to line the mattress. Use sheep wool for comforters. Wear fleece-lined (sheepskin) slippers to fend off dampness.

## **Flexibility and Strengthening Exercises**

Stiff, achy joints can be relieved with daily acupressure treatments. Acupressure improves blood circulation for rheumatic conditions. To soothe discomfort in the neck and lessen the general irritability that arthritis pain can cause, use your thumbs to press both GB 20 points. These points are situated below the base of the skull, two inches out from the middle of your neck. Press for one minute. Work on these points regularly, several times each day, in combination with other therapies. The GB 20 point is a good overall pain-relieving point and is one of the several anti-inflammatory points. (other points are given below.)

## Acupressure Points

For elbow and wrist pain:

LU 5, PC 3, HT 7, PC 7, LU 9, TW 10, LI 11, LI 5, TW 4

For ankle pain: SP 5, KI 3, ST 41, UB 60

The acupuncture points used will depend on the type of arthritis and where the symptoms are felt. Here are some examples. (Note: Acupuncture should be performed by an experienced and qualified therapist. Do not do this treatment yourself.)

If the arthritis is in the shoulder joints, points called the Large Intestine 15 and Triple Heater 14 might be used. (You can find this point by the little "dimples" that appear on the shoulder when you raise your arms straight out from the side of your body.)

If the arthritis afflicts the elbows, Large Intestine 11 (by the bend in the elbow) may be used. The Large Intestine 4, or "Joining of the Valleys" point on the hand may also be used. (To find this point, push your thumb against your forefinger. As you do, you'll notice a small mound of flesh popping up at the base of your thumb. The highest area on the mound is the point.)

If the arthritis is in the hip, Gall Bladder 30 (in the buttocks) may be used.

If the problem is in the knees, the "Eyes of the Knee" points are used. (If you put your fingers on the bottom of your kneecaps and slide them off, they'll fall into a little indentation right below the kneecap. The acupuncturist will place the needle there and direct it under the knee cap.)

If the arthritis is in the foot, the acupuncture point located on the spot where the toes meet the feet will be used.

For any arthritic problems with the face or head, Large Intestine 4 (the Joining of the Valleys point) is useful.

In cases of arthritis at the ankle, spine and jaw, local points beside the problem areas are used.

## Acupuncture Points

- For arthritis of jaw: ST 7, SI 19, TW 17, LI 4
- For arthritis of vertebrae: M-BW-35 (yiyi) corresponding to area of pain, UB 51, UB 40, GV 26
- For arthritis of shoulder: LI 15, TW 14, M-VE-48 (yianneiling), SI 11, TW 3, GB 34
- For arthritis of elbow: LI 11, TW 10, LI 4
- For arthritis of wrist and metacarpal fingers: TW 5, 11 10, 11 5, TW 4
- For arthritis of lumbosacral: GV 3, M-BW-25 (Shigizhuixia), UB 30, UB 26, UB 40, UB 60
- For arthritis of sacroiliac: UB 27, UB 28, local sore points
- For arthritis of hip: GB 29, GB 30, GB 34, GB 39
- For arthritis of knee: M-LE-27 (heding), M-LE-15 (xixia), ST 35, ST 34, ST 36, GB 34, SP 9
- For arthritis of ankle: ST 41, GB 40, GB 41, K 3, UB 60, GB 35, K 8
- For arthritis of metatarsophalangeal: M-LE-41 (shangbafeng), SP 4, UB 65, GB 38, SP 5
- Ear points: Sympathetic Neurogate Points of tenderness corresponding to region of pain in body.

### Frequency of Treatment:

Daily treatment is required if you are suffering from acute arthritis.

For chronic problems, treatment may be given every other day.

Oriental medicine uses a multidimensional approach in treating arthritis. The steps involve:

1. Determine the "type" of arthritis. Oriental doctors use terms such as Xing Bi and Tong Bi to classify different types of arthritis.
2. Treat with herbs and spices, diet, acupuncture, "ear acupuncture" and other therapies, as necessary depending on the type of arthritis and the symptoms.

### Types of Arthritis from Oriental Medicine Perspective

- **Xing Bi.** With this "migratory" arthritis, the pain moves around the body. It's caused by wind, dampness and cold invading and obstructing the chi (energy) and blood circulation. The patient is often thin, dislikes wind and has a white coating to the tongue.
- **Tong Bi.** In this "painful" type of arthritis, severe pain stays in place at one or more joints. It's caused by excessive cold, which slows the circulation of chi and blood. It's made worse by cold and lack of movement, but feels better with heat. There is typically no inflammation or redness at the afflicted joint.
- **Zuo Bi.** This is a "fixed" type of arthritis characterized by dampness and internal stagnation, in which the afflicted parts of the body become heavy and numb. The tongue typically has a greasy white coating, and the pain is worse on rainy and cloudy days.
- **Re Bi.** Caused by the conversion of pre-existing problems into heat, this "hot" arthritis produces swelling, tenderness and sharp pain in one or more joints. The patient's tongue is typically covered with a dry yellow coating, and the pulse is "slippery" and fast.

### Treatment

After determining the "type" of arthritis, the Oriental medicine practitioner tries to relieve the symptoms and to strengthen the body. A combination of herbs and spices, diet, acupuncture, "ear acupuncture" and other therapies, are used, as necessary.

### Herbs and Spices

A variety of herbs and spices are used. The actual herb used and the quantity and frequency will depend upon the condition of the person being treated. Dried ginger is a popular herb in oriental medicine. It is a hot substance that warms the intestines while toning the stomach, lungs and spleen.

Very often combinations of herbs are used. Some of the herbal formulas that are useful to treat arthritis include:

- Chen Pu Hu Chien Wan
- Feng Shih Hsiao Tung Wan
- Guan Jie Yan Wan

**Herbal Formula for those with a robust constitution (strong, loud voice, and thick tongue coating):**

- 1 part black cohosh root
- 1 part burdock root
- 1 part prickly ash bark
- 2 parts devil's claw root
- 2 parts dried gingerroot
- 2 parts sassafras root bark
- 4 parts chaparral leaf

**Herbal Formula for Individuals who are weaker and more deficient (frail, pale, little or no tongue coating, introverted personality):**

- 1 1/2 parts cinnamon bark
- 1 1/2 parts Siberian ginseng
- 2 parts angelica root
- 4 parts prickly ash bark
- 4 parts motherwort
- 4 parts oshaigusticum root
- 4 parts suma root

**Diet**

The following foods are useful for arthritis:

- |  |
|--|
| <ul style="list-style-type: none"><li>■ Black soybean - increases blood circulation. Useful for rheumatoid arthritis.</li><li>■ Cherry - useful to treat rheumatism.</li><li>■ Grape - Increases energy while strengthening the lungs, spleen and kidneys.</li><li>■ Papaya - Useful for rheumatoid arthritis</li><li>■ Royal jelly - Useful for rheumatoid arthritis.</li></ul> |
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Cortisone is commonly used for relief of arthritis pain. You can reduce the dependence on cortisone for your arthritis by stimulating the reflex areas for the adrenal glands. It is suggested that pressing certain reflex areas stimulates the body to produce natural cortisone.

To increase flexibility throughout the body and facilitate the flow of healing energy, thumb walk up, down, and then across the spine reflexes on the inside of your feet. These reflexes are located on the inside edge of both feet (zone 1) and extend from the heel nearly to the top of the big toe.

Work the entire area of the arch of the foot, from the "midline" to the "diaphragm line." Use the thumb walk to go up, down, and back and forth in this area. This will naturally stimulate the adrenal glands in a balanced way, along with working the kidneys, liver, and other internal organs. Work the whole foot and especially the reflexes of the kidneys, and the pituitary, thyroid, adrenal glands and solar plexus.

Many arthritis sufferers experience that their pain and inflammation is temporarily relieved following sex. There is no scientific validation of this and we are not quite sure what is the mechanism. It is possible that sexual activity encourages the production of endorphins, norepinephrine, dopamine, adrenaline and other substances in the body that help to lift the mood, temporarily reduce inflammation and pain, and otherwise make one feel good. In addition, the pleasurable aspects of sex can take one's mind off of other problems, at least temporarily.

Take 4 tablets under the tongue three times daily, or hourly if the pain is acute.

- Ferr phos - use in the beginning stage or when the inflammation is at its height. Pain on movement is accompanied by stiffness and possibly fever.
- Kali muriaticum: 6X to 30X in the second stage of the disease together with ferrum phosphorica with swelling of the joints when movement increases the pains. Take the three or four times per day, ten tablets each.
- Nat phos - restores balance if the body is too acidic, noticeable if perspiration is sour or if the tongue is coated a creamy yellow. Take with the ferrum and kali muriaticum.
- Kali sulph - helps a wandering arthritis. Symptoms tend to be worse in warm, stuffy rooms.
- Calc phos - use when fatigue is present and the joints feel cold and numb. Drafts, motion and weather changes adversely affect the joints.
- Calc fluor - useful for gouty enlargements of the finger joints.
- Silica: 6X. To reduce accumulation of urates lodgings around the joints and muscles, especially in gout.

## **Flexibility and Strengthening Exercises**

These exercises are useful to get you in shape for more vigorous aerobic exercise or as part of your warm-up and cool-down routines.

### **Neck Exercises**

#### **Heads Up**

- This exercise relieves jaw, neck, and upper back pain.
- Sit or stand straight.
- Gently slide your chin back.
- Keep looking forward as your chin moves backward. You will feel the back of your neck lengthen and straighten. Put your finger on your nose and then draw straight back from your finger.

#### **Two-Way Neck Stretch**

- In heads-up position (Exercise 1), and with your shoulders relaxed,
- Turn slowly to look over your right shoulder. Then turn slowly to look over your left shoulder.
- Tilt your head to the right and then to the left. Move your ear toward your shoulder. Do not move your shoulder up to your ear.

### **Hand and Wrist Exercises**

Do these exercises at a table that supports your forearms.

#### **1. One Two Three Finger Exercises**

For best hand function, you should be able to touch the tips of your fingers to the palm and straighten the fingers completely. Use one-two- three approach to stretch and strengthen fingers.

To bend fingers:

- Begin bending the joint closest to the tip of the finger
- Bend the middle joint
- When your fingertips are touching the palm, or are as close as possible, bend the knuckle joint.

To straighten your fingers, just do the movements in reverse:

- First straighten the knuckles
- Then the middle joint , and
- Straighten the fingertips.
- You can exercise your fingers individually or together, using your other hand to help.

## **2. Thumb Walk**

- Holding your wrist straight, form the letter "O" by lightly touching your thumb to each fingertip.
- After each "O" straighten and spread your fingers. Use the other hand to help if needed.

## **3. Hi and Bye**

- To strengthen and limber your wrist, rest your forearm on a table with your hand over the edge. Keep fingers relaxed and bend your wrist up and down.
- To strengthen the small muscles of the hand, slide your arm back until your fingers hang over with your knuckles at the table edge. Keeping your fingers straight and together and your palm flat, move your fingers up and down.

## **4. Door Opener**

- This exercise stretches the muscles and ligaments that rotate the forearm, letting you turn doorknobs, use a screwdriver, or put your hand in your back pocket.
- Start with your forearm resting on a table, palm down.
- Keeping your little finger on the table, turn your hand so the palm faces up.
- If you use your other hand to help, grip your forearm, not the wrist or hand.

## **Shoulder Exercises**

### **1. Pendulum**

- This is good for a painful or limited shoulder. It helps to relax shoulder muscles and moves the joint in all directions.
- You can do this exercise either standing or sitting.
- Lean slightly forward. Let your arm hang freely in front of you. Relax and feel the weight of your arm.
- Keeping the arm relaxed, begin to make small circles. Gradually increase to larger circles.
- Exercise just past the point of discomfort, but don't push too hard.

### **2. Shoulder Cradle**

- Grasp one arm near the elbow with your other hand and raise the arm up over your head.
- Holding your arm as high as it will go, bend and straighten your elbow. If your shoulder is painful or tight, you may do this exercise lying down.

### **3. Wand Exercise**

- If one or both of your shoulders are particularly tight or weak, this exercise is good for you.
- Use a cane, yardstick, or mop handle as your wand.
- Place one hand on each end and raise the wand as high overhead as possible.
- This exercise can be done standing, sitting, or lying down.

### **4. Shoulder Pulley**

- Fasten a hook or pulley in a beam or on the top of a door frame.
- Place a piece of rope or clothesline through the hook. Start with enough rope to let you sit while exercising.
- Hold one end of the rope in each hand. If gripping the rope is uncomfortable, add padding or handles.
- As you pull down with one arm, the other arm will be raised. Move your arms up and down in front of you and also out to the side.

### **5. Pat and Reach**

- This exercise helps increase flexibility and strength for both shoulders.
- Raise one arm up over your head and bend your elbow to pat yourself on the back.
- Move your other arm to your back, bend your elbow, and reach up toward the other hand. Can your fingertips touch?
- Relax and switch arm positions. Can you touch on that side?
- For most people, one position will work better than the other.

## **6. Shoulder Blade Pinch**

- This is a good exercise to strengthen the middle and upper back and to stretch the chest.
- Sit or stand with your head in heads-up position and your shoulders relaxed.
- Raise your arms out to the sides with elbows bent.
- Pinch your shoulder blades together by moving your elbows as far back as you can.
- Hold briefly, then slowly move your arms forward to touch elbows.
- If this position is uncomfortable, lower your hands to touch your shoulders.

## **Back and Abdominal Exercises**

### **1. Knee-to-Chest Stretch**

- Lie on the floor with knees bent and feet flat.
- Bring one knee toward your chest, using your hands to help.
- Hold your knee near your chest for ten seconds and lower the leg slowly.
- Repeat with the other knee.
- Relax and enjoy the stretch.
- Note: You can also tuck both legs at the same time if you wish.

### **2. Pelvic Tilt**

- An excellent exercise for low back pain.
- Lie on your back with knees bent, feet flat.
- Place your hands on your abdomen.
- Flatten the small of your back against the floor by tightening your stomach muscles and your buttocks.
- Imagine bringing your pubic bone to your chin, or trying to pull your tummy in enough to zip a tight pair of trousers.
- Hold the tilt for five to ten seconds. Relax.
- Arch your back slightly.
- Relax and repeat the Pelvic Tilt.
- Keep breathing. Count the seconds out loud.
- Once you've mastered the Pelvic Tilt lying down, practice it sitting, standing, and walking.

### **3. Back Lift (1)**

- This exercise improves flexibility along your spine.
- Lie on your stomach and rise up onto your forearms.
- Straighten your elbows. Breathe naturally and relax.
- Note: If you have moderate to severe low back pain, do not do this exercise unless it has been specifically prescribed for you.

### **4. Back Lift (2)**

- This exercise is good for strengthening your back muscles.
- Lie on your stomach with your arms at your side or overhead.
- Lift your head, shoulders, and arms. Do not look up.
- Keep looking down with your chin tucked in.
- Count out loud as you hold for a count of ten.
- Relax. You can also lift your legs off the floor instead of your head and shoulders.

### **5. Low Back Rock and Roll**

- Lie on your back and pull your knees up to your chest with your hands behind the thighs.
- Rest in this position for ten seconds, then gently roll knees from one side to the other, rocking your hips back and forth.
- Keep your upper back and shoulders flat on the ground.

## 6. Curl Up

- This exercise is great for strengthening your abdominal muscles.
- Lie on your back, knees bent, feet flat.
- Do the Pelvic Tilt (exercise 2 above).
- Slowly curl up to raise your head and shoulders.
- Uncurl back down, or hold for ten seconds and slowly lower.
- Breathe out as you curl up, and breathe in as you go back down. Do not hold your breath.
- **Caution:** If you have neck problems, or if your neck hurts when you do this exercise, do not do this exercise. Do the exercise 7 below instead. Never tuck your feet under a chair or have someone hold your feet!

## 7. Roll Out

- This exercise is a good abdominal strengthener. It is also easy on the neck. This exercise is recommended instead of the Curl Up (exercise 6) above if you have neck pain. If neck pain is not a problem, you can do both these exercises.
- Lie on your back with knees bent and feet flat.
- Bring one knee up to your chest.
- Do the Pelvic Tilt (Exercise 2) and hold your lower back firmly against the floor.
- Slowly and carefully, move one leg away from your chest as you straighten your knee.
- Move your leg out until you feel your lower back start to arch. When this happens tuck your knee back to your chest.
- Reset your pelvic tilt and roll your leg out again.
- Breathe out as your leg rolls out. Do not hold your breath.
- Repeat with the other leg.
- Note: You are strengthening your abdominal muscles by holding your pelvic tilt against the weight of your leg. As you get stronger, you'll be able to straighten your legs out farther and move both legs together.

## Hip and Leg Exercises

### 1. Straight Leg Raise

- This exercise strengthens the muscles that bend the hip and straighten the knee.
- Lie on your back, knees bent, feet flat.
- Straighten one leg. Tighten the muscle on the top of that thigh and straighten the knee as much as possible.
- Keeping the knee straight, raise your leg one to two feet (about 50 cm) off the ground. Do not arch your back.
- Hold your leg up and count out loud for ten seconds.
- Relax. Repeat with the other leg.

### 2. Hip Hooray

- This exercise can be done standing or lying on your back.
- If you lie down, spread your legs as far apart as possible. Roll your legs and feet out like a duck and then in, pigeon-toed.
- If you are standing, move one leg out to your side as far as you can. Lead out and in with the heel.
- Hold onto a counter for support.

### 3. Back Kick

- This exercise increases the backward mobility and strength of your hip.
- Hold onto a counter for support. Move the leg up and back, knee straight. Stand tall and do not arch your back.

#### 4. Knee Strengtheners

- This exercise strengthens the knee.
- Sitting in a chair straighten the knee by tightening up the muscle on top of your thigh.
- Place your hand on your thigh and feel the muscle work.
- Holding your knee as straight as possible, push out with your heel and then point your toes.
- Make circles with your toes.
- As your knee strengthens, see if you can build up to holding your leg out for thirty seconds. Count out loud. Do not hold your breath.

#### 5. Power Knees

- This exercise strengthens the muscles that bend and straighten your knee.
- Sit in a straight-backed chair and cross your legs above the ankles.
- Your legs can be almost straight, or you can bend your knees as much as you like. Try several positions.
- Push forward with your back leg and press backward with your front leg.
- Exert pressure evenly so that your legs do not move. Hold and count out loud for ten seconds.
- Relax. Change leg positions. Be sure to keep breathing.

#### 6. Hamstring Stretch

- This is a good exercise to do if you get muscle cramps in the back of your thigh.
- **Caution:** If you have unstable knees, or "back knee" (a knee that curves backward when you stand up), do not do this exercise.
- Lie on your back, knees bent, feet flat. Grasp one leg at a time just above the knee and hold the leg at a right angle with the body.
- Holding the leg out at arm's length, slowly straighten the knee. Hold the leg as straight as you can as you count to ten.
- **Caution:** Be careful. It's easy to overstretch and be sore with this exercise.

#### 7. Achilles Stretch

- This exercise helps maintain flexibility in the Achilles tendon, the large tendon at the back of your ankle. This exercise is especially helpful for cooling down after walking or cycling, and for people with ankylosing spondylitis or psoriatic arthritis and also for calf cramps.
- Stand at a counter or against a wall. Place one foot in front of the other, toes pointing forward and heels on the ground.
- Lean forward, bend the knee of the forward leg and keep the back knee straight, heel down. You will feel a good stretch in the calf.
- Hold the stretch for ten seconds. Do not bounce, Move gently.

#### 8. Tiptoes

- This exercise strengthens your calf muscles and makes walking, climbing stairs, and standing less tiring.
- Hold on to a counter or table for support and raise up on your tiptoes.
- Hold for ten seconds. Lower slowly.
- How high you go is not as important as keeping your balance and controlling your ankles.
- It is easier to do both legs at the same time.
- If your feet are too sore to do this standing, start doing it while sitting down.
- These exercises are useful to get you in shape for more vigorous aerobic exercise or as part of your warm-up and cool-down routines.

## **Ankle and Feet Exercises**

These exercises are for flexibility, strength, and comfort.

### **1. Ankle Circles**

- Sit in a straight-backed chair with your feet bare.
- Hold your feet slightly off the ground and slowly circle your ankles to the right and then to the left.
- Go as far in each direction as you can.

### **2. Towel Grabber**

- Sit in a straight-backed chair with your feet bare.
- Spread a towel out in front of your chair.
- Place your feet on the towel with your heels on the edge closest to you. Keep your heels down.
- Scoot the towel back underneath your feet by pulling it with your toes as you arch your feet.
- When you have done as much as you can, reverse the toe motion and scoot the towel out again.

### **3. Marble Pickup**

- Do this exercise one foot at a time.
- Sit in a straight-backed chair with your feet bare.
- Place several marbles on the floor between your feet. Keep your heel down and pivot your toes toward the marbles.
- Pick up a marble in your toes and pivot your foot to drop the marble as far as possible from where you picked it up.
- Repeat until all the marbles have been moved.
- Reverse the process and return all the marbles to the starting position.
- If marbles are difficult, try other objects like jacks, dice, or wads of paper.

### **4. Foot Roll**

- This exercise stretches the ligaments in the arch of the foot.
- Sit in a straight-backed chair with your feet bare.
- Place a rolling pin (or a large dowel or closet rod) under the arch of your foot and roll it back and forth.
- These exercises are useful to get you in shape for more vigorous aerobic exercise or as part of your warm-up and cool-down routines.

## **The Whole Body Exercise**

### **The Stretcher**

- This exercise is a whole-body stretch. Do it lying on your back. You can start the motion at your ankles as explained here, or reverse the process if you want to start with your arms first.
- Point your toes, and then pull your toes toward your nose. Relax.
- Bend your knees. Then flatten your knees and let them relax.
- Arch your back. Do the Pelvic Tilt. Relax.
- Breathe in and stretch your arms above your head. Breathe out and lower your arms. Relax.
- Stretch your right arm above your head, and stretch your left leg by pushing away from you with your heel. Hold for a count of ten.
- Switch to the other side and repeat.

Most of the major homeopathic remedies are useful to treat arthritis. Homeopathic remedies to relieve immediate pain and joint stiffness may include Rhus toxicodendron or Bryonia. What remedy is selected depends on the symptoms. Some homeopathic remedies include:

- Aconitum: 3X, every hour in rheumatic subjects with fever, restlessness, anxiety.
- Actea spic - The arthritis is centered in the hands and feet. Joints are painful and swollen.
- Apis mellifica: 3X for much swelling, little pain.
- Arctium: 6X, every four hours for pain in joints, colalgia, neuralgia.
- Arnica montana - The person is in denial. Denies that anything is wrong and prefers to be left alone. Is nervous and overly sensitive. The person may be suffering from rheumatoid arthritis related to cold, damp conditions. Soreness and bruising are problems.
- Belladonna - The pain strikes suddenly. The person does not like stimulus of any kind. The afflicted joints are swollen and red. The pain is "sharp" and related to chills or getting wet.
- Berberis vulgaris: 1X, every four hours for chronic synovitis of the knee.
- Bryonia alba: 3X for pain worse with movement, part sensitive to touch.
- Calcarea carlionica-ostrearum - The person is fearful and confused. Suffers from rheumatoid arthritis affecting the shoulders and upper back, which is made worse with wet or damp conditions.
- Chamomilla - Useful when the person is angry and restless. The pain is severe.
- Cimicifuga racemosa - The person is overly talkative and restless, appearing to be alternately happy and miserable. The pain appears more in the muscles than in the bones.
- Dulcamarta: 3, hourly for subacute rheumatism due to cold and wetness.
- Hepar sulphurils calcareum: 6, four d when suppuration has taken place.
- Kalmia latifolia: 3 T 3h for acute nonfebrile rheumatism with migratory pains.
- Mercurius: 12, every two hours for pain and swelling of joints, worse at night, profuse sweat, pericardial complications.
- Mercurius sulphuricus: 6, every four hours for rheumatic synovitis.
- Pulsatilla nigricans: 3X, every hour in women and children with pain worse by heat, better by cold.
- Rhus toxicodendron - The person is apprehensive and depressed, particularly at night. Lack of movement causes pain and stiffness. F
- Sulphuricum: 1-30, every two hours when the pains are worse at night, by warmth.

## Back Pain

Back pain is the leading cause of disability for people under the age of forty-five. Eighty percent of all Americans suffer from back pain at some point in their lives. In spite of this common occurrence, most people are completely unaware of the things they do that contribute to this



problem. Alternative medicine offers a number of systems for healing aching backs. There are a number of steps you can take to minimize future problems and pain.

Chronic pain has a high social cost. More than 11.7 million Americans are significantly impaired and 2.6 million are permanently disabled by back pain alone. One national survey found that more than 550 million days are lost from work each year because of pain. The cost in disability compensation and loss of productivity associated with pain in the USA is estimated to be as high as \$100 billion annually.

Back problems affect all kinds of people, men as much as women and young as well as old. Even among 16-24 year olds, one in three had back pain in the past year. It's most common among the middle aged: almost half of those aged 45-64 had back pain in the last year. Young people are more likely to have brief, acute episodes of back pain, while chronic pain is more characteristic of older people. Just over one in four people over the age of 65 suffered back pain for the whole year. The following table shows the demographics of back pain sufferers in U. K:

Men	Women	16-24	25-44	45-54	55-64	65+
40%	41%	33%	36%	47%	47%	40%

Many people who contract pain find that there is no satisfactory cure for it after prolonged treatment. This makes them desperate and irritable. To make things even worse, many people, including their doctors, often wonder whether the pain is real or the person is exaggerating for personal gain (such as disability, lazy to go back to work, etc.). This makes them more irritable and often the patient ends up in distancing from the friends and other social circles. Now we have a situation of pain combined with emotional stress and pain to make the situation even worse than what it was before.

Studies conducted at the University of Pittsburgh's Pain Evaluation and Treatment Institute and elsewhere have documented the important role that thoughts, feelings, and other people's responses can play in chronic pain. These studies showed that psychological problems rarely cause pain; but the longer chronic pain exists, the more likely it is that emotional factors are prolonging it. The good news is that there are psychological interventions that can help make the pain much more manageable, if not totally eliminate it. Similarly, chiropractic techniques are found to be very useful in alleviating the back pain as well as drug therapy for short term management of pain.

We will take a look at each of these options. We will also discuss the theories of pain in order that we can understand how the mind-body interventions and therapies such as acupuncture manage pain.

- Persistent aching, pain or stiffness anywhere along your spine, from the base of the neck to the hips. Although pain can occur anywhere in the back, the majority of back pain occurs in the lower back, where it is better known as lumbago.
- Sharp, localized pain in the neck, upper back, or lower back, especially after lifting heavy objects or engaging in other strenuous activity.
- Chronic ache in the middle or lower back, especially after sitting or standing for extended periods.
- Occasionally there is visible curvature of the spine, but usually there are no apparent external symptoms.

### Call Your Doctor Immediately If

- The pain increases when you cough or bend forward at the waist; this may be the sign of a herniated disk. Immediately after the onset of pain, lie flat with a pillow under your knees.
- The pain follows an injury and is accompanied by sudden loss of bladder or bowel control, if you have difficulty moving any limb, or if you feel numbness, pain, or tingling in a limb, do not move, but call for medical help immediately. You may have hurt your spinal cord.
- Back pain is accompanied by nausea, vomiting, fever, muscle weakness, pain down an arm or leg, or bowel or bladder disturbances, or if pain is unrelieved by 2-3 days of rest.
- Pain lasts longer than seventy-two hours, if the pain radiates into the legs, or if other symptoms such as unexplained weight loss occur, consult your health care provider.
- You have pain in one side of the small of your back, feel sick, and have a fever, see your physician immediately. You may have a kidney infection.
- The pain in your back extends downward along the back of the leg; you may be suffering from sciatica.
- The pain is accompanied by fever; you may have a bacterial infection.
- You have dull pain in one area of your spine when lying in or getting out of bed, especially if you are over 50; you may be suffering from osteoarthritis.
- Intense pain makes movement impossible. A tumor could be putting pressure on the spinal column and causing pain.
- Pain is felt in both thighs when walking. This can be a symptom of spinal stenosis, the formation of bony growths on the vertebrae that cause the lower spinal canal to narrow.
- Acute back pain is accompanied by changes in bowel or bladder habits.
- Pain is worse at night, and there is a history of cancer in your family.
- You feel numbness or weakness in your legs or feet.
- Pain is making you feel anxious or depressed.

### What Is Back Pain?

Most people suffer from back pain at some point in their lives.

Human spinal column is an extraordinary mechanism, providing the stability we use to stand upright and the flexibility we need for active movement. The spine, also known as backbone, is actually a stack of 24 individual bones called vertebrae. A healthy spine is S-shaped when viewed from the side, curving back at the shoulders and inward at the neck and small of the back. Spine houses the spinal cord—the intricate sensory network that runs through the vertebrae to transmit feeling and control movement throughout the entire body.

The main reason we suffer from back problems is that we are increasingly becoming sedentary creatures. The upright posture is designed for walking. Today, a high proportion of people spend the better part of their working day sitting at desks, at work stations, or in cars and trucks. These changes in human behavior have had a profound—and largely negative—impact on human physiology.

Women are very vulnerable to back pain. Childbearing and child rearing put a heavy load on women's backs. During the last two trimesters of pregnancy, the fetus can shift the center of gravity of women's back. This alters the curve of their spine, resulting in back pain. Soon after pregnancy and when children are toddlers, women experience back pain from bending and lifting. Women have two-thirds the muscle mass as compared to men of same size. This means that women need more muscle power to do the same work. We generally do not think about the implication of what we routinely do. Most of us are careful when we lift weights or heavy objects. But we won't think of much when we pick up a toddler and a 10-pound bag of groceries while still carrying a briefcase crammed with books and papers. (Add up the weight.) This puts severe strain on the back-muscles.

## Causes

Back problems are mostly self-inflicted. Most of our back troubles happen because of bad habits, generally developed over a long period of time: poor posture; overexertion in work and play; sitting incorrectly at the desk or the steering wheel; pushing, pulling, and lifting things carelessly. Sometimes the effects are immediate, but in many cases back problems develop over time. The most common type of back pain comes from straining the bands of muscles surrounding the spine. Although such strains can occur anywhere along the spine, they happen most often in the curve of the lower back; the next most common place is at the base of the neck.



For many years, it was assumed that back pain was the result of spinal degeneration or injury, especially damage to the intervertebral disks. These are structures located between the vertebrae that act as cushions. Each disk consists of a tough, fibrous outer layer surrounding a soft interior that provides the cushioning. With the ordinary wear and tear of living, the disks show signs of aging and may be injured. When a disk begins to degenerate, a strain—even something as small as a sneeze—can cause the disk to rupture, or herniate, allowing the soft interior material to protrude out of the disk and press against the spinal cord.

A herniated disk can cause severe intermittent or constant back pain. However, disk disease are not the main cause of back pain. That is because most adults past the age of forty—whether they experience back pain or not—have some degree of disk degeneration. In most instances, disk degeneration and even herniation do not produce any symptoms of back pain.

It is now believed that the leading cause of back pain is simple muscle strain. Symptoms may come on suddenly and can be acutely painful; but back pain, in actuality, develops over a long period of time. When muscles contract, lactic acid and pyruvic acid are produced as byproducts of muscular activity. It is the lactic acid in the muscles that produces the sensation of muscle fatigue following strenuous activity. If high levels of these acidic byproducts accumulate in the muscles, they cause irritation that can eventually turn into pain and interfere with the normal conduction of electrical impulses in the muscle tissue. This results in a phenomenon called delayed-onset muscle soreness (DOMS). Problems with acidic buildup are often made worse by dehydration.

In most cases, the back pain has an associated psychological component. It could be a deep-seated emotional or stress-related problem.

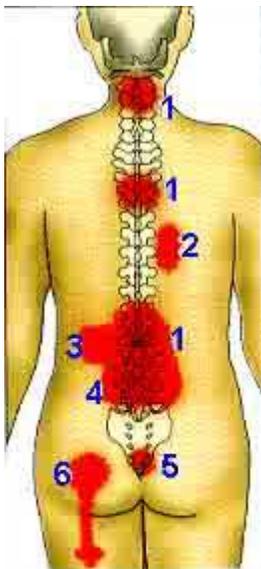
The factors that contribute to back pain include:

- Abnormal curvature of the spine
- Arthritis
- Bone disease
- Calcium deficiency
- Constipation may produce back pain
- Female pelvic disorders
- Improper footwear and walking habits
- Improper lifting, lifting heavy objects
- Kidney, bladder, and prostate problems
- Poor posture
- Pregnancy
- Prolonged sitting, especially in a chair that does not adequately support the back
- Rheumatism
- Sleeping on a mattress that is too soft
- Slouching when sitting
- Straining individual muscles
- Stress

Fractures are rarely the cause of back pain. Sometimes backache occurs for no apparent reason. They may develop from weakened muscles that cannot handle everyday walking, bending, and stretching. In other cases, the discomfort seems to come from, or is aggravated by, general tension, lack of sleep, or stress.

### Neck and Back Pain

Both neck and back pain are caused by conditions that affect the spine. The spine is built from a series of bones called vertebrae, which are separated by disks of cartilage that keep the bones from grinding together. When a disk herniates, or "slips," a small bulge of cartilage pushes out from within the disk and can press against and pinch one of the nerves that extends out from between the vertebrae, or even press into one of the nerves that run down the center of the spinal column. This can cause local pain and inflammation but can also project pain along the length of the nerve as it branches out from the spinal column.



A herniated disk in the neck can cause shoulder pain, pain in the arm, and tingling or numbness in the fingers. The pain seems worse on awakening, after the neck has stiffened or twisted in sleep.

A herniated disk in the lumbar spine, or lower back, can cause back pain, tingling or numbness in the foot, or sciatica: a shooting pain that runs along the length of one of the nerves extending through the buttocks and down into the leg.

1. Osteoarthritis
2. Fibrositis
3. Kidney infection
4. Lower back pain
5. Coccyx
6. Sciatica

Whether in the neck or the back, the herniated disk can be extremely painful and debilitating and can prevent normal work and activity. Over time, pressure on a nerve can cause a state of chronic inflammation, which is difficult to treat. Parts of the body can go numb or lose all sensations.

### **Conventional Treatment for Neck and Back Pain (Herniated disk)**

The standard treatments for this condition include anti-inflammatory medications, bed rest, traction, and microsurgery to remove the herniated portion of the disk.

In extreme conditions, the entire disk of cartilage is sometimes removed, and a 'splint' of bone from elsewhere in the body or from a donor bone is used to fuse the two vertebrae together so that they can't move and grind against each other.

Surgery is not always effective, however, and the problem persists in some people even after surgery.

### **Disk Herniation Does Not Always Means Pain**

Disk abnormalities may not always be the cause of the pain. In one study, MRI scans were used to examine the spines of people with no back pain. Two thirds of them had spinal abnormalities, including herniated and degenerated disks. If these problems had been seen in someone with back pain, they probably would have led to surgery.

### **Gate Control Theory of Pain**

The gate control theory was first proposed in 1965 by psychologist Ronald Melzack and anatomist Patrick Wall. They suggested that there is a "gating system" in the central nervous system that opens and closes to let pain messages through to the brain or to block them.

According to the gate control theory of pain, our thoughts, beliefs, and emotions may affect how much pain we feel from a given physical sensation. The fundamental basis for this theory is the belief that psychological as well as physical factors guide the brain's interpretation of painful sensations and the subsequent response. Many athletes do not experience pain during the intense activity of the game. After the game, when they turn their attention to their injuries, the pain suddenly appears to come from nowhere. Many pain sufferers find that their pain is worst when they feel depressed and hopeless-feelings that may open the pain gate-and that it's not so bothersome when they are focused on doing something that demands attention or is enjoyable. Although the physical cause of pain may be identical, the perception of pain is dramatically different.

Here's how the gate control theory works. (See also acupuncture for a description of the gate control theory and how that is used to explain the effect of acupuncture in controlling pain.

First, sensory messages travel from stimulated nerves to the spinal cord-the body's pain highway. There, they are reprocessed and sent through open gates to the thalamus, the brain's depot for tactile information. Sharp pains, such as a sudden burn, stimulate different nerves than gnawing, dull pains.

Once the nerve signal reaches the brain, the sensory information is processed in the context of the individual's current mood, state of attention, and prior experience. The integration of all this information influences the perception and experience of pain, and guides the individual's response.

The brain's response to these information will determine the extent of pain we get. If the brain sends a message back down to close the gate, the pain signals to the brain are blocked and we experience lower pain. (That message may be carried by endorphins, natural painkillers in the body that are chemically similar to morphine.) If the brain orders the pain gates to open wider, the pain signal intensifies and we can often feel debilitating pain such as migraine headache.

## **Conventional Treatment**

Traditionally, rest and painkillers are prescribed for back pain. The popular solution had been to go to bed until it goes away. But this is the wrong way! The medical experts now say that the best path to recovery is the one that keeps you moving.

A physiotherapist may use mobilization techniques backed by ultrasound, laser, or heat treatment. If the problem is severe and there is no improvement after several weeks, X rays and possibly an MRI scan may be suggested. Treatment can include anti-inflammatory and muscle-relaxant drugs, traction, a collar or surgical corset, painkilling epidural anesthetic injections, antidepressants, TENS or, in the case of a prolapsed disk, surgery.

## **Surgery**

Back surgery is generally considered when pain is unremitting or getting worse. Surgery always entails a degree of risk; there is always the chance of permanent damage and impaired mobility. According to U.S. government data, only 1 percent of those who suffer from back pain appear to benefit from surgery.

Back surgery is useful only for problems in four broad categories:

- Disk displacement (a protruded or "slipped" disk).
- Painful (and abnormal) motion of one vertebra in relation to another.
- Narrowing of the spine around the spinal cord itself from overgrowth of bone (spinal stenosis).
- Some cases in which misalignment of one vertebra with another (spondylolisthesis) leads to pain.

The physical therapy refers to a group of healing practices that include massage, stretching, ultrasound, electrostimulation, heat and cold applications, and muscle strengthening. A physical therapist will know which tendons, bones, and specific muscle groups are involved in a pain syndrome and can massage muscles and teach stretching exercises to release spasms and 'knots.'

The physical therapist will also teach specific exercises designed to strengthen muscles that are causing misalignment or joint pain because they're underdeveloped. They have a variety of techniques at their disposal to treat the pain. Cold applications can reduce inflammation; heat can relax a muscle group and increase healing circulation. Ultrasound can relax deep muscle tissue; electrostimulation can relax muscle spasms by overloading them with neural messages.

## **Exercise**

People suffering from back pain often avoid exercising certain muscles because movement can hurt. But strengthening muscles despite discomfort can diminish pain by improving muscle tone, strength, flexibility, and endurance. Exercise can also bolster your sense of control over your body. Workouts can also ease pain by facilitating the release of neurotransmitters called endorphins, the natural painkillers in the body.

You should set up a specific goal for the day and try to attain it, however much it hurts. A beginning goal might be to walk half a block a day and increase the distance gradually over time. Doctors and physical therapists can help determine safe and effective ways to recondition your bodies. Initially, it will hurt. The muscles have not been used for a long time. The pain signifies that the muscle being exercised has been weakened by lack of use. Gentle stretching exercises such as yoga are very useful.

Learn to pace your activities. Rest only after attaining your goals for the day. In other words, do not stop as soon as the exercise begins to hurt. Using a chart to monitor exercise and keep track of progress can help you increase your physical functioning in a careful, gradual way. Gradually, you will learn to become more active without increasing your level of pain.

Here are some suggested exercises

- Aerobic exercise for at least thirty minutes, three to four times per week
- Stretching exercises daily.

### **Stretching For Relief of Back Pain**

Stretching is more important for the relief of back pain than strengthening exercises. The key is to find what muscles or muscle groups are asymmetrically tight or imbalanced, causing postural problems and strain leading to back pain. One of the most common muscles associated with this kind of back pain problem is the rectus femoris. This muscle runs from above the hip down through the kneecap into the front of the tibia (the inner, longer bone of the leg between the knee and ankle). If the muscles in both legs are tight, it can produce, what doctors call, an anterior pelvic tilt, where the whole pelvis leans forward. This often results in a lordosis in the back or an excess amount of lumbar curve. This condition is commonly referred to as sway back.

### **Chair Exercise**

- Sit in chair and lean forward until pain is felt; breathe out and slowly lean farther, stretching muscles further.
- Stand and put the knee of the leg you want to stretch on the seat of a chair. Hold on to the back of the chair with the opposite hand for balance. Pull the heel of the leg you want to stretch to the buttocks, and push forward with the pubic bone. This will push the pelvis backward, and you'll feel the stretch all the way from the knee, up the leg to the front of the thigh.

### **Knee Pulls**

- Sit in a straight-backed chair. Lift your right knee and clasp it in both hands and pull it as close to your chest as possible. Exhale deeply as you feel tension or mild pain in your back. Do the same with your left leg. Do several repetitions.
- Do the same exercise while lying on mat placed on the floor. While lying on the mat, pull both knees toward your chest. Breathe out as you pull your knees toward your chest and as you feel the tension.

### **Pelvic Jack**

- The Pelvic Jack is another easy stretch to help with low back pain. You can do this while sitting in a chair.
- Simply sit up straight, back against the chair back so that you have the normal low back curve. Then just allow your pelvis to roll back as if you were going to slouch into the chair. Hold that for a few seconds and then come back up into the straight position with the normal lumbar curve.

### **Reverse Ankle Pull**

- Stand at the back of a straight-backed chair. Bring your right ankle up behind you, grasp it with your right hand, and gently but firmly pull upward toward your back so that your thigh muscles stretch. Exhale as you pull.
- Do the same with both legs.

## "Cat-Cow" Yoga Position

- Another very effective stretching posture is the "Cat-Cow" yoga position, where you're on your hands and knees, and you alternately drop your back into a sway back position, and then arch it like a cat.

Frequently, a person suffering from extreme acute back pain can't move much, or is stiff in the morning or has trouble getting out of bed. Here is how to do the stretch:

- Lie flat on your back, perhaps with a pillow under the knees so as not to put too much of a strain on the lower back.
- Alternately push one foot out and then the other. You don't really have to be pushing against anything. What you are doing is pushing out with your heel. It is like you're trying to make your leg longer. What you're doing actually is rocking the pelvis back and forth instead of from front to back as in the Pelvic Rock.

## Press-ups

- Press-ups are something like half of a push-up. It is a great exercise to strengthen your lower back.
- Lie on the floor on your stomach. Keep your pelvis flat on the floor and push up with your hands, arching your back as you lift your shoulders off the floor.
- Do press-ups once in the morning and once in the afternoon.

## Crunch sit-up

- Lie flat with both feet on the floor and your knees bent.
- Cross your arms and rest your hands on your shoulders.
- Raise your head and shoulders off the floor as high as you can while keeping your lower back on the floor. Hold for 1 second, then repeat.

## Swim on Dry Land

- This is great for extending and strengthening your lower back.
- Lie on your stomach and raise your left arm and your right leg.
- Hold for 1 second, then alternate with your left leg and right arm as if you were swimming.

## Swimming

- Swimming is great exercise for the back.
- A good exercise for acute low back pain is to get into a warm pool and swim.

**Caution: Know your limit.** If the exercise you're doing hurts or aggravates your condition, stop immediately. Make sure that before you stretch any muscles it must absolutely be relaxed. It must be relaxed in order for it to stretch at all. Do the stretch, hold it for five to ten seconds, then release and relax for five to ten, then go back into the stretch and hold it for five to ten seconds.

## Yoga

Yoga is an excellent way to keep the body limber and in shape. Yoga breathing exercises (pranayama) gently work the muscles of the upper back. The yoga breathing exercises and postures also have the potential to reduce much of the tension and stress that can contribute to back pain. A primary focus of yoga is therapeutic relaxation through gentle exercise and meditation. Yoga teachers believe that by focusing the mind inward, one is able to profoundly relax and revitalize the body and achieve a greater sense of harmony and well-being. It can also help you be aware of your bodies and emotions. It can help you lessen back pain by making you aware of what brings it on.

Yoga is an excellent therapy to relax. When your attention is directed inward, your body receives messages that you are safe and secure and that it is appropriate to relax. So muscles relax, blood pressure drops, nerves are calmed, anxiety is decreased, immunity is heightened, and healing is enhanced. All of these things can greatly improve one's ability to deal with both the symptoms and causes of back pain. Yoga is also excellent to prevent back pain.

A qualified yoga professional can tailor a specific yoga program to your needs. Lying flat on your back (the Corpse posture) is helpful for releasing tension and relieving pain, rotating the back (the Spinal Twist) eases tension in the upper back and shoulders, and back rolls (the Cat Stretch or Cobra) can increase the flexibility of the spine.

The other yoga postures that may be helpful:

- Camel pose
- Cow pose
- Forward Bend
- gentle, modified Fish pose
- Locust pose
- Lotus pose
- Palm Tree pose

All these postures may be used both as a preventive measure and to help remedy back pain.

In a 1985 survey published in a US magazine, 96% of respondents who practiced yoga reported relief from persistent back pain, compared to 23% who were seeing neurosurgeons.

**Caution:**

Be sure to get advice from a trained teacher. When you have a backache, you should not do any yoga postures without expert guidance. This is especially true if your pain comes from a slipped disk.

**Bodywork**

Bodywork includes all the various forms of massage, deep tissue, and movement awareness therapies that can be applied to the treatment of back pain. There are several techniques of bodywork available to choose from for back pain.

Some of the more common forms of bodywork used for back pain and the postural problems that can cause it, include Rolfing and Hellerwork. Both of these techniques involve the strenuous manipulation of the muscles, connective tissues, and joints in order to allow the body, muscles, and connective tissue to realign themselves. Movement awareness therapies such as the Feldenkrais Method and the Alexander technique have also proved effective for realigning and correcting the body's posture. These methods use light touch as well as visualization and suggestion in order to reprogram the body's ingrained image of itself. By relearning proper posture and movement with these techniques, one is often able to alleviate a lot of unnecessary back pain.

Other hands-on techniques that effectively treat back pain through energy healing include acupressure, shiatsu, and reflexology.

The following exercise is a variation of Feldenkrais exercise that can greatly benefit an aching back.

- Lie on your back and take a few deep breaths.
- Notice how your spine is resting on the carpet.
- Do all the vertebrae touch, or are there spaces between your back and the floor?
- Does one side of your back touch the floor differently than the other?
- Does one side feel heavier than the other?
- Send both legs, putting your feet flat on the carpet.
- Gently drop your knees to one side, noticing how far down they seem to go.
- Bring them back to center and drop them once again to the same side noticing any differences.
- Repeat this twenty-five times and then rest, stretching your legs back out.
- How does your back now touch the floor?
- Does your breathing seem any different than before?
- Bend your legs again and drop them to the other side, noticing how far they seem to go.
- How does this side compare to the other?
- Bring your legs back to center and rest.
- Now imagine doing this movement in the most relaxed and fluent manner.
- Do this in your mind ten times, and then actually bend your knees to that side.
- Is the movement easier and fuller than before?
- Do this movement another twenty times, paying attention to how it makes your head move.
- When your legs drop, does your chin move toward or away from your chest?
- How does this movement affect your breathing?
- Now stretch your legs back out and rest, noticing how your back now touches the ground.
- What differences do you notice in your breathing, neck, and head?
- Stand up, and walk around slowly, noticing how your body moves and feels.

Many people will notice surprising differences in their movement and posture. Indeed, some people find that their backs now lie completely flat on the ground for the first time in their lives and those with chronic pain may find the problem completely alleviated from this simple five- minute exercise.

### **The Alexander Technique**

An Alexander teacher will train you to become more aware of how you move and hold yourself, and reeducate you to correct your posture. This realignment of the musculoskeletal structure eases areas of muscle tension and nerve pressure in the neck and back, and allows the body to move more effectively.

### **Reflexology**

Press the following points every hour until pain is over, five minutes each point:

- 12-spine- press in the most painful place
- 52-autonomic nervous system
- 55-general pains

Work on your hands and feet focusing on the following reflexes:

■ Arm
■ Diaphragm
■ Hip
■ Knee
■ Leg
■ Neck
■ Sciatic Nerve
■ Shoulder
■ Solar Plexus
■ Spine

Gently apply pressure with your thumb to one of the reflexology points for the back. Hold for 1 minute. The area corresponding to the spine runs along the inner edge of both feet, from the toe to the heel. Press the base of the big toe for upper back pain; below the ball of the foot for middle back pain; and in the arch for lower pain back. Consider consulting a trained reflexologist if pain persists.

### **Relaxation**

Relaxation techniques provide important and useful means of managing pain. Muscle relaxation decreases or prevents muscle spasms, reduces and controls muscle tension, and helps control other physiological mechanisms (altered blood flow, changes in brain chemicals) involved in nervous system arousal and pain production. Muscle relaxation may also reduce anxiety and distress, improve sleep, and distract a person from the pain.

Several relaxation techniques are available. These encourage relaxation of the back muscles by avoiding stress—a common cause of muscular tension. These include progressive muscle relaxation, biofeedback, meditation, visualization, self-hypnosis, and affirmations. They help promote mental and emotional relaxation.

### **Research by psychologist Francis Keefe at Duke**

University has shown that relaxation can be effective for patients with low back pain. Several other researchers on migraines and other chronic pain validates the efficacy of relaxation techniques in managing pain.

### **Schuessler Tissue Salts**

Take 4 tablets three times daily under the tongue or hourly if the pain is severe. Stop after two or three weeks.

- Calc fluor
- Ferr phos
- Nat mur
- Use Mag phos for cramps, spasms and darting pains.

### **Trigger Point Therapy**

Trigger point therapy is based on the phenomenon of painful trigger points that develop in the muscle. These can occur as a result of muscle spasm or from tangled knots of normally smooth muscle fibers. Trigger points are often associated with junctions of the autonomic nervous system. In persons who are suffering from muscular aches and pains, the trigger point is characterized by knotted muscles and a painful tender spot. A trigger point can radiate pain and sensation through nerves to other places on the body.

The treatment involves injecting a small amount of local anesthetic into the trigger point. The anesthetic seems to 'defuse' the disturbed nerve reaction by scrambling the electrical signals that prompt pain sensation in the nerves, and switching the nerve-muscle complex back to a state of rest. A series of treatments are necessary to cause the pathologically disturbed nerve and muscle to realign normally, resulting in long-term improvement.

Trigger point therapy can be especially useful when there has been an injury to muscles and nerves, whether caused by a traumatic incident or simply by repeated strain and tension.

### **Acupressure**

To treat persistent lower back pain, firm pressure may be applied to acupoints on the Bladder and Gallbladder meridians, relieving pain and stimulating the flow of qi.

Experts suggest that pressing the B 54 acupressure points, which are behind your knees, may help move pain and pressure away from your back. To press these points follow the steps below:

- Lie on your back with your legs up and your knees bent.
- Place your fingertips in the center of the crease behind each knee.
- Holding on to these points, gently rock your legs back and forth for one minute as you breathe deeply.
- When you're done let your feet rest flat on the floor, with your knees bent, and relax.
- Repeat this exercise three times a day.

### **Chinese Medicine**

Traditional medicine regards the kidneys as the source of qi that is supplied to the entire body, but especially to the muscles of the low back. As the kidneys and the related muscles of the low back weaken, the muscles go into spasm. This causes the muscles on either side of the spine to pull unequally on the spinal vertebrae. One side pulls harder than the other, causing the spine to drift in that direction. Eventually, disks and nerves become pinched from the bending of the spine to the right or left, causing acute pain.

Middle back pain is often caused by imbalances in the liver and spleen, organs that provide qi to the muscles of the middle back. Upper back pain can be caused by excess kidney energy that is transferred upward to the neck, excessive or deficient heart energy, or tension in the shoulder muscles caused by stress and liver-gallbladder imbalances.

For backache that often results from kidney yin deficiency (or expanded kidneys) Chinese medicine recommends:

- Black beans, black soybeans, and mung beans and sprouted
- Blackberries, mulberries, blueberries, huckleberries
- Kuzu root
- Millet and barley
- Seaweeds
- Spirulina and chlorella
- String beans
- Tofu
- Watermelon and all other melons

## **Foods to Avoid**

- Alcohol
- Animal products (They will stimulate the liver into a heat or stagnant condition and drain kidney yin.)
- Coffee
- Hot spices such as cinnamon, cloves, and garlic
- Tobacco

Other key aspects of Chinese medicine are: acupressure, acupuncture, tai chi and qigong. T'ai chi is an ancient Chinese discipline of slow, fluid movements. It's a great relaxation method that helps the muscles in your back. The breathing exercises and stretching activities of t'ai chi foster harmony within the body.

## **Chiropractic**

Chiropractors are shown to be helpful in dealing with low back pain, sciatica, neck pain, and other syndromes related to the spine. If you have back pain, it's reasonable to make a chiropractor's office your first stop.

It is estimated that more people see chiropractors for back problems than for all other ailments combined. Chiropractic spinal manipulation has been recognized by the U.S. Agency for Health Care Policy and Research as an effective therapy for acute low-back pain. Chiropractic treatment has been found to be more beneficial to patients with persistent back and neck complaints than other forms of manipulation. Research in Great Britain found chiropractic to provide "worthwhile, long-term benefits" for patients with low back pain in comparison to hospital outpatient management. This study also found chiropractic benefits to persist for a three-year period, indicating long-term benefits. For patients with uncomplicated, acute low back pain, chiropractic has also been found to be effective. A cost comparison study of back-related injuries showed the number of work days lost for patients treated with chiropractic to be nearly ten times less than that of patients treated under medical care. Also, average compensation costs for chiropractic care were \$68.38, compared to \$668.39 for patients treated with standard, non-surgical treatments.

Traditional chiropractic therapy relies on spinal manipulation to correct subluxations, or misaligned vertebrae, which may be responsible for problems anywhere along the spine. According to practitioners, misalignment of the vertebrae in the spine can cause the joints to press on the spinal nerves, leading to direct pain in the back and possibly "referred" pain in other parts of the body. By helping restore motion to poorly functioning vertebrae, chiropractic therapy diminishes the accompanying pain and muscle spasm.

Chiropractic is a harmless therapy and, if it does not help you, you can always go to see an orthopedist. In fact, English orthopedists are also trained to manipulate the spine unlike their American counterparts.

The straight chiropractors, who confine their practice to dealing with the bony structures of the body, can provide a great deal of relief and a healing touch for many musculoskeletal problems. They are trained to recognize what they should treat and what they shouldn't treat.

## **Cognitive Restructuring**

Our thoughts can have a profound effect on our mood and physical state-including our perception of physical pain.

If you constantly tell yourself, "I don't see how this pain is ever going to get better," or "I can't take it anymore," as many pain patients do, you may exacerbate your pain in three ways.

- It becomes hard to develop the sense of power and control necessary to fight the pain.
- These self-defeating, stressful thoughts can further tense your muscles.
- Such thoughts may alert the nervous system to widen the pain gate and increase the discomfort.

Cognitive restructuring revises the way you think about your problem by rewriting your internal "script." It has been successful in treating a number of psychological problems, most notably depression. In the treatment of chronic pain, cognitive restructuring is used as an adjunct to other approaches, such as relaxation.

In cognitive restructuring, pain sufferers use a diary to record when their pain was particularly severe; what the situation was at the time of the pain; what they thought about and felt before, during, and after the pain episode; and what they tried to do to decrease the pain. By examining these diaries, perhaps with the help of a trained professional, the pain patient can identify negative thoughts and feelings and learn to change them. For example, they may learn to identify cues that trigger tension and anxiety and find out how to view stressful situations calmly and realistically rather than as catastrophes.

### **Mind-Body Approaches to Pain**

Thoughts, feelings, and other people's responses can affect the way you feel about pain. Several psychological interventions are available that can help make the pain much more manageable, and in some cases, totally eliminate it.

Many pain patients find that their pain is worst when they feel depressed and hopeless. The pain is not so bad when they are focused on doing something that demands attention or is enjoyable. The physical cause of pain may be identical; but the perception of pain is dramatically different.

The gate theory offers a partial explanation for such great variation in the experience of pain. But it does not give the whole story. The missing pieces may be the role of psychological factors on the pain.

For example, thoughts and emotions can directly influence physiological responses such as muscle tension, blood flow, and levels of brain chemicals that play important roles in the production of pain.

Scientists at University of Pittsburgh found that stressful thoughts lead to pain only in those parts of the body that are already physically vulnerable. They placed muscle tension sensors on the lower backs, forearms, and foreheads of three groups of volunteers: patients with back pain, patients with other types of pain, and pain-free people. Their muscle tension was monitored while they recalled and described in great detail the last time they experienced extreme pain and their last episode of severe stress. When discussing these events, people with back pain had a higher tension level in their back muscles-and only in their back muscles-than they did when the experiment began. The other two groups showed no change in back tension.

How you cope with the pain also affects your experience of pain. For example, anticipating pain before it strikes can worsen the situation. This may be more important in cases of pain such as migraine headaches.

You may feel that you have no control over your physical condition. This can sap you of the inner strength to fight back. Even relatively minor problems may appear very serious. The result is that you will be tempted to remain passive and inactive. Some people will try to cope with this situation by turning to excessive medication or alcohol.

Sometimes your interactions with other people can augment your discomfort by inadvertently rewarding you for the pain. We often use symbols such as moans, groans, grimaces, and limps to convey our pain to others. Your friends or family members may respond to these signals in ways that harm you in the long run. If others start paying special attention to you when pain strikes, you may unconsciously seek attention by having an episode of pain.

Mind-body interventions such as relaxation training and biofeedback work by helping control physiological responses that contribute to pain production. Others help patients manage stress-inducing thoughts, emotions, and behaviors that can open the pain gates. All help increase the sense of control over pain and the factors that influence it. It is often possible to reduce the dosage of the pain medicine required by complimenting your drug therapy with mind-body therapies.

### **Pain Clinic**

Many people with persistent pain can successfully manage by using mind/ body techniques on their own. But others need professional help. You can get help from a clinic devoted exclusively to treating pain. Select a clinic that has interdisciplinary facilities that offer personalized treatment tailored to your specific physical and psychological needs.

A study conducted by researchers from University of Pittsburgh and a group of German researchers reviewed 65 studies including about 3,100 pain-clinic patients. The length of treatment varied from several weeks to several months. The clinic patients showed a 56 percent improvement in pain and disability compared with a 14 percent improvement for people in the control groups. The clinic patients also showed significantly less psychological distress and higher levels of increased physical activity and were more likely to return to work.

### **Prevention**

Improving your posture will help prevent many kinds of recurring back problems. First, analyze your posture by standing with your heels against a wall. Your calves, buttocks, shoulders, and the back of your head should touch the wall, and you should be able to slip your hand behind the small of your back. Then step forward and stand normally: if your posture changes, correct it right away. If you stand for long periods at work, wear flat shoes with good arch support and get a box or step about six inches high to rest one foot on from time to time.

Other tips:

- Buy backrests for car seats and a supportive mattress for your bed.
- If lifting heavy objects, bend at the hips and knees, keeping your back straight.
- Make sure your chair supports the small of your back
- Regular exercise such as swimming.

The best way to prevent back pain is to stay active and to exercise. Your doctor or a physical therapist will advise you as to the proper exercises to keep the back strong and supple.

Rather than spending hours sitting or standing in one position, take regular breaks and move around. This simple activity can do wonders in helping strengthen the back.

## **Computer**

With the increase in computer use, doctors report that more and more people are reporting neck and back pain. The main culprit in this case is the position of the computer display terminal. Locate your terminal so that it is in level with your eyes when sitting upright. You should not have to bend down to look at the terminal. In many cases, you will have to elevate the terminal to accomplish this. Take occasional breaks from the computer use to stretch. Buy one of those funny looking "ergonomic" chair. It does help by keeping your back straight. Remember the idea is to keep the posture straight. Many people tend to sit slumped or bend that put a lot of pressure on their spine and back.

## **Sitting**

Most people spend long hours sitting. Make sure your chair correctly supports your body. A good chair bottom supports your hips comfortably but doesn't touch the backs of your knees. Your chair back should be set at an angle of about 10 degrees and should cradle the small of your back comfortably; if necessary, use a wedge-shaped cushion or lumbar pad. Avoid over-soft or bucket-shaped chairs. Very low chairs can be uncomfortable and difficult to get in and out of, as can chairs without arms. Your feet should rest flat on the floor. Your forearms should rest on your desk or work surface with your elbows almost at a right angle.

The best way to sit down is to stand in front of the chair with one foot slightly behind the other, almost under the chair. Bend your knees, and at the same time place your hands behind you to rest on the arms of the chair (or the seat, if the chair has no arms). Then lower yourself gently on to the chair. Placing a small, firm cushion - or rolled-up towel - at the small of the back gives vital support to the lower back area and encourages correct seating posture.

## **Beds**

If you have an old or sagging mattress, put a board under it as a temporary measure. If the bed itself is causing problems, you can put the mattress on the floor. To prevent or minimize back pain at night, keep your spine in a neutral position. Don't prop your head and neck on a big pillow. Instead, choose one that keeps your head and neck in line with your upper back. Sleep only on your side or your back, but never on your stomach. Sleeping on your stomach twists your neck and back. Also, avoid extremes in surfaces, such as saggy mattresses or bare floors. A good mattress and pillow will maintain your neck and back in the correct posture even while you sleep. Pillows between your knees or along your back or sides may provide further comfort to your back and shoulders.

## **Lifting**

When you have to lift heavy objects, don't bend at the waist. Squat with your legs, keep your back upright as you grasp the object, and stand upright again. Let your legs do the lifting, not your back. A back brace may also give support and prevent back strain; its main benefit is that it won't let you bend over at the waist. Use a back brace sparingly: Long-term use can make you dependent on it and may eventually lead to weaker-not stronger-back muscles.

Learn the correct technique to lift. First stay as close as possible to the object you are going to pick up. The closer you stand to whatever you're picking up (a child, a bag of groceries or a box of office supplies) the less strain you put on your muscles. Here's the right technique. Beginning in a standing position, squat from your knees rather than bending from the waist to pick up the load. Plant your feet firmly in front of you, one foot slightly ahead. Once you have your arms around it, keep the load as close to your abdomen as possible while lifting and lowering. Use both of your hands so that you lift symmetrically.

Lift first, turn second. We all have a natural tendency to do things that puts strain on our backs. For example: You grab a bag of groceries and turn to load them into the car--or lift an infant up and out of a crib--in one quick movement. Don't do it. Over time, twisting can lead to herniated disks. Instead, lift your load, hold it close to your abdomen, and then turn, using your feet to get you where you want to go instead of swiveling your hips.

### **Miscellaneous**

- Housework can put a great strain on backs. Take frequent breaks between chores.
- When vacuuming, work in short stretches, keeping the vacuum cleaner close to your body and using short sweeps. Try alternating the arm you use, and make full use of the cleaner's accessories. Store the vacuum cleaner where it is easily reached.
- Organize your cupboards so that everyday items are easy to reach. If you have to get something down from a high cupboard, use safe steps - do not overstretch.
- Wet clothes are heavy. Always carry your laundry basket in front of you, not resting on one hip.
- Try ironing sitting down, or resting one foot on a raised block or low stool. Don't stand for too long without changing position.
- When making beds, kneel rather than stoop. Resist the temptation to do everything from one side of the bed by stretching over. Go to the other side!
- Avoid clothes that restrict your mobility such as tight trousers. This can encourage bad posture and back stress. Avoid or minimize the use of high heel shoes. Low-heeled shoes can sometimes help with arch support, but more than 1/2 inches will misalign the curvature of your back, which can lead to back pain. If you must wear heels, save them for special occasions.
- Wheel your belongings. Briefcases are heavy. So are big purses slung on shoulder straps. Dangling from one shoulder, those big loads create an unequal stress on your spine, which can hurt your back. You can do some common sense techniques to minimize back strain.

■ Carry the minimum in a purse.

■ Use a fanny pack or backpack

■ Use a suitcase on wheels or use a luggage cart (a lightweight metal frame with wheels).

### **Common Sense Recommendations**

Back pain can strike at any time. Most of the recommendations given here apply to short term, acute pain. If you are suffering from pain for quite some time (chronic pain), you should seek professional help.

1. Do not ignore the pain. It is the body's way of telling us that something is wrong. Stop doing whatever started the pain attack in the first place. Stop what you are doing and ease yourself gently into a more comfortable position.
2. When pain hits, immediately drink two large glasses of quality water. This often gives relief within minutes. Muscle aches and back pain are frequently connected to dehydration. The body needs a minimum of eight 8-ounce glasses of water daily to keep acidic wastes from building up in muscles and other tissues.
3. Try lying face down on the floor, hands by your sides, immediately the pain starts. This takes the pressure off your back.
4. If pain follows an injury or sudden movement, apply ice (or a bag of frozen vegetables from the freezer in an emergency) (Do not apply ice directly to your skin as it may cause a cold burn.) for the first forty-eight hours then apply heat.
5. Rest on a firm bed. When getting up, roll to your side, draw your knees up, push up to a sitting position, and stand by pushing up with your legs.
6. Avoid all meats and animal protein products until you are healed. Animal foods

contain uric acid, which puts undue strain on the kidneys that can contribute to back pain. Eat no gravies, oils, fats, sugar, or rich or highly processed foods.

7. Try gentle stretches. Gentle stretches can actually help you heal more quickly. While lying down, try bringing up your knees to your chest. Then, put a little pressure on your knees. Stretch, then relax. Repeat a few times unless you feel pain. If you do, stop.
8. See your doctor after one or two days if the pain is still bad. Before you see the doctor, make a note on how the pain started, how bad it is, what makes it better/worse etc.
9. Take painkillers at regular intervals. Do not exceed the recommended dose. Always read the instructions.
10. To relieve back muscle pain, soak in a very warm bath or apply a heating pad directly to your back.
11. Stop smoking. If you smoke, quit. Studies have shown that people who don't smoke are more likely to experience long-lasting relief from back pain, including less persistent problems overall than those who do smoke. Smoking also makes the disks in your back age faster and stiffen up, because it keeps oxygen and blood from getting to your back.
12. Once the acute pain has subsided, doing exercises to strengthen the abdominal muscles may help to prevent recurrences; these muscles help to support the back.
13. Use relaxation music to help calm the mind and ease body tension.
14. Don't do any bending, twisting or lifting. Learn the correct techniques.
15. Ask a friend or your partner to massage your back. Make sure, though, that they treat you gently and stop them if anything they are doing causes pain. Don't let them touch your spine.
16. When sitting, keep your knees a little higher than your hips and keep your feet flat on the floor.
17. When carrying things on your shoulder, switch the weight to the other side from time to time. Carrying heavy shoulder bags may produce neck, back, and shoulder pain.
18. Always push large objects; never pull them.
19. If you are a nursing mother, put pillows behind your back for comfort and bring your baby to your breast rather than strain your back by bending over your infant. If you're nursing in a chair, make sure that it's a chair with good back support.
20. Move around. Do not sit in the same position for long periods of time.
21. Do not sleep on your stomach with your head raised on a pillow. Instead, rest your back by lying on your side with your legs bent, so that your knees are about an inch higher than your hips. Sleep on a firm mattress with your head supported on a pillow. If your mattress is not firm enough, place a board between the box spring and the mattress.
22. Maintain a healthy weight and get regular moderate exercise. A lack of exercise can cause back pain. Activities that are good for the back include swimming, cycling, walking, and rowing. Avoid baseball, basketball, football, bowling, golf, tennis and weightlifting.

## **Acupressure**

To treat persistent lower back pain, firm pressure may be applied to acupoints on the Bladder and Gallbladder meridians, relieving pain and stimulating the flow of qi.

Experts suggest that pressing the B 54 acupressure points, which are behind your knees, may help move pain and pressure away from your back. To press these points follow the steps below:

- Lie on your back with your legs up and your knees bent.
- Place your fingertips in the center of the crease behind each knee.
- Holding on to these points, gently rock your legs back and forth for one minute as you breathe deeply.
- When you're done let your feet rest flat on the floor, with your knees bent, and relax.
- Repeat this exercise three times a day.

## **Acupuncture**

Acupuncture is a traditional Chinese medical therapy. There is documented research that supports the physiological and therapeutic effect of acupuncture. It has a wide variety of medical uses that include regulating menstruation, reducing the cramps of irritable bowel syndrome, treating tinnitus (ringing in the ears), stimulating immune cells, and inducing anesthesia for surgery. It can be especially helpful in dealing with musculoskeletal problems, such as arthritic symptoms, bursitis, neck pain, and joint pain.

Practitioners use needles, moxibustion, or cupping to stimulate acupoints on the yang channels that flow down the back and legs, such as the Small Intestine, Kidney, and Bladder meridians, to relieve pain and restore the circulation of qi ("life energy"). In Chinese medical theory, the meridians represent paths of energy flow, but Western science has discovered that the nodes are physiologically located at junctures of the autonomic nervous system. Stimulation of the nodes thus affects the nervous system and can cause effects at some distance from the actual point of stimulation.

Many pain clinics now use acupuncture routinely, which can sometimes be helpful in dealing with persistent back pain. In the 1980s, researchers at the University of California, Los Angeles, found that acupuncture restored blood flow, relaxed muscle spasms, and strengthened weak muscles. In other US studies, patients receiving acupuncture for back and neck pain improved more than control groups.

## **Biofeedback**

Biofeedback procedures are useful in managing back pain. The technique known as electromyographic (EMG) biofeedback alerts you to electrical activity from muscle tension, thus helping you control it and diminish the pain it causes.

In one innovative experiment, Herta Flor and her colleagues treated patients suffering from chronic back pain with 12 one-hour sessions of biofeedback. They were compared to a second group, who received the same amount of treatment but were given false feedback-the information they received came not from their own muscles, but from other patients'. The patients given accurate biofeedback reported at least a 40 percent reduction in pain intensity, and half of them experienced a drop of 75 percent; the other group reported no change. Following the biofeedback, patients were encouraged to practice relaxation at home on a regular basis. After two-and-a-half years, the first group's improvements still held.

## **Neural Therapy**

Neural therapy is a treatment for chronic pain that is very popular in Europe and South America. It involves injection of small amounts of a local anesthetic into strategic points.

Neural therapy was discovered by a German physician Ferdinand Hueneke in 1940. Proponents of the therapy theorize that injuries, surgical procedures, and scars can create local disturbances in the autonomic nervous system that actually change the electrical fields of the body, often causing pain or dysfunction at remote sites. Injecting a local anesthetic at the original place of disruption neutralizes or depolarizes the local disturbance and relieves the pain in the distant affected area. A series of treatments may break the aberrant neurological pattern. The trick is to find the scar, the gland, or the trigger point that's causing the symptoms - it could be as ordinary as an appendix scar.

Very often dramatic results are obtained with neural therapy. The patients may be able to freely, painlessly move the painful muscles immediately after receiving the injection. This reaction is often described as "lightning reaction."

## **Nutritional Therapies**

Certain foods and nutrients can modulate the complex cellular metabolism that sustains chronic inflammation. They will not relieve pain quickly in the way that conventional medications do but generally have to be used over a period of weeks and months before they take effect. But they will affect the underlying physiological mechanisms of inflammation and degeneration, which the NSAIDs do not.

Red meat can aggravate or cause chronic back pain. Uric acid contained in red meat can cause joint inflammation. Furthermore, the body uses the arachidonic acid in animal fat to manufacture series-2 Prostaglandins, hormone-like substances which worsen inflammation. Vegetables such as potatoes, soy beans and other legumes, and cold-water fish should replace animal meat as the main source of protein.

Nuts and seeds are another excellent source of protein, and provide other significant health benefits. Nut and seed oils, as well as fish oil, contain essential fatty acids which the body converts to series-1 or series-3 Prostaglandins. These Prostaglandins derived from vegetable sources act as anti-inflammatory agents. Almonds, walnuts and peanuts are particularly beneficial, due to their high magnesium content. Magnesium is not only a constituent of bone and cartilage, but also maintains muscle tone. Chronic back pain is often a symptom of poor abdominal muscle tone.

The diet should include a wide variety of raw vegetables and fruits, and wholegrain cereals to provide the nutrients needed for the maintenance of bones, nerves and muscles, all of which contribute to a strong and supple back. Eat oatmeal, porridge or a Swiss muesli made with soaked oats every morning. These foods are excellent sources of silica, which is particularly important for building strong bones, and B vitamins, which support muscle and nerve health.

## **Nutritional Supplements**

Calcium and magnesium are vital for the muscles and bones, and help alleviate muscle spasms if they exist. Silica is also highly recommended to improve bone structure. Bioflavonoids and vitamins C and E are essential for maintaining connective tissue, and are useful for alleviating disk injuries. Vitamin C also helps if calcium absorption is poor due to inadequate stomach acid. Evening primrose oil is an excellent, mild anti-inflammatory and is useful whether the source of the pain is sciatica or muscle spasms.

## **Recommended Daily Dosages**

### **Most Important**

- Calcium - 1,000 mg
- Magnesium - 500 mg

Note: Consult your physician if you are suffering from any kidney problems before taking these supplements.

### **Helpful**

- Vitamin E, with mixed tocopherols, 400-800 IU

## **The Antioxidants and the Antioxidant Precursors and Cofactors**

Whenever there is an inflammatory reaction in the body, toxic substances called free radicals are released. These free radicals can cause further damage to tissue, which again increases the inflammation in a kind of vicious circle. Enhancing the antioxidant reaction in the body can help relieve symptoms caused by inflammation.

## **Vitamin C**

This is an essential antioxidant, which can support healing of musculoskeletal injuries and relieve chronic pain. Recommended dosage: up to 2000-3000 milligrams per day.

**Bioflavonoids** such as quercetin and catechin:

Used with vitamin C. They have an antioxidant effect and also diminish capillary permeability, which can directly reduce joint inflammation and swelling.

## **Vitamin E**

This has both an anti-inflammatory and an immune regulating effect.

Recommended dosage: up to 800 International Units per day.

## **Zinc, copper, and manganese**

These are cofactors for the activity of superoxide dismutase (SOD), the body's premier naturally produced anti-inflammatory enzyme. SOD acts as a relatively weak anti-inflammatory. Augmenting the body's own SOD with manganese, zinc, and copper, provides a stronger antioxidant effect.

Recommended dosage:

- copper - 2 milligrams twice daily.
- zinc - 30 milligrams twice daily.
- manganese - 50 milligrams twice daily.
- Zinc and manganese also function directly as antioxidants. Excess zinc can create copper deficiency and depress immune function, so it's important not to consume more than 90 milligrams per day.
- N-acetyl-cysteine and selenium- N-acetyl-cysteine is an amino acid and selenium is a mineral that together function as precursors for glutathione peroxidase, another of the body's own natural antioxidants. Recommended dosage: N-acetyl-cysteine, 600-milligram capsule. three times daily;
- selenium, 200-microgram tablet twice daily.

## **Carotenoids**

These make up an important family of antioxidants from which the body can also synthesize vitamin A. Vitamin A is an important immune-enhancing nutrient. It is also essential for tissue repair. Recommended dosage: 25,000 International Units daily.

## **Vitamin A**

This vitamin assists with cellular repair and regeneration. Recommended dosage: 10,000 International Units daily.

**Essential fatty acids**, including EPA (eicosapentaenoic acid), GLA (gamma-linolenic acid), and linolenic acid

These have been shown to help in treating arthritis, and particularly rheumatoid arthritis. These oils work together through different pathways to reduce inflammatory Prostaglandins. Linolenic acid is found in flaxseed oil and in cold-water fish such as tuna, salmon, herring, trout, mackerel, sardines, and cod liver. GLA is found in vegetable sources, including primrose oil, borage oil, and black currant seed oil. Borage oil is a good source of GLA, or gamma-linolenic acid. It has been shown to improve symptoms of rheumatoid arthritis as well as other types of musculoskeletal pain. Recommended dosage: six 240-milligram capsules of GLA per day. It may be necessary to build up the dosage gradually to establish tolerance.

### **Fish oil**

This is a source of EPA, or eicosapentaenoic acid, an omega-3 oil, which has similar effects to those of GLA through a related but different metabolic pathway. Recommended dosage: two to three 1000- or 1700- milligram capsules three times daily. Flaxseed oil in the same amounts provides a vegetarian alternative. Other nutrients are able to relieve pain and slow degenerative processes through different means.

### **Vitamin B6**

This vitamin has been shown to reduce neurological pain and may help with pain caused by pinched nerves, such as carpal tunnel syndrome. It may also help with arthritic symptoms. Recommended dosage: 50-200 milligrams daily.

**Warning:** Higher doses of vitamin B6 may cause toxic neurological side effects, especially when it is taken alone without complementary B vitamins and magnesium.

### **Bromelain**

Bromelain is an anti-inflammatory enzyme derived from the pineapple plant. It has been shown to reduce joint swelling and impairment of mobility. Recommended dosage: 500-1500 milligrams, two or three times daily.

### **Glucosamine Sulfate**

This is naturally present in joint cartilage and has been proposed as a therapy for arthritis and possibly disk problems. Recommended Dosage: 500 - 1000 milligrams two or three times daily.

### **Osteopathy**

Osteopaths and chiropractors use many of the same diagnostic techniques and treatment methods. Osteopaths use manipulation and specific thrusts similar to chiropractic to restore mobility to the musculoskeletal structure of the body. Diagnostic techniques are also similar to those of chiropractic. Methods for treating acute or chronic back pain depend on the cause of the problem, and range from gentle massage to ease muscle tension, to pressure and stretching techniques to restore mobility to the joints. Several studies have shown that osteopathy can aid in the recovery from lower back pain.

### **Problem Solving**

This approach is often used in conjunction with cognitive restructuring. As patients identify situations that trigger their pain, training in problem solving helps them deal with those situations. It helps the patients to identify the problem and then think of a reasonable solution and think about effective ways to cope with it. In some cases this may involve assertive communication to deal with the perpetrators of the pain.

Problem solving is usually used as part of a comprehensive approach to pain, which may include such strategies as cognitive restructuring, exercise, relaxation, and biofeedback. It can be a useful and important aid in dealing with any type of pain.

### **Qigong**

This ancient Chinese system of exercises combines movement and mindfulness - a form of meditation that includes focusing on breathing and body awareness - to relax the muscles and ease stresses on the body. In 1996, the Maryland School of Medicine incorporated qigong into a program for managing chronic lower back pain.

## **Distraction**

Many people suffering from chronic pain become isolated and are left with nothing to focus on but their pain and misery. Learning to fill their minds with pleasant thoughts help lessen their distress. Recently, researchers have systematically evaluated several different kinds of distraction strategies for dealing with pain. A review done at University of Pittsburgh Pain Evaluation and Treatment Institute concluded that the distraction approaches can be classified into five groups. All of these have been found to be effective for mild- to-moderate pain. These are:

1. Pleasant images - Conjure up peaceful, pain-free visions.
2. Dramatized images - Envision situations that use the pain as part of the script (for example, imagining that you are a wounded spy trying to escape your captors).
3. Neutral images - Think of your plans for the weekend.
4. Focusing on the environment - Instead of paying attention to your body, count the ceiling tiles or plan how to redecorate the room, etc.
5. Rhythmic activity - Example: Counting, singing, etc.

Researchers at University of Pittsburgh have also concluded that:

- *"Although none of these coping strategies was consistently more effective than any other, the imagery strategies collectively seemed to be more effective than other strategies that included no imagery. The more the individuals are able to become involved in the mental image, the more useful it is as a distractor. Vivid, detailed images, involving as many senses as possible, seem to work best."*
- Imagery is not a substitute for more active ways of coping with pain. But it can be a valuable part of an overall plan to manage pain.

## **Imagery**

Imagine that you're carrying a 100-pound bag on your back. Drop the bag, open it and examine the contents. There may be a lot of stuff in that bag-anger, frustration, depression, painful memories-that you can throw away to lighten your load. Do this exercise once a day for several minutes every time you have a bout of back pain.

## **Juice Therapy**

Drink ½ to 1 cup of fresh grape juice daily, apart from meals. Grape juice made from dark grapes is the most effective. Keep the juice at room temperature and do not mix it with other juices. If the juice is too sweet for your taste, mix it with plain water to your taste. Drink the juice once a day, preferably before a meal, as a preventive.

## **Massage**

Massage can help relax tense muscles and relieve aches and pains. Massage therapists may use firm stroking movements up either side of the spine, fanning across the shoulders; circular thumb movements over the small muscles on either side of the spine may also ease discomfort. For the occasional, mild backache, a friend could massage you in a similar manner or you can use the self-help technique described below.

## **Self Massage for Back Pain**

Here is a technique you can do yourself. You need two tennis balls and a sock.

1. Take a hot bath or shower.
2. Do some gentle stretching such as yoga.
3. Slide two tennis balls into a sock, tying off the open end of the sock so that the balls are touching each other.
4. Lie on your back on the floor. Have the socks at hand and place them under the small of your back, one ball on each side of your spine.

5. Take a deep breath and let your body relax into the balls. Rock your hips gently from side to side. Then adjust your body slightly so that the balls move up your back a few inches. Hold that position briefly, then take a deep breath.
6. Wait until you feel a sense of softening or melting into the balls before you move them farther up your back.
7. Most people take about 10 to 15 minutes to work the balls up and down their back. If you have a particularly sore area on your back, spend some extra time with the balls touching that spot.
8. **Caution:**  
Do not do massage if you have a prolapsed disk or a spinal problem. Deep massage can worsen this condition.

### **Meditation**

Practice meditation each day while lying flat on your back. Place pillows under your knees and thighs to ease pressure on your back.

### **Energy Medicine**

Energy medicine techniques such as ultrasound have been used to treat back pain. Ultrasound helps to break up local edema as well as local fibrosis where there's been inflammation. Ultrasound can also break any scarring between the muscle layers from an injury. It will also warm the tissues, which helps to relax the muscles. It can also reduce the nerve conduction velocities, which means that the rate at which a pain impulse is conducted along a nerve pathway to the brain is slowed down, causing a pain-relieving effect.

Energy devices such as the TENS unit (Transcutaneous Electrical Nerve Stimulator) are also used for the relief of back pain. The TENS, which can be used at home, works by applying an electrical current to the affected nerves in the area of the back pain, causing conduction to be blocked and pain to be relieved. TENS units and other similar energy devices are also believed to stimulate the production of endorphins, the body's own natural painkillers.

### **Herbs**

Many of the herbs used for pain relief use the same biochemical pathways as the non-opiate pain-relieving drugs, but they are not as effective. However, on the positive side, many of these herbs have multiple effects. Their antispasmodic and circulation-promoting constituents may make up for what these plants lack in prostaglandin-suppressing strength. Herbal formulas that combine prostaglandin-suppressing, antispasmodic, sedative, and antidepressant plants are commonly prescribed by professional herbalists in North America, Great Britain, and Australia

Chronic pain often creates other problems besides the pain itself. These may include: tension, spasm, insomnia, and depression. And while conventional pain medications may remedy one or two of these side effects, some formulas of herbs can address them all. A pain-reliever, an antispasmodic, a sedative, and an antidepressant may all be included in a typical herbal formula created by a medical herbalist. For example, one herbal combination may include equal parts of willow bark (for pain), cramp bark (for spasm), valerian (a sedative), and St. Johns wort (an antidepressant).

### **For example, if related to drink.**

Hot, moist herbal packs help relieve the pain and increase blood circulation on painful areas, while herbal teas, juices and extracts soothe muscles and nerves.

- An infusion of meadowsweet three times a day combined with a rub on the area with lobelia and cramp bark is useful for physical strain or rheumatic problems.
- Bromelain (pineapple extract) is a powerful anti-inflammatory (take 2-3 g daily at first, then 1-2 g as the pain eases). Other anti-inflammatories, effective when drunk as teas, are valerian, St. John's wort, and Jamaican dogwood.
- Burdock soothes the pain and purifies the blood. Take 1-3 capsules or 10-25 drops of extract in 1 cup liquid daily.
- Camomile has a calming effect on smooth muscle tissue. Take it as 1-3 cups of tea, 10-20 drops of extract in a cup of liquid or 1-3 capsules daily.
- Fresh yarrow juice is excellent for strengthening back muscles.
- Horsetail not only heals and builds connective tissue, but also normalizes the bowels and alleviates lower-back pain, much of which can be traced to a dysfunctional intestinal tract. Take internally as per camomile.
- If the muscle tension is due to emotional stress, take borage, St. John's wort, lemon balm or valerian teas.
- Use a white or black mustard seed pack for more intense heat. A mustard pack should not be left on for more than ten minutes because it can irritate the skin.

Here are some herbs that are useful in pain relief.

### Hot Peppers

Cayenne pepper (*Capsicum* spp.) is used in formulas for liniments and plasters in the folk medicine. Red pepper contains a pain-relieving chemical--capsaicin--that is so potent that a tiny amount provides the active ingredient in some powerful pharmaceutical topical analgesics. One product, Zostrix, contains only 0.025 percent capsaicin. The exact mechanism in which red pepper works is not known. But it sure does work. Red pepper's effectiveness may be due to:

- Capsaicin interferes with our pain perception
- Capsaicin trigger release of the body's own pain-relieving endorphins
- Salicylates present in red pepper.

### How to Apply

1. You can buy a commercial cream containing capsaicin and use that.
2. Mash a red pepper and rub it directly on the painful area.
3. Take any white skin cream that you have on hand such as cold cream. Mix in enough red pepper to turn it pink.
4. Place 1 ounce of cayenne pepper in a quart of rubbing alcohol. Let the mixture stand for three weeks, shaking the bottle each day. Then, apply to the affected part during acute attacks.
5. Place 1 ounce of cayenne pepper in a pint of boiling water. Simmer for half an hour. Do not strain, but add a pint of rubbing alcohol. Let cool to room temperature. Apply as desired to the affected part.
6. **Caution:** Do not ingest any of these remedies. Wash your hands thoroughly after preparing or using red pepper. Don't get it in your eyes.
7. Some people are sensitive to this compound. Test it on a small area of skin to make sure that it's okay for you to use before using it on a larger area. If it seems to irritate your skin, discontinue use.

### **Cramp Bark and Black Haw**

For the treatment of spasmodic pain, both cramp bark (*Viburnum opulus*) and black haw (*Viburnum prunifolium*) have been used in American Indian medicine. The Indians used cramp bark to treat both menstrual pain and muscle spasm. Cramp bark and black haw were also used historically for arthritic or menstrual pain. The plants contain the antispasmodic and muscle-relaxing compounds esouletin and scopoletin. The antispasmodic constituents are best extracted with alcohol. So use tinctures rather than teas. Black haw also contains aspirin-like compounds.

**Directions:** Mix equal parts of cramp bark and black haw tinctures. Take between 1 and 4 droppers every two or three hours for up to three days.

### **Willow Bark**

Willow bark (*Salix alba*) was used for treating pain by the ancient Greeks more than 2,400 years ago. American Indians throughout North America used it as a pain reliever even before the arrival of the European colonists. Investigation of salicin, a pain-relieving constituent in willow bark, led to the discovery of aspirin in 1899. The most important active constituent is salicin, but other anti-inflammatory constituents also appear in the willow bark.

### **Peppermint (*Mentha piperita*) and other mints.**

The compounds menthol and camphor are found in many over-the-counter backache medications. They are chemicals that can help ease the muscle tightness that contributes to many bad backs. Menthol is a natural constituent of plants in the mint family, particularly peppermint and spearmint, although the aromatic oils of all the other mints contain it as well. Camphor occurs in spike lavender, hyssop and coriander.

### **Ginger**

Ginger is used to treat various sorts of pain in the folk medicine of China and India. It is an important pain medication in contemporary Arabic medicine. Ginger contains 12 different aromatic anti-inflammatory compounds, including some with mild aspirin-like effects. **Directions:** Cut a fresh ginger root (about the size of your thumb) into thin slices. Place the slices in a quart of water. Bring to a boil, and then simmer on the lowest possible heat for thirty minutes in a covered pot. Let cool for thirty more minutes. Strain and drink 1/2 to 1 cup, sweetened with honey, for taste if needed.

### **Rosemary**

Drinking rosemary tea for pain is a remedy used in the contemporary Hispanic folk medicine of Mexico and the Southwest. Its leaf also contains four anti-inflammatory substances---camosol, oleanolic acid, rosmarinic acid, and ursolic acid. Carnosol acts on the same anti-inflammatory pathways as both steroids and aspirin; rosmarinic acid acts through at least two separate anti-inflammatory biochemical pathways; and ursolic acid, which makes up about 4 percent of the plant by weight, has been shown in animal trials to have anti-arthritic effects. **Directions:** Put 1/2 ounce of rosemary leaves in a 1-quart canning jar and fill the jar with boiling water. Cover tightly and let it stand for thirty minutes. Drink a cup as hot as possible before going to bed, and have another cupful in the morning before breakfast.

## **Epsom Salt Baths**

Folk traditions call for Epsom salt baths to relieve pain. Epsom salt was reputed to have magical healing properties. Epsom salt is primarily magnesium sulfate and has been used medicinally in Europe for more than three hundred years. The heat of an Epsom salt bath can increase circulation and reduce the swelling of arthritis, and the magnesium can be absorbed through the skin. Magnesium is one of the most important minerals in the body, participating in at least 300 enzyme systems. Magnesium has both anti-inflammatory and anti-arthritic properties. **Directions:** Fill a bathtub with water as hot as can be tolerated. Add 2 cups of Epsom salts. Bathe for thirty minutes, adding hot water if necessary to keep the bath water warm.

## **Angelica**

Various species of angelica have been used to quiet pain by American Indians throughout North America. The European species (*Angelica archangelica*) and the Chinese species (*Angelica sinensis*) have been used in the same way in the folk medicine of Europe and China respectively. The Chinese species is sometimes sold in North America under the names dang gui or dong quai. All species contain anti-inflammatory, antispasmodic, and anodyne (pain-relieving) properties. The European species of angelica has been used in European folk medicine since antiquity, as has the Chinese species in Chinese medicine. **Directions:** Place 1 tablespoon of the cut roots of either species of angelica in a pint of water and bring to a boil for two minutes in a covered pot. Remove from heat and let stand, covered, until the tea cools to room temperature. Drink the pint in 3 doses during the day.

## **Aromatherapy**

Treatment with essential oils can often help relieve the painful muscle spasms that contribute to back pain. Several of these--sage, rosemary, thyme, horse balm and mountain dittany--are rich in thymol and carvacrol, compounds that help muscles relax.

**How To Use:** Add a few drops to a couple of tablespoons of any vegetable oil and massage the oil mixture directly into the affected area. Alternately, you can add a few drops of the oil to a hot bath and soak for a while, inhaling the steamy vapors.

Other compounds with potent muscle-relaxing action that can relieve back spasms are borneol and bornyl-acetate. Plants rich in these chemicals include cardamom, sage and rosemary. Borneol is an effective antispasmodic compound at a very dilute concentration, making it even more potent than menthol, camphor, thymol and carvacrol.

Here are some essential oil formulae for best results.

### **Aromatherapy Oil Blend for Severe Backaches**

- ½ ounce of carrier oil.
- 14 drops of lavender essential oil
- 4 drops of birch essential oil
- 4 drops of blue chamomile essential oil
- 4 drops of ginger or black pepper essential oil
- 4 drops of rosemary, coriander or eucalyptus essential oil
- Mix together. Use daily as needed, rubbing it into the affected area after a hot bath, when muscles are relaxed and pores are open.

### **Aromatherapy Oil Blend for Minor Aches**

- ½ ounce of carrier oil
- 2 drops of birch essential oil
- 2 drops of blue chamomile essential oil
- 2 drops of ginger or black pepper essential oil
- 2 drops of lavender essential oil
- 2 drops of rosemary, coriander or eucalyptus essential oil
- Mix together and use daily as needed, rubbing it into the affected area after a hot bath, when muscles are relaxed and pores are open.

### **Essential Oils Useful for Back Pain**

- For muscular fatigue: lavender, marjoram, rosemary, clary sage.
- For acute pain: black pepper or ginger, birch.
- **Caution:** Never ingest an essential oil. Even small quantities of some oils, on the order of a single teaspoon, can be fatal.

### **Ayurveda**

Ayurveda recommends an integrated approach to managing backache incorporating herbs, herbal oils, stretching exercises of yoga and diet to correct the underlying dosha deficiency. Most back pain can be effectively treated with these ayurvedic treatments, but a ruptured or slipped disk often requires intensive medical care.

### **Herbal Remedies**

- Kaishore guggulu 1 tablet 2 or 3 times a day.
- Musta - Musta is an herb that is a muscle pain killer. Take 1/4 to 1/2 teaspoon 2 or 3 times a day with warm water.
- Tagara and valerian - These are muscle relaxants. Take 1/2 teaspoon of either with some warm water. It will relax your muscles and will also help induce restful sleep.
- Yogaraj guggulu, 1 tablet 3 times a day

### **Herbal Oil Rub (Massage)**

- Rub the painful area of the back with mahanarayan oil. This is very effective for relieving the pain. Vata and pitta types should just rub the oil on the surface, while kapha types should give a deeper massage to the area for some time.
- Apply a paste made of ginger powder mixed with sufficient water to the affected area. Leave it on for 10 to 15 minutes, wash it off, and then rub the back with some eucalyptus oil.

### **Hot Herbalized Bath**

- Apply the mahanarayan oil on your back.
- Put 1/3 cup ginger powder and 1/3 cup baking soda into the hot water in your tub.
- Soak in the tub for 10 to 15 minutes.
- Repeat this bath 2 or 3 times a week.
- This provides extra healing and muscle relaxation.

## Enema

Individuals who suffer from backache often get constipated. It is often difficult to determine which came first - the backache or the constipation. Either one can induce the other. For example, the backache may be due to chronic constipation, or the spasming muscles and anxiety caused by the back pain may induce constipation. A simple enema of dashamoola tea will help in either case.

- Boil 1 tablespoon of dashamoola powder in a pint of water for about 5 minutes, cool it down, and add 1/2 cup sesame oil.
- When it is cool enough, use it as an enema, retaining the liquid for 5 to 10 minutes.
- A dashamoola-sesame oil enema is soothing to vata and will help relieve both the constipation and the pain.

## Diet and other Tips

Ayurveda suggests that backache is often due to excess vata.

- Avoid exposure to cold weather or cold winds.
- Avoid high-heeled shoes.
- Avoid strenuous exercise such as jogging, jumping, etc. Instead, opt for the gentle yoga stretching.
- Minimize sexual activity when you have back pain.
- Reduce your consumption of vata-increasing foods. Avoid most beans, including black beans, pinto beans, adzuki beans, and garbanzo beans. Avoid raw, cold salads.
- Sit quietly and meditate, or observe your breathing. This will help relax tense muscles.

## Bach Flower Remedies

Rescue Remedy, comprising cherry plum, clematis, impatiens, star of Bethlehem, and rock rose, is recommended for the shock of sudden, agonizing pain caused by a slipped disk. Rescue Remedy is prepared by infusing flower heads in spring water for three hours.

## Hydrotherapy

For sudden back pain, a practitioner may advocate applying alternate hot and cold compresses to the painful area - three minutes for the hot compress, one minute for the cold, repeated every 20 minutes. The hot compress will increase blood flow to the area and relax the muscles, while the cold compress helps reduce inflammation.

Those with or prone to chronic backaches may benefit from alternating hot and cold showers. Begin with a hot jet or strong spray aimed at the back for one to four minutes. Follow this by a cold jet or strong spray for 5 to 30 seconds. You can repeat this treatment as often as once every hour if necessary.

## Drug Therapy/Pain-Killers

The first line of treatment for any pain be it joint pain, back pain, or muscle spasm, is usually pain killers unless it's unusually severe.

## Aspirin or NSAIDS

Nine times out of ten you'll get a recommendation to try aspirin or another of the family of medications called nonsteroidal anti-inflammatory drugs, or NSAIDS, for short. These drugs reduce pain sensations and also block the release of Prostaglandins, a group of hormone like substances that can promote inflammation.

## **Disadvantages of NSAIDs**

NSAIDs are effective in the temporary treatment of moderate pain but have the potential for long-term side effects.

- Cause stomach disorders
- Cause tiny pinpoint perforations in the surface of the small intestine. This can induce "leaky gut syndrome," which is thought to be part of the mechanism of allergy, autoimmune disease, and even arthritis itself.
- Cause ulceration and bleeding in the stomach.
- Long-term use may cause kidney disorders
- Long-term use of NSAIDs may weaken the intestinal barrier. This allows allergenic substances to pass that may actually promote inflammation in the joints.
- May induce high blood pressure.
- Over the long term they may even accelerate the course of joint degeneration.
- The NSAIDs typically cause some stomach upset.

## **COMMON NSAIDs**

- Aspirin
- Bufferin
- Flurbiprofen (Ansaid)
- Ketoprofen (Orudis)
- Ibuprofen (Motrin, Nuprin, Advil)
- Indomethacin (Indocin)
- Naproxyn (Naprosyn)
- Voltaren

## **Other medications used:**

### **Steroids**

Steroid injections work quite well in the short term. They can relieve pain quickly and completely. Unfortunately, the effect wears off, and the second injection is a little less helpful, the third a little less than that, and so on. You can only give a limited number of steroid injections to a joint, after which you run the risk of actually killing off tissue and weakening bones.

### **Codeine/Tylenol combination (Tylenol 3):**

This certainly blocks pain, but does nothing for the underlying causes of chronic pain. It is a powerful narcotic. You can build up a tolerance to it and require a higher dosage for the painkilling effect. People also experience a dulling effect on mental processes. There is also a high risk of addiction.

### **Homeopathy**

Homeopathy is most helpful in the acute stage, to combat inflammation when the symptoms are clear. If the problem is persistent and recurring, constitutional treatment under the advice of a homeopath is recommended, as there are many backache remedies.

For a sciatica or a slipped disk, treatment can be found under those conditions.

Bryonia is useful when each movement causes excruciating pain, and possibly great irritability -  
Use

Rhus toxicodendron is helpful for relieving strains which are hardly noticeable while moving about, but are painful and stiff upon getting up or first moving. The pain causes restlessness, and heat and warmth help - Use

Dulcanwra is used for back pain that comes on during wet weather or after getting cold and wet, and is relieved by warmth -

If you feel bruised and sore and don't want to be touched, and if the pain is better while you're lying down use arnica 6C or 12C three or four times a day until you begin to notice improvement. Arnica 6c helps overcome the shock of severe pain.

If your lower back gives out, accompanied by dull pain that is worse after walking or stooping use aesculus 6C or 12C three or four times a day until you begin to notice improvement.

## Canker Sores

Canker sores are painful, small ulcers in the mouth or on the inner lips caused by an assortment of viruses. Doctors call this condition aphthous stomatitis or aphthous ulcers. Canker sores are usually white or yellow in color surrounded by red halos. They can appear on the tongue, the lips, the gums, or the insides of the cheeks. The first sign of a canker sore may be a tingling, burning sensation inside the mouth, followed shortly by the appearance of a white or yellowish spot edged by a red halo. Canker sores do not form blisters as cold sores (fever blisters) do. The cold sore, commonly confused with the canker sore, is caused by the herpes simplex virus type 1. The canker sore, on the other hand, is an inflammation, rather than an infection. Canker sores may range in size from the size of a pinhead to as large as a quarter. They are usually about an eighth of an inch in diameter—the size of a pencil eraser. They appear suddenly and often leave suddenly, usually lasting from four to twenty days.



Canker sores often pop up when you're under stress or after you've eaten an irritating food (pineapple, nuts and chocolate are common culprits). They usually clear up by themselves within a week or so, but they often recur, sometimes in the form of multiple sores. Some believe canker sores are contagious. But most think it is not. A susceptibility to canker sores tends to run in families. No successful conventional treatment is available. The natural remedies may help relieve the symptoms of canker sores or may prevent sores from recurring.

### Causes of Canker Sores

Canker sores can be triggered by any of a number of factors, including:

- **Poor dental hygiene:** If you get recurrent canker sores, your toothpaste may be the culprit. Try a toothpaste that does not contain the detergent sodium lauryl sulfate. This is a detergent that may cause the mucous surfaces in the mouth to dry out, leaving them vulnerable to attack from acidic foods. Do not use the same toothbrush for longer than one month. When canker sores on the gum are healing, it is best to use a very soft toothbrush.
- **Irritation from dental work:** Using a rough, hard-bristled toothbrush, or pressing unduly hard while brushing the teeth. This can irritate the mucous membranes and create a canker sore.
- **Food allergies (especially milk and gluten sensitivity):** It has been clearly demonstrated that allergic mechanisms are responsible for producing canker sores in many cases. There is considerable evidence that sensitivity to gluten (a protein found in grains) is the primary cause of recurrent canker sores in many cases. The frequency of recurrent canker sores is increased in patients with celiac disease, a condition characterized by diarrhea and malabsorption due to a sensitivity to gluten. Withdrawing gluten from the diet results in complete remission of recurrent canker sores in patients with celiac disease and some improvement in the rest of the patients.
- **Non-food allergens:** Allergens that commonly induce canker sores include preservatives such as benzoic acid, methylparaben, dichromate, and sorbic acid. Elimination of allergens usually brings complete resolution or significant improvement in people with recurrent canker sores.
- **Nutritional deficiencies:** Although a number of nutrient deficiencies can lead to canker sores, thiamine deficiency appears to be the most significant. Deficiencies of iron, lysine, vitamin B12, and folic acid also can lead to canker sores. Several studies showed that nutrient deficiencies are common among recurrent canker sore sufferers than in the general population. A study of 330 patients with recurrent canker sores showed that forty-seven (14.2 percent) were deficient in iron, folate, vitamin B12, or a combination of these nutrients. When these patients' deficiencies were corrected, the majority had complete remission. Other studies have shown similar deficiency rates for the same nutrients and equally good response to supplementation.

- Biting the cheek: Some people bite the delicate tissues in their cheeks or lips during sleep, or while chewing or talking. This is true especially for people who are suffering from TMJ or whose bite is uneven. This can result in lacerations and canker sores.
- From ayurvedic point of view, people with high pitta in their saliva will have sharp teeth because the crown of the tooth becomes eroded. This can lead to repeated sores.
- Foods: When you eat sharp, dried, or hard foods, such as popcorn, corn chips, crackers, or dried bread, it can hurt the oral mucous membrane resulting in canker sores.
- Hormonal imbalances
- Viral infection
- An underlying immunologic disease (such as HIV infection)
- Trauma (such as that caused by biting the inside of the cheek or using a hard- bristled toothbrush)
- Stress: Stress is often a precipitating factor in recurrent canker sores, suggesting a breakdown in normal immune function and/or integrity of the mucosal lining
- Fatigue
- Abnormal immune response to normal bacteria in the mouth
- Canker sores are occasionally associated with Crohn's disease

### **Traditional Medicine Perspective**

Sores arise as a discharge of waste that is not being cleansed by the liver and kidneys. Canker sores, therefore, indicate a depressed liver and kidney function. Treatment consists of strengthening both of these organs so that blood can be more efficiently cleansed and detoxified.

### **See Your Medical Doctor When...**

- Your sore persists for more than two weeks. This may indicate a more serious condition that needs treatment. A mouth ulcer that sticks around, even if it's not causing pain, could be the sign of oral cancer or a number of other disorders, including vitamin deficiency, anemia, or Crohn's disease.
- You get sores once a week or more, especially when they appear in bunches.
- Your canker sores are extremely painful; your doctor can give you medication to alleviate pain.
- You have persistent multiple mouth sores, which may indicate an underlying problem, such as a drug reaction or, in rare cases, oral cancer or leukemia.

### **Conventional Medicine**

Canker sores can be safely ignored. They generally heal themselves in seven-ten days. Doctors can give medications to reduce the discomfort or to treat any underlying medical problems.

1. Allopathic doctors don't have much to offer people with canker sores. They often prescribe antibiotics or corticosteroids, medications that help relieve pain and inflammation. But neither of these treatments helps much. So they tend to recommend traditional relief--ice to alleviate the pain and rinsing the mouth with warm saltwater several times a day.
2. Doctors also suggest eliminating things that sometimes trigger or aggravate canker sores, such as alcohol, chewing gum, citrus fruits, coffee, dairy products, meat, pineapple, spicy foods, tomatoes, toothpaste and vinegar and other acidic foods.
3. Doctors also suggest avoiding anything that you happen to be allergic to. Nibbling the "forbidden" foods (the ones you are allergic to) is a notorious cause of canker sores.
  - Over-the-counter ointments are recommended to relieve the discomfort of a canker sore. Look for a medicine that contains glycerin, which protects the sore, and peroxide, which fights bacteria.
  - If your sore does not respond to over-the-counter or at-home treatments, your doctor may prescribe a medication containing diphenhydramine to dry up the sore and lidocaine to relieve pain.
  - If you have an infection, it may be treated with an antibiotic such as tetracycline.

## Common Sense Recommendations

- Eat plenty of salad with raw onions. Onions contain sulfur and have healing properties.
- Include in the diet yogurt and other soured products, such as cottage cheese, and buttermilk.
- Rinse your mouth four times a day with a combination of 2 oz hydrogen peroxide, 2 oz water, and 1 tsp each of salt and baking soda. Do not swallow.
- Rinse your mouth with milk of magnesia to coat sores.
- When you feel a canker sore starting, just get a 1/2 gal. of orange juice & drink it up in 2 or 3 days-presto it goes away! Lack of vitamin C causes them. You can also take Vitamin C pills if you don't want to drink all that orange juice. (Tip courtesy of B. Chudalla)
- Try mouthwashes that contain the pain-relieving medication chlorhexidine.
- Cover the ulcer with a wet tea bag; the tannin will help dry up the sore.
- Sodium bicarbonate powder mixed with water is a very effective first aid remedy. This mixture can be used as a mouth rinse as well as swallowed to help make the body more alkaline. Use a toothpaste containing sodium bicarbonate instead of the standard toothpastes high in fluoride and other chemicals.
- Antacid Remedy: Antacids can soothe canker sores by reducing the acidity in your mouth that can irritate them. Here is an antacid remedy you can brew at home: Combine equal parts of the liquid form of Kaopectate or Milk of Magnesia (both antacids) with Benylin or Benadryl (both mild anesthetics). Apply the mixture to the canker sore with a cotton swab. You'll cut down on painful acidity in your mouth and numb the sore, too.
- Use over-the-counter salves containing glycerin and peroxide.
- You can use several OTC medications to suppress the pain. Aspirin, acetaminophen, or ibuprofen are useful. You can also use topical anesthetics. These range from ice, applied to the sore to reduce swelling, to over-the-counter treatments. Those medications with xylocaine numb the area temporarily. Ointments like Orabase and benzocaine coat the sore, protecting it from being irritated by food and from becoming infected.
- Try stress-relieving acupressure exercises. Avoid constant stress. Take time to exercise, sleep and relax.
- Eliminate sources for all food allergens and gluten.
- Do not eat fish or meat of any kind for two weeks. The consumption of animal protein increases the body's acidity, which slows healing.
- Avoid chewing gum, lozenges, mouthwashes, tobacco, coffee, citrus fruits, and any other foods that you know trigger these sores.
- Be careful not to irritate the gums with hard toothbrush bristles or sharp-edged foods such as potato chips or dry bread crusts. Too much acid from fruits and vegetables, and spicy foods can also trigger mouth sores.
- Keep the bowels regular to prevent toxic buildup. Walk regularly walking in fresh air to oxygenate the body and stimulate bowel movement.
- Apply 1 open capsule of Lactobacillus acidophilus, onto sore twice daily.
- If you have repeated attacks of canker sores, check for nutritional deficiencies.
- To avoid getting canker sores, it is important to maintain a proper balance of minerals, acidity, and alkalinity in the body.
- Consult your dentist if you have a mouth sore that does not heal.
- Dab the sore with the medicated end of a styptic pencil (available in drugstores), just as you would to stem bleeding from a shaving nick. This will numb inflamed nerve endings. Use a new pencil to avoid infecting the sore with bacteria. This is an old remedy, but it still works.
- Stress and allergies are probably the most common cause of open sores in the mouth. Learn to relax and minimize stress from your life.
- Some doctors prescribe mouthwashes that contain tetracycline, an antibiotic, for canker sores.
- Do not use the same toothbrush for longer than one month.

## Prevention

- Brush your teeth with disinfecting baking soda. Use soft toothbrushes. Do brush hard. Change toothbrush regularly.
- Undertake stress management techniques.
- Eat 4 tbsp live-culture yogurt a day; it contains bacteria that can keep your system healthy.
- Avoid foods that are spicy, salty, or acidic.
- Take vitamin and mineral supplements C, B complex, folic acid, iron, and zinc.
- Many people have reported excellent relief with a mouth rinse of aqueous colloidal silver; it has a natural antimicrobial effect and boosts immunity. Use after brushing the teeth to help prevent any type of oral infection, including parasites and candida.
- According to B. Chudalla, "if you don't want to get canker sores, there is an easy preventative." A nurse told Chudalla how to prevent them 30 yrs. ago. "When you feel one starting, just get a 1/2 gal. of orange juice & drink it up in 2 or 3 days-presto it goes away! Lack of vitamin C cause's them." Cadullah says that you can also take the vitamin-C pills.

## Acupressure

To relieve stress, press Gall Bladder 21, the highest point of the shoulder muscle, midway between the outer tip of the shoulder and the spine. If you do this as soon as you notice a tingling in the mouth, before a sore develops, it may help reduce its severity.

## Aromatherapy

Apply antiseptic oils of myrrh (*Commiphora molmol*), tea tree (*Metaleuca spp.*), and geranium (*Pelargonium odoratissimum*) on the sores. You may also rinse your mouth four times a day with 1/2 cup water mixed with 1 drop each of the oils of geranium and lavender (*Lavandula officinalis*).

## Ayurveda

### Topical Remedies

- Honey and Turmeric: Mix together 1 teaspoon honey with 1/4 teaspoon turmeric, and rub it on the sore. It will burn a little at first, but the sore area will heal quickly.
- Aloe Vera Juice: Rinse your mouth several times a day with a little aloe vera juice.
- Aloe Vera Gel: Apply aloe vera gel, 2 tablespoons at the canker sore. Repeat the application 3 times a day.
- Aloe Vera Gel and Neem: Use a mix of aloe vera gel and neem powder (Indian herb). Mix 1 teaspoon of aloe vera gel with a pinch of neem powder, and apply directly to the canker sore.
- Tea Tree Oil: Add 10 drops of tea tree oil to 1/3 cup of water. Mix it well. Swish the liquid in your mouth. The mild solution will act as an antiseptic to help prevent secondary infection, and it will also help to heal the sore.
- Ayurvedic herb Kama Dudha: Mix 1/4 teaspoon of kama dudha with 1 teaspoon fresh cream. Mix together and rub it on the sore.

### Internal Remedies

- Ayurveda suggests that canker sores manifest in people with high pitta. Follow a pitta-soothing diet, avoiding hot, spicy foods and fermented food. Also avoid strong alcoholic drinks, as they may aggravate the sores.
- Between meals, drink 1/2 cup cranberry juice. Cranberry juice will help to heal the sore and relieve the burning sensation and irritation.
- Eat a mixture of rock candy powder (1/2 teaspoon) and cumin powder (1/2 teaspoon). This will help stop the pain, as well as reduce inflammation and irritation.

## Herbal Therapy

Several herbs are useful in the treatment of canker sores. Most of them contain tannins and have other wound healing properties. Tannin, the common name for tannic acid, is a constituent of many plants and gives foods an astringent taste. An antiseptic with broad-spectrum antibacterial and antiviral action, it's especially helpful for treating mouth sores, which could be caused by a bacterium, a fungus, a virus or an allergy.

- Gargle with **calendula tea or goldenseal tea** to help canker sores heal. To make the tea: Pour a cup of boiling water over one to two teaspoons of the dried herb. Let this mixture steep for ten minutes. Strain it so that there is no herb left in the liquid. Use this tea as a mouthwash three or four times daily.
- **Myrrh:** Myrrh contains high amounts of tannins. Powdered myrrh is useful for the treatment of mild inflammations of the mouth. Myrrh had been used as a traditional remedy for mouth and gum irritations. Some herbalists suggest mixing 200-300 mg of herbal extract or 4 ml of myrrh tincture with warm water and swishing it in the mouth two to three times per day. Alternately, you can open a capsule and dab a little directly on the sore.
- **Tea:** Regular beverage tea also has a rich supply of tannins. Try placing a spent tea bag on your canker sores. Or make tea from some of the other herbs that are high in tannin, such as bearberry, eucalyptus, St. John's Wort, sage, raspberry, peppermint and licorice.
- **Cankerroot (Coptis groenlandica) or goldthread.** This plant got its name because of its traditional use as a treatment for canker sores. American Indians and early settlers alike used cankerroot as a tea to treat both sore throat and canker sores. They chewed raw root for canker sores and fever blisters.
- **Goldenseal:** This herb was an American Indian favorite for treating all sorts of wounds. Goldenseal contains astringent, antiseptic chemicals that help treat wounds and infections. Add two teaspoons of dried goldenseal to a cup of boiling water and steep until cool. Use it as a mouth rinse three or four times a day. Barberry and Oregon grape have similar constituents and healing effects.
- **Licorice.** Licorice contains tannin, and the compounds glycyrrhetic-acid and glycyrrhizin. All of these help speed the healing of sores. Licorice that has had the glycyrrhizic acid removed is called deglycyrrhizinated licorice (DGL). Glycyrrhizic acid is the portion of licorice root that can increase blood pressure and cause water retention in some people. The wound-healing and soothing components of the root remain in DGL. A mixture of DGL and warm water obtained by combining 200 mg of powdered DGL and 200 ml of warm water may be applied to the inside of the mouth. This is found to shorten the healing time for mouth ulcers. It can then be swished in the mouth for two to three minutes and then spit out. Continue this on each morning and evening for one week.
- You can use licorice to sweeten the herbal teas recommended here. In one study that looked at the power of licorice to heal canker sores, a mouthwash containing this herb provided relief for 75 percent of the people who used it. Those who got relief noted substantial improvement within one day and complete healing by the third day.
- **Sage:** Many herbalists suggest making a strong sage tea to treat inflammations of the mouth and throat. To make this tea, use two teaspoons of dried herb per cup of boiling water. Let it steep until cool and then gargle with it.
- **Caution:** You should not drink too much of this tea. Sage contains a fair amount of thujone, a compound that in very high doses may cause convulsions if taken in excessive quantities.
- **Wild geranium (Geranium maculatum).** The Cherokee Indians used wild geranium as an astringent to stop the bleeding of open wounds and as a wash to treat canker sores. It is widely used in folk medicine to treat mouth sores.

- **Echinacea:** The antiviral, immune-enhancing, and wound-healing properties of Echinacea make it a reasonable choice for mouth ulcers. Liquid Echinacea in the amount of 4 ml can be swished in the mouth for two to three minutes, then swallowed. This can be repeated three times per day. Tablets and capsules containing Echinacea may also be helpful.
- **Chamomile:** Chamomile has a soothing effect on mucous membranes (including the lining of the mouth). It also has healing properties. A strong tea made from chamomile tincture can be swished in the mouth three to four times per day.
- **Aloe Vera:** Aloe Vera is used in Ayurvedic medicine to treat canker sore. An extract from aloe vera has been shown to be beneficial in one preliminary study. Some doctors of natural medicine recommend 1-3 tablespoons of aloe vera juice be used as a mouthwash then swallowed three times daily.
- **Tea tree oil** helps prevent infection and control parasites and candida. Rinse the mouth with 3 drops of tea tree oil diluted in a glass of water. Twice daily, after brushing the teeth, apply a few drops of oil with a cotton swab directly to infected area.

### Herbal Mouth Rinses:

- Rinse the mouth with licorice root tea, diluted myrrh oil or aloe vera juice to soothe and heal the sore.
- Use horsetail or Echinacea tincture (20 drops diluted in 1/4 cup water), sage, lavender or chamomile tea to rinse the mouth every two hours.
- Place 1 tsp. fenugreek seeds in 1 cup cold water. After six hours, bring to a boil and strain immediately. When cooled to lukewarm, add 1 tsp. honey. Use to gargle and swallow a little.
- Oak, burdock root, rest-harrow, red clover, red raspberry and calendula are astringent and reduce inflammation. Make a strong tea with them and use it as a mouth wash.

### A three-week herbal cure:

- Mix 3 parts nettle, 1 part sage, and 3 parts chicory.
- Soak 3 tbsp. of the mix in 1 qt. cold water overnight. Next morning bring to a boil, steep for five minutes, strain.
- Drink 1 cup three times daily.

### Diet/Food Therapy

- **Consume more yogurt:** Yogurt contains active acidophilus cultures that can prevent and heal canker sores. Eat at least four tablespoons of yogurt daily to prevent outbreaks. To heal an outbreak, eat at least one eight-ounce container a day.
- **Avoid foods you are allergic or sensitive to:** Food sensitivities or allergies can make mouth ulcers worse. Many canker sores are the result of gluten intolerance. Avoid coffee, spices, citrus fruits, and other foods that may irritate your mouth. If you suffer from recurrent mouth ulcers, you should discuss the diagnosis and treatment of food sensitivities with a nutritionally oriented doctor. For some people, treating allergies may be a key component to restoring health.
- **Take Foods Rich in B-Vitamins:** Eat green, leafy vegetables and whole grains, These foods are rich in B complex vitamins, which help the body deal with stress, a common trigger in the development of canker sores. Nutritional yeast can supply B vitamins. It is available in health food stores in the form of flakes, which can be added to cereal or salads, or stirred into liquids. Nutritional yeast also comes in the form of a paste which can be spread on bread.

## Foods to Eat

- Eat foods that are easy to digest
- Do a one- to three-day carrot-juice fast.
- Wheatgrass juice or liquid chlorophyll; drink two ounces three times a day
- Soft grains, well cooked
- Lightly cooked vegetables

## Foods to Avoid

- Dairy products
- Oily foods
- Sweets such as cakes, candies, and raw fruit
- Salty foods
- Animal protein

## Nutritional Therapy

If your sores are caused by a vitamin or mineral deficiency, supplements of vitamins C and B complex, as well as folic acid, iron, and zinc, may help. Several studies have found a high incidence of iron and B vitamin deficiency among people with recurrent mouth ulcers. Supplementing with B vitamins-300 mg vitamin B1, 20 mg vitamin B2, and 150 mg vitamin B6-has been reported to provide some people with relief. Thiamine (B1) deficiency, specifically, has been linked to an increased risk. Some people with recurrent mouth ulcers have been reported to respond to lactobacillus acidophilus. Chewing four lactobacillus tablets three times per day may reduce soreness in some people with recurrent mouth ulcers.

- Take 1,000 milligrams of the amino acid lysine at each meal during an outbreak and then 500 milligrams at each meal for a week afterward.
- Rub the liquid from a vitamin E capsule directly on the sore. Apply it three times a day during an outbreak until the sore heals.
- Take 4,000 - 5,000 milligrams of vitamin C daily during outbreaks of canker sores and at least 500 milligrams daily as a way of preventing them.
- Zinc lozenges help resolve canker sores by supporting the immune system.
- Calcium supplements help counteract the over acidity.

## Suggested Daily Dosages:

- **Acidophilus (Lactobacillus acidophilus)** Aids in maintaining healthy balance of intestinal flora ("friendly" bacteria). Use a high-potency powdered form. **Dosage:** Take on an empty stomach as directed on the product.
- **L-Lysine** A deficiency may cause an outbreak of sores in and around the mouth. Do not take for longer than 6 months at a time. **Dosage:** 500 mg 3 times daily, on an empty stomach. Take with water or juice. Do not take with milk. Take with 50 mg vitamin B6 and 100 mg vitamin C for better absorption.
- **Vitamin B complex** Important for immune function and healing. **Dosage:** 50 mg of each major B vitamin 3 times daily.
- **Extra vitamin B3 (niacin)** Deficiencies of niacin have been linked to mouth sores. **Dosage:** 50-100 mg 3 times daily. Do not exceed this amount. **Caution:** Do not take niacin if you have a liver disorder, gout, or high blood pressure.
- **Pantothenic acid (vitamin B5)** Necessary for adrenal function. **Dosage:** 50-100 mg 3 times daily.
- **Vitamin B12 Dosage:** 1,000-2,000 mcg daily, on an empty stomach.
- **Folic acid Dosage:** 400 mcg daily.
- **Vitamin C with bioflavonoids** Fights infection and boosts the immune system. **Dosage:** 3,000-8,000 mg daily, in divided doses.

- **Zinc lozenges** Enhances immune function and aids healing. **Dosage:** 1 15-mg lozenge every 3 waking hours for 2 days. Do not exceed a total of 100 mg daily. Take with 3 mg copper.
- Calcium **Dosage:** 1,000 mg
- **Aqueous colloidal silver** **Dosage:** 1 tsp. daily
- **Garlic** Acts as a natural antibiotic and immunostimulant. **Dosage:** 3 Capsules 3 times daily.

### Imagery

Visualize a soothing light shining on your sore. For the next five minutes, see the light slowly penetrate the sore and begin healing it from the bottom. Do this twice a day until the sore has healed.

### Juice Therapy

Frequent canker sores can signal that you're not getting enough iron or folic acid. Juice therapy is helpful in this case. Add two kale leaves, a small handful each of parsley and spinach and four or five carrots into a juicer. This drink is very nutritious and is also a good source of beta-carotene, which has been shown to heal mouth sores.

### Lifestyle Changes

Minor trauma from poor-fitting dentures, rough fillings, or braces can aggravate mouth ulcers and should be remedied by a dentist. Sodium lauryl sulfate (SLS), a component of some toothpastes, is a potential cause of canker sores. In one study, most recurrent canker sores were eliminated just by avoiding SLS-containing toothpaste for three months. Positive effects of eliminating SLS have been confirmed in another double blind research. SLS is thought to increase the risk of canker sores by removing a protective coating (mucin) in the mouth. People with recurrent canker sores should use an SLS-free toothpaste for several months to see if such a change helps.

### Mind-Body Medicine

Canker sores are often brought about by stress. Learn to meditate, do guided-imagery, and visualize yourself as a healthy, relaxed person. Find a relaxation technique that you will enjoy doing and will keep doing.

### Tissue Salts

- For whitish ulcers in the mouth, use **Kali mur**.
- When the color is gray and the cause is nervous tension, use **Kali phos**.
- If the ulcers are located on the tongue, use **Silicea**.
- Use **Nat mur** if the corners of the lips are also cracked.

### Homeopathy

Homeopathic remedies can ease the pain of canker sores, reduce inflammation, and help the tissues heal.

- **Arsenicum album:** A person who breaks out in burning, painful mouth sores, and also feels anxious and tired, is likely to benefit from this remedy. Hot drinks often ease the pain, and the person feels best when keeping warm. They often have unhealthy, easily-bleeding gums, and tend to be extremely neat and tense. Arsenicum album is recommended when the mouth is dry and burning, and the ulcers are soothed by warm water. Restlessness and anxiety are felt. Often caused by stress and worry.
- **Borax:** This remedy is often helpful when canker sores feel hot and sensitive. Sores may break out on the inside of the cheeks, on the gums, and on the tongue. Produces profuse saliva, yet still feels dry inside the mouth. Other indications are: sensitive to noise, suffers from motion sickness, bleeding ulcers when touched, and hot and tender mouth.

- **Calcarea carbonica:** This remedy is often indicated for infants and small children who suffer from recurrent canker sores. Other indications are: head-sweats during sleep, and slow to teethe or learn to walk. May also canker sores in adults who are chilly, stout, and easily fatigued.
- **Hepar sulphuris calcareum:** This remedy may be indicated when a person develops painful mouth sores that become infected-with pus formation, extreme sensitivity, and aggravation from cold drinks. Often feels extremely chilly, vulnerable, and oversensitive.
- **Mercurius solubilis:** This remedy is useful when bleeding gums, a swollen coated tongue, and offensive breath are seen along with canker sores. The sores feel worse at night, and salivation is profuse, with drooling during sleep. The person tends to sweat at night and is very sensitive to any change in temperature.
- **Natrum muriaticum:** Pearly sores that erupt inside the mouth, especially on the gums or tongue, may respond to this remedy. The mouth feels dry, and the tongue may have a tingling feeling. Often troubled by cold sores around the corners of the mouth or chin, and have chapped or cracking lips. A craving for salt, strong thirst, and a tendency to feel worse from being in the sun are other indications for Natrum muriaticum.
- **Nux vomica:** A person who needs this remedy may break out in canker sores after overindulging in sweets, strong spicy foods, stimulants, or alcoholic beverages. The person may have swollen gums, a coated tongue, and bloody salivation. Irritability, impatience, and a general chilliness are often seen.
- **Sulphur:** For sores that are painful, red and inflamed, with burning pain that is worse from warm drinks and aggravated by heat of any kind. The mouth may have a bitter taste; the gums can be swollen and throbbing. Reddish lips and mucous membranes, and a tendency toward itching and skin irritations are other indications.

**Dosage:** Follow the label directions. Take one dose and wait for a response. If improvement is seen, continue to wait and let the remedy work. The frequency of dosage varies with the condition and the individual. If no response is seen within a reasonable amount of time, select a different remedy.

## CERTIFIED HOMEOPATHY ONLINE COURSE - SESSION 10 – QUESTION & ANSWERS

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY, STATE, ZIP, PC: \_\_\_\_\_

PHONE: \_\_\_\_\_

FAX: \_\_\_\_\_

E-MAIL: \_\_\_\_\_

Please be sure to fill out the information above, complete the test and e-mail or fax it back to us at [iridology@netzero.net](mailto:iridology@netzero.net) or 530-878-1119. We will grade your question & answer session and will let you know if we have any questions or concerns. **Please put your answers on a separate piece of paper.**

1. What are nosodes and sarcodes?
2. We have listed names of homeopathic remedies on page 3 and 4. Go on the web and research 4 of those remedies. Create a table and include the following in the table: Common Name, Latin Name, What Part of the Plant is Used, How it is Used, What it is Used For, What Diseases it is Used For, How it Works, Safety Concerns, Interactions With Other Medicines, Interactions with Herbs and Supplements, Interactions with Foods, What Dose is Used, and Other Names That this Remedy is Called.
3. What is Pulsatilla (Puls) used for?
4. What is the "frequency of treatment" for acute arthritis?
5. What is the difference between Osteoarthritis, Rheumatoid Arthritis, and Gout?
6. What is Glucosamine and how does it work?
7. What are the Herbal Remedies for Angina and how do they work?
8. What can the average person do to protect himself/herself from anthrax?
9. What is the main reason we suffer from back problems?
10. What are the Homeopathic remedies to relieve immediate pain and joint stiffness?
11. What are the types of arthritis from an Oriental Medicine Perspective?
12. What are the factors that contribute to back pain?
13. What is the "Cat-Cow" Yoga Position?
14. What are canker sores?
15. What is cramp bark used for?
16. What is an NSAID?
17. What are the caused of canker sores?
18. What is calcarea carbonica?
19. A person who breaks out in burning, painful mouth sores, and also feels anxious and tired, is likely to benefit from which remedy?
20. Which tissue salts should be used for whitish ulcers in the mouth?