

CERTIFIED WOMEN'S HEALTH COUNSELOR ONLINE COURSE SESSION 3:

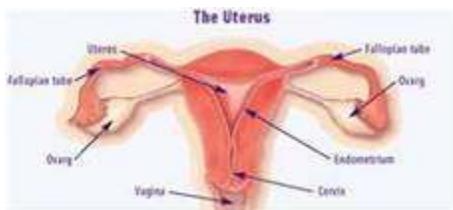
- Menstruation: Balance and Imbalance. Herbal Programs to Help Balance Hormones and Regulate Menses. What could be the causes of irregular periods?

The Menstrual Cycle - What Happens During Your Menstrual Cycle

The timing and amount of blood flow you experience during your monthly menstrual cycle depends on the coordinated performance of your endocrine glands, which produce the hormones necessary for menstruation to occur when pregnancy does not. What they do affects what happens in your reproductive organs.

First, What Are the Reproductive Organs?

The uterus is a pear-shaped organ which, in its non-pregnant state, is collapsed and about the size of your fist. It is located between the bladder and the lower intestines.



The lower third of the uterus is called the cervix. The cervix has an opening called the "os," which opens into the vaginal canal and permits your period to flow out.

Extending from each side of the uterus are the fallopian tubes. Near the end of each fallopian tube is an ovary.

The ovaries are almond-sized organs which produce eggs. Each ovary contains from 200,000 to 400,000 follicles. These follicles contain the material necessary to produce eggs.

The inner lining of the uterus is called the endometrium. The endometrium sheds during menstruation. In addition to endometrial tissue, your menstrual flow also contains blood and mucus from the cervix and vagina. When pregnancy occurs, the endometrium thickens and fills with blood vessels that mature into the placenta that contains the growing fetus.

Which Hormones Interact with the Reproductive Organs?

The area of the brain called the hypothalamus, together with the pituitary gland, which also is in the brain controls the hormones necessary for reproductive health.



Six hormones serve as chemical messengers to your reproductive system. These hormones include:

- Gonadotropin-releasing hormone (GnRH)
- Follicle-stimulating hormone (FSH)
- Luteinizing hormone (LH)
- Estrogen
- Progesterone
- Testosterone

During your menstrual cycle, GnRH is released first by the hypothalamus. This causes a chemical reaction in the pituitary gland and stimulates the production of FSH and LH. Estrogen, progesterone, and testosterone (yes, the "male" hormone) are produced by the ovaries in reaction to stimulation by FSH and LH. When these hormones work harmoniously, normal menstrual cycles occur.

The Menstrual Cycle in Phases

The menstrual cycle is divided into two phases--the follicular or proliferative phase; and the luteal or ovulatory phase. The follicular phase includes the time when menstruation occurs and is followed by proliferation or the growth and thickening of the endometrium. This phase typically lasts from 10 to 14 days, starting with the first day of menstruation.



Estrogen and progesterone levels are at their lowest during menstruation. When bleeding stops, the proliferative phase begins causing the endometrium to grow and thicken in preparation for pregnancy. During the next (approximately) two weeks, FSH levels rise causing maturation of several ovarian follicles and the size of the eggs triple.

FSH also signals the ovaries to begin producing estrogen which stimulates LH levels to surge at around day 14 of your cycle triggering one of the follicles to burst, and the largest egg is released into one of the fallopian tubes.

This phase is followed by the premenstrual phase, known as the luteal phase. This premenstrual period lasts approximately 14 days. After ovulation, LH causes the corpus leuteum to develop from the ruptured follicle. The corpus leuteum produces progesterone. Together estrogen and progesterone stimulate the endometrium to prepare a thick blanket of blood vessels that will support a fertilized egg should pregnancy occur. When pregnancy occurs, this blanket of blood vessels becomes the placenta which surrounds the fetus until birth.

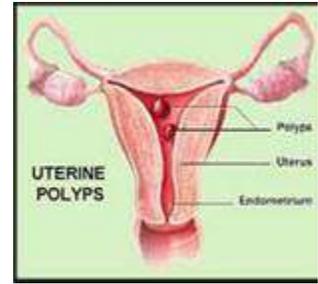
When pregnancy does not occur, the corpus leuteum deteriorates and becomes the corpus albicans. Once this occurs, progesterone and estrogen levels decline, and the endometrial lining is shed during menstruation.

- Periods can vary greatly from woman to woman and from month to month and still be normal. Generally, the length of the menstrual cycle can fluctuate from 3 weeks to 5 weeks, without alarm.
- When counting the days in a cycle, always count the first day of the period as day one. The average period lasts about 6 days, although some women may experience slightly shorter or longer periods and be perfectly normal.
- Variations in the amount of menstrual flow and the timing of menstruation are quite normal in young women during the first few years following the onset of menstruation. Periods may be irregular or very light. The use of oral contraceptives can often cause fluctuations in menstruation which include either light periods or spotting/bleeding between periods.
- It is not uncommon for young women to feel frightened when dark clumps of tissue is discovered in their menstruation. However, this is usually nothing abnormal and just a part of the endometrium, or uterine lining that is shedding.
- The average age of the onset of menstruation is about 12 or 13, however it may begin as young as 8 for some girls or not until 14 or 15 for others. If the period has not started by the age of 16, determine whether there may be an underlying condition.

Uterine Polyps May Cause Abnormal Uterine Bleeding

Almost a quarter of all women experience uterine polyps -- an overgrowth of tissue in the endometrium. While many women experience abnormal uterine bleeding, the fact is that uterine polyps are often asymptomatic.

Uterine polyps, also called endometrial polyps, are usually small, bulb-shaped masses of endometrial tissue, attached to the uterus by a stalk. They are soft, as opposed to uterine fibroids, which can grow much bigger and are made of hard muscle.



When symptoms of uterine polyps are apparent, they're similar to those of more serious conditions, such as endometrial cancer.

The symptoms may include several types of abnormal uterine bleeding such as:

- Heavy menstrual bleeding
- Spotting between periods
- Bleeding after intercourse
- Bleeding after menopause

Who is at Risk?

The exact cause of uterine polyps is unknown, but they are sensitive to the hormone estrogen. You may be more likely to develop polyps if any of the following are true:

- Age 40 to 50
- Pre- or peri-menopausal
- Obese, or having a body mass index of 30 or more (such as a 5-foot, 9-inch adult weighing 203 pounds)
- Currently or formerly taking an anti-estrogen drug like Nolvadex (tamoxifen).

High blood pressure and the presence of cervical polyps were at one time also cited as risk factors. But a study published in the November 2008 issue of the *American Journal of Obstetrics and Gynecology* did not find an association between those conditions and uterine polyps.

However, a small study published in *Maturitas: The European Menopausal Journal* in 2007 did link the chance of malignancy in uterine polyps to high blood pressure and obesity in women who did not have breast cancer or take tamoxifen.

Fewer than 1% of all uterine polyps are associated with cancer.

An article published in a 2008 issue of the *American Journal of Obstetrics and Gynecology* found a relationship between hormone replacement therapy (HRT) and uterine polyps, but other studies have not found HRT during menopause to be a risk factor.

Uterine Polyps and Infertility

Infertility is defined as the inability to conceive after 1 year of trying. When a woman is infertile and has no symptoms of uterine polyps, the chance that she has asymptomatic polyps is between 3% to 5%, according to the Jones Institute of Reproductive Medicine. If she's experiencing abnormal bleeding, it's more likely that polyps are present.

Uterine polyps can act like a natural intrauterine device (IUD), preventing a fertilized egg from implanting in the uterine wall. They can also block the area where the fallopian tube connects to the uterine cavity, preventing sperm from traveling into the tube to meet the egg. Similarly, they can block the canal of the cervix, which would prevent sperm from entering the uterus at all. Polyps may also play a role in miscarriage for some women.

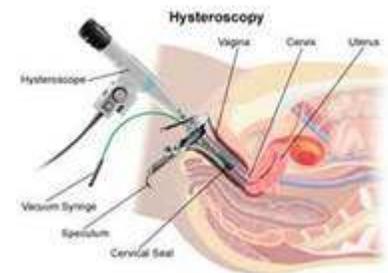
In a study published in 2005 in the journal *Human Reproduction*, women undergoing artificial insemination after having their polyps removed became pregnant at about twice the rate of women who did not have their polyps removed. In fact, the women who had their polyps removed often became pregnant without artificial insemination.



Diagnosis and Treatment

The doctor may recommend one of several methods for finding out whether there are uterine polyps:

- **Hysterosalpingogram (HSG):** An exam using an x-ray, in which a radiologist injects a contrast dye into the uterus and fallopian tubes to make it easier to see polyps and other tissue.
- **Ultrasound:** Insertion of a wand-like device into the vagina that sends out high-frequency sound waves to create images.
- **Sonohysterogram:** A special type of ultrasound in which the radiologist fills the uterine cavity with saline using a narrow catheter. The saline distends the cavity (like a balloon) and creates a space between the walls. This aids in visualizing polyps that may be missed with traditional ultrasound.
- **Hysteroscopy:** A procedure using a scope inserted through the vagina into the uterus to view the polyps and determine their size and extent. Part or all of a polyp can also be removed for microscopic examination by inserting instruments through the hysteroscopic tube.
- **Excision through traditional methods:** A sample of a polyp may be obtained through curettage (scraping or scooping) or biopsy (removing tissue via an instrument resembling a drinking straw), or after a hysterectomy (removal of the uterus).



Examination of tissue under a microscope is the only way to reliably determine whether a polyp is benign (noncancerous) or malignant (cancerous).

Some polyps disappear on their own. When removal is necessary to control bleeding, to increase pregnancy odds or to check for cancer, curettage guided by a hysteroscope is often recommended, according to the University of Michigan Health System.

A more conventional method, dilation and curettage (D&C), or scraping the uterine lining, is also still in use.



Hysteroscopy is generally performed using either local or no anesthesia, but general anesthesia is sometimes used as well. After hysteroscopy, there may be slight bleeding and mild cramps, but the patient should be able to resume normal activities right away, with the possible exception of intercourse, which may need to be avoided for a week or two if the doctor advises.

When polyps are too numerous for hysteroscopic removal, hysterectomy may be recommended.

There is no specific method for preventing uterine polyps, although keeping oneself at a healthy weight, with normal blood pressure readings are the best methods of lessening risk factors.

Top Ten Causes of Heavy Menstrual Bleeding

All of us, from time to time, experience what we feel is unusually heavy bleeding during our menstrual periods. Fortunately, most often what we think is abnormal uterine bleeding is not excessive enough to be diagnosed as menorrhagia.

How do you know when bleeding during your period is abnormally heavy? The easiest way to know if you are experiencing menorrhagia is to take note of how often you need to change your pad or tampon. If your period is heavy enough to require changing more often than every one or two hours, or if you have a period that lasts more than a full week, you may be experiencing menorrhagia.

Let's take a look at the most common causes of menorrhagia or heavy menstrual bleeding:

What is Very heavy menstrual bleeding?

As you get closer to menopause, it may be hard to tell when your period is going to start. The time between your periods may be longer or shorter than usual. When it does start, bleeding may be very heavy and last for several weeks.

You may have dysfunctional uterine bleeding or DUB. DUB most often affects women over 45. Usually it is caused by an imbalance in the chemicals in the body (hormones) that control the menstrual cycle.

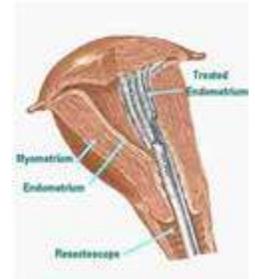
Younger women also may have heavy bleeding. Usually it is because of an irregular menstrual cycle. A woman may go for several months without a period, but the lining of her uterus continues to build up. When finally her body sheds the uterine lining, she may have very heavy bleeding.

The symptoms can be very upsetting and may make you feel limited in the things you can do. Sometimes, the symptoms are a sign of a more serious problem.

Your doctor will probably do a blood test. Depending on the results, your medical history, and your age, the doctor may recommend that you have a biopsy to rule out endometrial hyperplasia.

What treatments are used for Very Heavy Menstrual Bleeding?

- Birth control pills or other medicines may be helpful.
- Another choice is watchful waiting.
- A surgical procedure called endometrial ablation may help to relieve very heavy menstrual bleeding. Endometrial ablation causes sterility (inability to become pregnant), but it does not trigger menopause. The long-term effects of endometrial ablation are unknown.

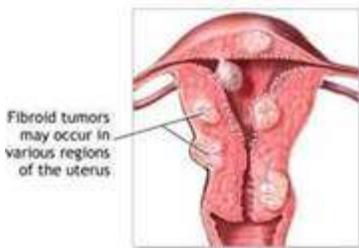


Do you have a Bleeding Disorder?

If you have very heavy periods (lasting more than 7 days or soaking more than one pad or tampon every 2 to 3 hours), frequent or long-lasting nosebleeds, easy bruising, or prolonged oozing of blood after dental work, you may have a bleeding disorder such as von Willebrand Disease. This is not the same as very heavy menstrual bleeding, but it can be an underlying cause.

Uterine Fibroid Tumors

Uterine fibroid tumors are another very common cause of excessive menstruation. It's important to understand that fibroid tumors are usually benign (non-cancerous) tumors that often occur in the uterus of women during their thirties or forties. Several surgical treatments are available for treating fibroid tumors of the uterus including myomectomy, endometrial ablation, uterine artery embolization, and uterine balloon therapy, as well as hysterectomy.



Non-surgical pharmacological treatments for fibroid tumors include GnRH agonists, oral contraceptives, androgens, RU486 (the abortion pill), and gestrinone. Some women find natural progesterone to be an effective treatment for uterine fibroid tumors. Often, when symptoms are not severe or troublesome, a "wait and see" approach is taken. Once menopause occurs, uterine fibroid tumors typically shrink and disappear without treatment.

Fibroid tumors are solid tumors which are made of fibrous tissue, hence the name 'fibroid' tumor. Most often fibroids occur as multiple tumor masses which are slow-growing and often cause no symptoms.

The size of fibroids varies immensely among women and some are so small that a microscope is required to see them. However some women experience a single large fibroid tumor the size of a grapefruit or a fibroid which is so large it encompasses the entire abdominal area. Such large tumors can weigh as much as 50 pounds; the largest, reported, fibroid ever recorded weighed in at 140 pounds.

No one is sure why fibroid tumors develop, but some facts seem clear:

- fibroid tumors do not develop before the body begins producing estrogen during the onset of menstruation
- fibroid tumors will continue to grow while estrogen is present
- they will grow very quickly during pregnancy when the body is producing extra estrogen
- the tumors often shrink and disappear after menopause when the body stops producing estrogen
- A woman will almost never develop fibroid tumors after menopause.

The estrogen connection appears to be quite clear, although there are still some who doubt the role estrogen plays in the development of fibroid tumors because women with fibroids often have blood levels which reveal normal amounts of estrogen.

Types of Fibroid Tumors

Submucous Fibroids

These fibroids occur just below the lining of the uterus and can cause menstrual problems, including pain as they grow and move around the pelvic area.

Intramural Fibroids

A round fibroid most often within the uterine wall which can cause enlargement of the uterus as they grow.

Subserous Fibroids

This fibroid grows on the outer wall of the uterus and usually causes no symptoms until it grows large enough to interfere with other organs.

Pedunculated Fibroids

These fibroids develop when a subserous fibroid grows a peduncle (stalk), as they grow larger they may become twisted and cause severe pain.

Interligamentous Fibroid

A fibroid which grows sideways between the ligaments which support the uterus in the abdominal region. This type of fibroid is especially difficult to remove without the possibility of interfering with the blood supply or other organs.

Parasitic Fibroid

The rarest form of fibroid tumor occurs when a fibroid attaches itself to another organ.

Diagnosis of Fibroid Tumors

Diagnosis of fibroids is generally made by your physician during your annual gynecological exam when your physician feels a mass, they often are found when your physician is looking for something else or may never be discovered if you do not experience symptoms. However larger fibroids may make examination of your ovaries impossible if they grow near your ovaries.

An ultrasound scan is often ordered when such masses are felt by your physician to determine the cause of the mass, however some fibroids appear on sonograms as ovarian tumors and surgery is the only way an accurate diagnosis can be made.

Although most fibroids cause no symptoms, the estimated 25 percent of women who do have symptoms may have abnormal bleeding, pain during menstruation, and as the fibroid tumors grow larger, women will often experience a swollen abdomen.

Larger fibroids may cause frequent urination or an inability to control your bladder, either the ability to control the urge or in severe cases, a woman may find that she is unable to urinate at all. If a fibroid extends towards a woman's back it may push on the bowels, causing constipation and a backache.

Treatment of Fibroids

If your fibroid tumors are severe enough that they cause certain symptoms, surgery is often, the recommended treatment. However, before you consent to hysterectomy, learn about your treatment options. Symptoms which justify surgery include:

- extremely heavy bleeding during your menstrual cycle, which causes anemia that does not respond to treatment
- pain, which has become intolerable to the woman or discomfort caused by the pressure of the fibroids on another organ
- when the location of the tumors is likely to cause further problems

Surgery for fibroid tumors includes myomectomy and hysterectomy. Myomectomy is the surgical removal of each individual tumor without damage to the uterus, preserving a woman's ability to conceive. However, fibroids will often grow back and although it is possible to have a myomectomy repeated, multiple myomectomies can cause other problems such as the walls of the uterus sticking together due to scarring.

Women should also consider uterine artery embolization. Uterine artery embolization leaves the uterus intact in a non-surgical procedure. Polyvinyl particles are placed into the uterine artery at a point just before the nexus of vessels spread out into the uterine tissue. The particles flow into the vessels and clog them. This prevents the fibroids from receiving the constant blood supply they require and causes the fibroids to shrink overtime. However, almost immediately the symptoms of heavy bleeding and pelvic pain are significantly reduced.



The sad fact is that because fibroids do grow back, most women will eventually have to face a hysterectomy. Removing the uterus is the only permanent way to effectively relieve most women of fibroids.

Hysterectomy is, most often, the procedure of choice for fibroid tumors when a woman with severe symptoms:

- has completed her family and her uterus has grown to the size of a uterus at twelve weeks of pregnancy
- a woman has excessively large fibroid tumors
- severe abnormal bleeding occurs
- When the fibroids are causing problems with other organs such as the bladder and bowels.

Science is starting to evaluate other options for treating fibroids, including the use of Lupron which may be beneficial for those who want to become pregnant or for women approaching menopause when fibroids often shrink naturally. Lupron shrinks fibroids in most women with continued use, but one drawback is that the fibroids will quickly grow back once treatment is stopped.

If you have fibroid tumors, investigate your options before deciding what treatment you want to try. There are many alternatives to hysterectomy currently available, and science is creating more options for women every day.

Before You Have a Hysterectomy

Are you facing a hysterectomy? Learn the facts about hysterectomy and alternatives before you decide whether hysterectomy is the right choice for you. It is critical to understand when hysterectomy is elective surgery and when it is necessary to save your life. Although hysterectomy may provide relief from your condition, it's important to explore all alternatives before you choose hysterectomy.

Reasons for Hysterectomy

Hysterectomy is not optional for some conditions. These conditions include invasive cancers of the female reproductive system; severe infections, such as PID, that are unresponsive to treatment; severe hemorrhaging; or rupture of the uterus. Other conditions that may be helped by hysterectomy include uterine prolapse, endometriosis, fibroids, chronic pelvic pain, or certain cases of hyperplasia.

Female Reproductive Organs Removed During Hysterectomy

A subtotal hysterectomy is the only hysterectomy that removes only the uterus. In a simple or total hysterectomy only the uterus and cervix are removed. A hysterectomy with bilateral salpingo-oophorectomy or radical hysterectomy removes the uterus, cervix, ovaries, and fallopian tubes. A supracervical hysterectomy leaves only the cervix intact, an option for women who have never had a bad Pap.

Hysterectomy Alternatives

Most physicians are trained to see the uterus of little value other than for the purpose of childbirth. The sad fact is that 90 percent of the over 500,000 hysterectomies performed in the United States are classified by insurance companies as elective. If your physician has recommended a hysterectomy for a non-life-threatening condition, you owe it to yourself to explore your alternatives.

Surgical Menopause

Having both ovaries removed during hysterectomy causes an instant and, in many cases, intense onset of menopausal symptoms. Surgical menopause often causes more severe symptoms of menopause including more severe, frequent, and longer-lasting hot flashes than those whose menopause is natural. It's important to explore your options in hormone replacement before you have a hysterectomy.

Hysterectomy Recovery

Pain and fatigue are normal parts of recovering from a hysterectomy. Hysterectomy recovery takes from four to eight weeks. Sexual intercourse should not be resumed until you are told it is safe. You should not do any lifting, pushing or pulling; this includes lifting babies or children. Even if you are feeling better you should not attempt strenuous activities for the full recovery period.

Hysterectomy Support Groups

One of the best ways to find answers and support when making a decision about whether to have a hysterectomy or try an alternative procedure is to talk with other women with similar experiences. Talking with family members who have had a hysterectomy may provide useful insight.

Sex after Hysterectomy

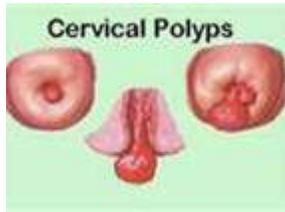
Removal of both the uterus and ovaries causes a rapid decline in sex hormones. Some women miss the uterine contractions that occur during orgasm. Removal of the cervix may cause a change in the way that penetration is experienced. Vaginal dryness often improves with the use of hormones or vaginal lubricants. Many women find their sex lives greatly improved after a hysterectomy.

Hysterectomy's Potential Long Term Health Consequences

Because hysterectomy has long term effects on a woman's health, longevity, and sexuality it is imperative that women understand these potential consequences. Women who have undergone hysterectomy may have a greater risk of heart disease and osteoporosis, and may be more likely to become depressed. They may also experience low libido, inability to orgasm, or other sexual dysfunctions.

Cervical Polyps

Cervical polyps are small, fragile growths that begin in either the mucosal surface of the cervix, or the endocervical canal and protrude through the opening of the cervix. The cause of cervical polyps is not clear; however, they are often the result of an infection and many times associated with an abnormal response to increased estrogen levels or congestion of the blood vessels located in the cervix. Women most commonly affected by cervical polyps are those over the age of twenty who have had children. A simple out-patient office procedure that removes the growth, along with antibiotics, is the usual treatment for cervical polyps.



Endometrial Polyps

Endometrial polyps are typically non-cancerous, growths that protrude from the lining of the uterus. The cause of endometrial polyps is unclear, although they are often associated with an excess of estrogen following hormone treatment or some types of ovarian tumors. Treatments for endometrial polyps include hysteroscopy and D&C. A pathology lab will evaluate endometrial polyps for cancer following removal.



What Is Lupus?

Lupus is a complex autoimmune disease. In people with lupus, the immune system turns against parts of the body it is designed to protect. Lupus can affect many parts of the body, including the:

- joints
- skin
- kidneys
- heart
- lungs
- blood vessels
- brain



There is no cure for lupus but lupus can be effectively treated with drugs -- and most people with the disease are able to remain functional and active. Lupus is characterized by periods of increased symptoms, called flares, and periods of inactive symptoms, or remission.

Understanding how to prevent flares and how to manage them when they do occur helps people with lupus cope with the effects of the disease in daily life.

Researchers are studying many aspects of lupus, including who gets the disease and why. Here's what we know -- many more women than men develop lupus. Lupus is three times more common in African American women than in Caucasian women and lupus is also more common in women of Hispanic, Asian, and Native American descent. While lupus can run in families, the risk that a child or sibling of a patient will also have lupus is considered low.

Types of Lupus

There are several types of lupus:

Systemic lupus erythematosus (SLE) is the form of the disease that most people think of when they speak of lupus. Systemic implies that the disease can affect many parts of the body, including organs. Symptoms may be mild or severe. Typically, the first symptoms of systemic lupus erythematosus develop between the ages of 15 and 45 years, but it does affect people younger and older too.

Discoid lupus erythematosus is a chronic skin disorder characterized by a red, raised rash which appears on the face, scalp, or other skin areas. The raised rash can become thick and scaly, possibly even causing scarring. The rash can linger for days, years, and possibly recur. Some, but not most, people diagnosed with discoid lupus will develop systemic lupus erythematosus down the road.

Subacute cutaneous lupus erythematosus is a type of lupus with skin lesions that appear on parts of the body that have been sun-exposed. The lesions associated with this type of lupus do not cause scarring.

Drug-induced lupus, as its name suggests, is a form of lupus caused by medications. Many different drugs can cause drug-induced lupus. While symptoms of drug-induced lupus are much like those associated with systemic lupus, they typically disappear when the drug is stopped. It's also important to note that the kidneys and brain are rarely involved.

Neonatal lupus is a rare type of lupus that can occur in newborn babies of women with systemic lupus erythematosus, Sjögren's syndrome, or no disease. Women with systemic lupus or other autoimmune disorders should consult with their doctor while pregnant. It's possible for doctors to identify mothers at high risk for complications.

What Causes Lupus?

While there has been progress in understanding lupus, the cause is still not known. A combination of genetic, environmental, and possibly hormonal factors are chief suspects. However, no single gene is thought to predispose a person to lupus -- it's thought to involve numerous genes along with other factors, including:

- sunlight
- stress
- certain drugs
- infectious agents such as viruses

A healthy immune system produces proteins called antibodies and specific cells called lymphocytes that help fight and destroy viruses, bacteria, and other foreign substances that invade the body. In lupus, the immune system mistakenly produces antibodies against the body's healthy cells and tissues (autoantibodies) which trigger inflammation and damage to various parts of the body. The most common type of autoantibody linked with lupus is called an antinuclear antibody (ANA) -- but researchers have more to learn.

List of Common Symptoms of Lupus

- Painful or swollen joints and muscle pain
- Unexplained fever
- Red rashes, most commonly on the face
- Chest pain upon deep breathing
- Unusual loss of hair
- Pale or purple fingers or toes from cold or stress (Raynaud's phenomenon)
- Sensitivity to the sun
- Swelling (edema) in legs or around eyes
- Mouth ulcers
- Swollen glands
- Extreme fatigue

Other symptoms of lupus include chest pain, hair loss, anemia (a decrease in red blood cells), mouth ulcers, and pale or purple fingers and toes from cold and stress. Some people also experience headaches, dizziness, depression, confusion, or seizures.

Systemic Effects

The following systems in the body also can be affected by lupus.

Kidneys - Inflammation of the kidneys (nephritis) can impair their ability to get rid of waste products and toxins from the body effectively. There is usually no pain associated with kidney involvement.

Lungs - Some people with lupus develop pleuritis, an inflammation of the lining of the chest cavity. There can be chest pain and breathing difficulties. Lupus patients may also develop pneumonia.

Central nervous system - Lupus affects the brain or central nervous system in some patients. Headaches, dizziness, memory disturbances, vision problems, seizures, stroke, or changes in behavior can result.

Blood vessels - Blood vessels may become inflamed (vasculitis), affecting circulation. The inflammation may be mild or severe.

Blood - Lupus patients may develop anemia, leukopenia (a decreased number of white blood cells), or thrombocytopenia (a decrease in the number of platelets in the blood, which assist in clotting). Some people with lupus may have an increased risk for blood clots.

Heart - In some people with lupus, inflammation can affect the heart (myocarditis and endocarditis) or the membrane that surrounds it (pericarditis), causing chest pains or other symptoms. Lupus can also increase the risk of atherosclerosis (hardening of the arteries).

Pregnancy for Women with Lupus

Here's the bad news -- a lupus pregnancy is considered high risk. And the good news -- most women with lupus carry their babies safely to the end of their pregnancy. Women with lupus have a higher rate of miscarriage and premature births compared with the general population. In addition, women who have antiphospholipid antibodies are at a greater risk of miscarriage in the second trimester because of their increased risk of blood clotting in the placenta.



Lupus patients with a history of kidney disease have a higher risk of preeclampsia (hypertension with a buildup of excess watery fluid in cells or tissues of the body). Pregnancy counseling before pregnancy is recommended. Ideally, a woman should have no signs or symptoms of lupus and be taking no medications for at least 6 months before she becomes pregnant.

Some women may experience a mild to moderate flare during or after their pregnancy; others do not. Pregnant women with lupus, especially those taking corticosteroids, also are more likely to develop high blood pressure, diabetes, hyperglycemia (high blood sugar), and kidney complications. Be prepared in case the newborn baby needs special care.

Lupus Diagnosis

Let's face it -- diagnosing lupus is difficult. It may take much longer than you anticipated for doctors to piece together the symptoms and offer an accurate diagnosis. Making a correct diagnosis of lupus requires knowledge and awareness on the part of the doctor and good communication on the part of the patient. Giving the doctor a complete, accurate medical history (for example, what health problems you have had and for how long) is critical to the process of diagnosis. This information, along with a physical examination and the results of laboratory tests, helps the doctor consider other diseases that may mimic lupus, or determine if the patient truly has the disease. Reaching a diagnosis may take time as new symptoms appear.

No single test can determine whether a person has lupus, but several laboratory tests may help the doctor to make a diagnosis. The most useful tests identify certain autoantibodies often present in the blood of people with lupus. For example, the antinuclear antibody (ANA) test is commonly used to look for autoantibodies that react against components of the nucleus of the body's cells. Most people with lupus test positive for ANA; however, there are a number of other causes of a positive ANA besides lupus, including infections, other autoimmune diseases, and occasionally as a finding in healthy people. The ANA test simply provides another clue for the doctor to consider in making a diagnosis. In addition, there are blood tests for individual types of autoantibodies that are more specific to people with lupus, although not all people with lupus test positive for these and not all people with these antibodies have lupus. These antibodies include anti-DNA, anti-Sm, anti-RNP, anti-Ro (SSA), and anti-La (SSB). The doctor may use these antibody tests to help make a diagnosis of lupus.

Some tests are used less frequently but may be helpful if the cause of a person's symptoms remains unclear. The doctor may order a biopsy of the skin or kidneys if those body systems are affected. Some doctors may order a test for anticardiolipin (or antiphospholipid) antibody. The presence of this antibody may indicate increased risk for blood clotting and increased risk for miscarriage in pregnant women with lupus. Again, all these tests merely serve as tools to give the doctor clues and information in making a diagnosis. The doctor will look at the entire picture—medical history, symptoms, and test results—to determine if a person has lupus. Other laboratory tests are used to monitor the progress of the disease once it has been diagnosed. A complete blood count, urinalysis, blood chemistries, and the erythrocyte sedimentation rate (ESR) test can provide valuable information. Another common test measures the blood level of a group of substances called complement. People with lupus often have increased ESRs and low complement levels, especially during flares of the disease. X rays and other imaging tests can help doctors see the organs affected by SLE.

Diagnostic Tools for Lupus

- Medical history
- Complete physical examination
- Laboratory tests:
 - Complete blood count (CBC)
 - Erythrocyte sedimentation rate (ESR)
 - Urinalysis
 - Blood chemistries
 - Complement levels
 - Antinuclear antibody test (ANA)
 - Other autoantibody tests such as anti-DNA, anti-Sm, anti-RNP, anti-Ro (SSA), anti-La (SSB)
 - Anticardiolipin antibody test
 - Skin biopsy
 - Kidney biopsy

Lupus Doctors

Diagnosing and treating lupus are often a team effort between the patient and several types of health care professionals. A person with lupus can go to his or her family doctor or internist, or can visit a rheumatologist. A rheumatologist is a doctor who specializes in rheumatic diseases (arthritis and other inflammatory disorders, often involving the immune system).

First Visit to the Rheumatologist

Clinical immunologists (doctors specializing in immune system disorders) may also treat people with lupus. As treatment progresses, other professionals often help. These may include nurses, psychologists, social workers, nephrologists (doctors who treat kidney disease), hematologists (doctors specializing in blood disorders), dermatologists (doctors who treat skin disease), and neurologists (doctors specializing in disorders of the nervous system).

The Patient-Physician Encounter

With research advances and a better understanding of lupus, the prognosis for people with lupus today is better than it was decades ago. It is possible to have lupus and remain active and involved with life, family, and work. With future research, there is hope for new treatments, improvements in quality of life, and, ultimately, a way to prevent or cure the disease.

Lupus Treatment

Lupus treatment plans are tailored to the individual's needs and may change over time. The range and effectiveness of treatments for lupus have increased dramatically, giving doctors more choices in how to manage the disease. It is important for the patient to work closely with the doctor and take an active role in managing the disease. Once lupus has been diagnosed, the doctor will develop a treatment plan based on the patient's age, sex, health, symptoms, and lifestyle. In developing a treatment plan, the doctor has several goals:

- to prevent flares
- to treat flares when they do occur
- to minimize organ damage and complications

The doctor and patient should reevaluate the plan regularly to ensure it is as effective as possible.

NSAIDs

For people with joint or chest pain or fever, drugs that decrease inflammation, called NSAIDs, are used. While some NSAIDs, such as ibuprofen and naproxen, are available over-the-counter, a doctor's prescription is needed for others. NSAIDs may be used alone or in combination with other types of drugs to control pain, swelling, and fever. Even though some NSAIDs may be purchased without a prescription, it is important that they be taken under a doctor's direction.

Common side effects of NSAIDs can include:

- stomach upset
- heartburn
- diarrhea
- fluid retention



Some people also develop liver, kidney, cardiovascular, or even neurological complications, making it especially important to stay in close contact with the doctor while taking these medications.

Anti-malarials

Anti-malarials are another type of drug commonly used to treat lupus. These drugs were originally used to treat malaria, but doctors have found that they also are useful for lupus. A common antimalarial used to treat lupus is hydroxychloroquine (Plaquenil). It may be used alone or in combination with other drugs and generally is used to treat:

- fatigue
- joint pain
- skin rashes
- lung inflammation



Studies have found that continuous treatment with anti-malarials may prevent flares from recurring. Side effects of anti-malarials can include:

- stomach upset
- damage to the retina of the eye (rare)

Corticosteroids

The mainstay of lupus treatment involves the use of corticosteroids, such as:

- prednisone (Deltasone)
- hydrocortisone
- methylprednisolone (Medrol)
- dexamethasone (Decadron, Hexadrol)

Corticosteroids are related to cortisol, a natural anti-inflammatory hormone. They work by rapidly suppressing inflammation. Corticosteroids can be given:

- by mouth
- in creams applied to the skin
- by injection



Because they are potent drugs, the doctor will seek the lowest dose with the greatest benefit. Doctors sometimes give very large amounts of corticosteroid by vein over a brief period of time (days) ("bolus" or "pulse" therapy). Short-term side effects of corticosteroids include:

- swelling
- increased appetite
- weight gain

These side effects generally stop when the drug is stopped. It is dangerous (even life threatening) to stop taking corticosteroids suddenly, so it is very important that the doctor and patient work together in changing the dose.

Long-term side effects of corticosteroids can include:

- stretch marks
- weakened or damaged bones (osteoporosis and osteonecrosis)
- high blood pressure
- damage to the arteries
- high blood sugar (diabetes)
- infections
- cataracts

Typically, the higher the dose and the longer they are taken, the greater the risk and severity of side effects. People with lupus who are using corticosteroids should talk to their doctors about taking supplemental calcium and vitamin D or medications to reduce the risk of osteoporosis

Immunosuppressives

For some patients whose kidneys or central nervous systems are affected by lupus, a type of drug called an immunosuppressive may be used. Immunosuppressives, such as cyclophosphamide (Cytoxan) and mycophenolate mofetil (CellCept), restrain the overactive immune system by blocking the production of immune cells. These drugs may be given by mouth or by infusion (dripping the drug into the vein through a small tube).

Side effects may include:

- nausea
- vomiting
- hair loss
- bladder problems
- decreased fertility
- increased risk of cancer and infection



The risk for side effects increases with the length of treatment. As with other treatments for lupus, there is a risk of relapse after the immunosuppressives have been stopped.

DMARDs

In some patients, methotrexate, a disease-modifying anti-rheumatic drug, may be used to help control the disease.



Working closely with the doctor helps ensure that treatments for lupus are as successful as possible. Because some treatments may cause harmful side effects, it is important to report any new symptoms to the doctor promptly. It is also important not to stop or change treatments without talking to the doctor first.

What is Pelvic Inflammatory Disease?

Pelvic inflammatory disease affects millions of women each year in the United States and is an infection of one or more pelvic organs, including the uterus, cervix, and fallopian tubes.

PID occurs when a bacteria or organism enters the cervix and spreads upward. Symptoms of pelvic inflammatory disease include:

- lower abdominal pain,
- fever up to 103 degrees,
- rapid pulse,
- chills,
- back pain,
- pain during sex,
- Vaginal discharge.

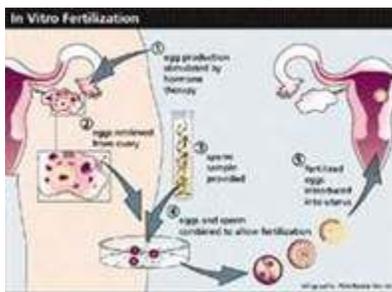


PID is a **serious** condition and requires **immediate medical attention**. Make a record of your pain and take it with you to your appointment. It will help your physician to know exactly when your pain occurs, where your pain is located, and the severity of your pain. If pelvic inflammatory disease is **left untreated it can become life-threatening!**

Pelvic inflammatory disease is usually contracted through sexual contact. Untreated gonorrhea and chlamydia cause an estimated 90 percent of all cases of PID. However, it's sometimes caused by abortion, childbirth, or a pelvic procedure.

What are Current Treatment and Prevention Recommendations?

Pelvic inflammatory disease can today be diagnosed through a new procedure called, fallopscopy. Fallopscopy is a visual examination of the inside of the fallopian tubes; it's a simple procedure performed on an out- patient basis.



If PID is found and it hasn't progressed to a stage severe enough to require major reconstructive surgery to repair the fallopian tubes, antibiotic therapy may be tried. Floxin is now approved by the FDA as the first oral medication approved for independent use to treat pelvic inflammatory disease. Previous recommendations included the use of intravenous antibiotics which required hospitalization.

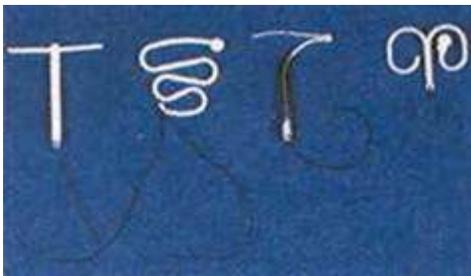
The cervix dilates slightly just before, during, and after your period; increasing your risk of pelvic inflammatory disease by making it easier for an organism or bacteria to enter the cervix and cause infection. Extra care should be taken at these times to prevent PID and other sexually transmitted diseases.

Douching significantly increases your risk of developing pelvic inflammatory disease and other pelvic infections and is not recommended. Douching removes the natural, protective mucous from the cervix, giving bacteria a more receptive place to grow. You should use caution if you must douche and be aware of the risk.

The best protection against PID and other STD's is to always use a condom, unless you are in a long-term monogamous relationship and both of you have been tested for HIV and other STDs. A few inconvenient moments before sexual intercourse can prevent a lifetime of pain and even an untimely death.

IUDs or Intrauterine Devices

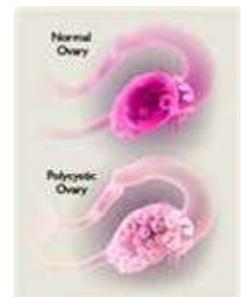
The Dalkon Shield IUD was taken off the market in 1975. This IUD was associated with a high incidence of pelvic infections and infertility, and some deaths. Today, serious complications from IUDs are rare, although IUD users may be at increased risk of developing pelvic inflammatory disease. Other side effects can include perforation of the uterus, abnormal bleeding, and cramps. Complications occur most often during and immediately after insertion.



Women using intrauterine devices (IUDs) for birth control may also experience excessive or prolonged periods. If you experience excessive uterine bleeding while using an IUD, the IUD should be removed and replaced with an alternative birth control method.

What is Polycystic Ovary Syndrome (PCOS)?

Polycystic ovary syndrome (say "pah-lee-SIS-tik OH-vuh-ree SIN-droh-m") is a problem in which a woman's hormones are out of balance. It can cause problems with your periods and make it difficult to get pregnant. PCOS may also cause unwanted changes in the way you look. If it is not treated, over time it can lead to serious health problems, such as diabetes and heart disease.



Polycystic ovary syndrome (or PCOS) is common, affecting as many as 1 out of 15 women. Often the symptoms begin in the teen years. Treatment can help control the symptoms and prevent long-term problems.

What are Hormones, and What Happens in PCOS?

Hormones are chemical messengers that trigger many different processes, including growth and energy production. Often, the job of one hormone is to signal the release of another hormone.

For reasons that are not well understood, in PCOS the hormones get out of balance. One hormone change triggers another, which changes another. For example:

- The sex hormones get out of balance. Normally, the ovaries make a tiny amount of male sex hormones (androgens). In PCOS, they start making slightly more androgens. This may cause you to stop ovulating, get acne, and grow extra facial and body hair.
- The body may have a problem using insulin, called insulin resistance. When the body doesn't use insulin well, blood sugar levels go up. Over time, this increases your chance of getting diabetes.

What are the Symptoms?

Polycystic ovary syndrome (PCOS) symptoms tend to start gradually. Often, hormone changes that lead to PCOS start in the early teens, after the first menstrual period. Symptoms may be especially noticeable after a weight gain.

With PCOS, you may have only a few symptoms or many symptoms. It is common for PCOS symptoms to be mistaken for other medical problems.

Early Symptoms

Early symptoms of PCOS include:

- Few or no menstrual periods. This can range from less than nine menstrual cycles in a year (more than 35 days between cycles) to no menstrual periods. Some women with PCOS have regular periods but are not ovulating every month. This means that their ovaries are not releasing an egg each month.
- Heavy, irregular vaginal bleeding. About 30% of women with PCOS have this symptom.
- Hair loss from the scalp and hair growth (hirsutism) on the face, chest, back, stomach, thumbs, or toes. About 70% of women in the United States with PCOS complain of these hair problems caused by high androgen levels.
- Acne and oily skin, caused by high androgen levels.
- Depression or mood swings.

Living with PCOS symptoms can affect your sense of well-being, sexual satisfaction, and overall quality of life. This too can lead to depression.

Gradual Symptoms

PCOS symptoms that may develop gradually include:

- Weight gain or upper body obesity (more around the abdomen than the hips). This is linked to high androgen levels.
- Male-pattern baldness or thinning hair (alopecia). This is linked to high androgen levels.
- Repeat miscarriages. The cause for this is not known. These miscarriages may be linked to high insulin levels, delayed ovulation, or other problems such as the quality of the egg or how the egg attaches to the uterus.
- Inability to become pregnant (infertility). This is because the ovaries are not releasing an egg (not ovulating).
- Symptoms of too much insulin (hyperinsulinemia) and insulin resistance, which can include upper body weight gain and skin changes, such as skin tags or dark, velvety skin patches under the arm, on the neck, or in the groin and genital area.
- Breathing problems while sleeping (obstructive sleep apnea). This is linked to both obesity and insulin resistance.
- High blood pressure may be more common in women who have PCOS, especially

if they are very overweight. Your doctor will check your blood pressure.

The most common reasons that first bring women with PCOS to a doctor include:

- Menstrual problems.
- Male-type hair growth (hirsutism) on the face and body.
- Infertility.
- Weight gain or upper body obesity.

When to Call a Doctor

Polycystic ovary syndrome (PCOS) is a long-term (chronic) condition. Symptoms tend to start gradually. It is common for PCOS symptoms to be mistaken for some other medical problem. PCOS causes a wide range of symptoms, so it may be hard to know when to see your doctor. But early diagnosis and treatment of PCOS will help prevent serious health problems, such as diabetes and heart disease. See your doctor if you have symptoms that suggest PCOS.

If you are a teenage girl, see your doctor if you have:

- Not started menstruating by age 14 and have hair growing on your chest, back, belly, or face (hirsutism).
- Not started menstruating by age 15 or within 2 years of breast and genital hair development.
- Fewer than eight menstrual cycles a year and this has lasted for 2 years after you started menstruation.
- Severe acne.
- Hair loss from your scalp.
- Excessive hair growth or hair growing in places such as the chest, back, belly, or face.
- Menstrual cycles that are consistently less than 21 days apart or more than 45 days apart.
- Any symptoms of diabetes, such as increased thirst and frequent urination (especially at night), unexplained increase in appetite, unexplained weight loss, fatigue, blurred vision, or tingling or numbness in your hands or feet.
- Skin problems such as acne, oily skin, dandruff, skin tags (acrochordons) in the armpits or neck area, or dark skin patches (acanthosis nigricans) in skin folds or on the neck, groin, or underarms.
- Depression or mood swings. Many women may have emotional problems related to the physical symptoms of PCOS, such as excess hair, obesity, or infertility.
- Excess weight gain or upper body obesity (more abdominal fat than hip fat). This is linked to high androgen levels.
- Decided to quit smoking, if you have been smoking.

If you are between 20 and 40 years old, see your doctor if you have:

- Menstrual cycles that are consistently less than 21 days apart or more than 35 days apart.
- Regular menstrual cycles but you have been trying unsuccessfully to become pregnant for more than 12 months.
- Vaginal bleeding that lasts more than 8 days; large clots; or excessive spotting.
- Pelvic pain that lasts for more than 4 weeks.
- Excessive hair growth or hair growing on the chest, back, belly, or face (hirsutism).
- Any symptoms of diabetes, such as increased thirst and frequent urination (especially at night), unexplained increase in appetite, unexplained weight loss, fatigue, blurred vision, or tingling or numbness in your hands or feet.
- Skin problems such as acne, oily skin, dandruff, skin tags (acrochordons) in the armpits or neck area, or dark skin patches (acanthosis nigricans) in skin folds or on the neck, groin, or underarms.
- Depression or mood swings. Many women may have emotional problems related

- to the many physical symptoms of PCOS, such as excess hair, obesity, or infertility.
- Excess weight gain or upper body obesity (more abdominal fat than hip fat). This is also known as android obesity and is related to increased male hormone (testosterone) levels.
 - Decided to quit smoking, if you have been smoking.

What Causes PCOS?

The cause of polycystic ovary syndrome (PCOS) is not fully understood, but genetics may be a factor. If you have PCOS, your sisters and daughters have a 50% chance of developing PCOS.

PCOS problems are caused by hormone changes. One hormone change triggers another, which changes another. PCOS problems may include:

- Ovary hormone imbalance. When the hormones that trigger ovulation are not at the right levels, the ovary does not release an egg every month. In some women, cysts form on the ovaries. These cysts make androgen.
- High androgen levels. High androgen in a woman causes male-type hair and acne problems and can stop ovulation.
- High insulin and blood sugar levels. About half of women with PCOS have a problem with how the body uses insulin, called insulin resistance. When the body doesn't use insulin well, blood sugar builds to high levels. If not treated, this can lead to diabetes.

PCOS seems to run in families, so your chance of having it is higher if other women in your family have PCOS, irregular periods, or diabetes. PCOS can be passed down from either your mother's or father's side.

How is PCOS Diagnosed?

If you have possible symptoms of polycystic ovary syndrome (PCOS), such as menstrual cycle problems or trouble getting pregnant, see your doctor for an exam. PCOS increases your risks of infertility, uterine cancer, diabetes, and heart disease. If you are diagnosed with PCOS, be sure to have regular checkups. This helps you and your doctor lower your risk of these serious health problems.

No single test can show that you have PCOS. Your doctor will talk to you about your medical history, do a physical exam, and run some lab tests. You may also have an ultrasound scan of your pelvis.

- The medical history includes questions about your symptoms. Your doctor may ask you about changes in your weight, skin, hair, and menstrual cycle. He or she may also ask you about problems with getting pregnant, medicines you are taking, and your eating and exercise habits. Be sure to mention whether you have lost hair from your scalp or have male-pattern facial or body hair. You will also talk about any family history of hormone (endocrine) problems, including diabetes.
- The physical exam checks your thyroid, skin, hair, breasts, and belly. You will have a blood pressure check and a pelvic exam to check for enlarged or abnormal ovaries. Your doctor can also tell you what your body mass index (BMI) is, based on your height and weight.

Lab tests are also used to look for signs of PCOS. These signs may include high androgen levels, high blood sugar, or high lipid levels. Other tests may include checking your blood for:

- Human chorionic gonadotropin (hCG), to find out if you are pregnant.
- Testosterone, an androgen. Androgens at high levels can block ovulation and

- cause acne, male-type hair growth on the face and body, and hair loss from the scalp.
- Prolactin, which can play a part in a lack of menstrual cycles or infertility.
- Cholesterol and triglycerides, which can be at unhealthy levels with PCOS.
- A chemistry screen to check kidney and liver function and glucose levels.
- Thyroid-stimulating hormone (TSH) to check for an overactive or underactive thyroid.
- Adrenal gland hormones, such as DHEA-S or 17-hydroxyprogesterone. An adrenal problem can cause symptoms much like PCOS.
- Glucose tolerance and insulin levels, which can show insulin resistance.
- A pelvic ultrasound can show enlarged ovaries or more eggs than normal on the ovaries, which are signs of PCOS. But many women with PCOS do not have these signs.

Conditions with Symptoms Similar to Polycystic Ovary Syndrome (PCOS)

Medical conditions that cause symptoms similar to polycystic ovary syndrome (PCOS) include:

- High prolactin hormone levels.
- Excess adrenal hormones. This excess level may be present from birth (congenital adrenal hyperplasia) or may develop in adulthood, causing irregular menstrual cycles and excess hair growth (hirsutism).
- Cushing's syndrome.
- Tumors of the ovary or adrenal gland that produce male hormones.
- Thyroid problems, such as autoimmune thyroiditis, hypothyroidism, or hyperthyroidism.
- Eating disorders.

Regular Testing for Diabetes, Heart Disease, and Uterine Cancer

Diabetes

If you have PCOS, experts recommend that you have blood glucose testing for diabetes by age 30. You may have this done at a younger age if you have PCOS and other risk factors for diabetes (such as obesity, lack of exercise, a family history of diabetes, or gestational diabetes during a past pregnancy). After this, your doctor will tell you how often to have testing for diabetes.

Heart Disease

Your doctor will regularly check your cholesterol and triglycerides, blood pressure, and weight. This is because PCOS is linked to higher risks of high blood pressure, weight gain, high cholesterol, heart disease, hardening of the arteries (atherosclerosis), heart attack, and stroke.

Uterine (Endometrial) Cancer

Regular menstrual cycles normally build up and "clear off" the uterine lining every month. When the uterine lining builds up for a long time, precancer of the uterine lining (endometrial hyperplasia) can grow. If you have had infrequent menstrual periods for at least 1 year, your doctor may use a transvaginal ultrasound and/or endometrial biopsy to look for signs of precancer or cancer.

How is it Treated?

Regular exercise, healthy foods, and weight control are key treatments for PCOS. Medicines to balance hormones may also be used. Getting treatment can reduce unpleasant symptoms **and** help prevent long-term health problems.

The first step in managing PCOS is to get regular exercise and eat heart-healthy foods. This can help lower blood pressure and cholesterol and reduce the risk of diabetes and heart disease. It



can also help you lose weight if you need to.

- Try to fit in moderate activity and/or vigorous activity on a regular basis. Walking is a great exercise that most people can do.
- Eat a heart-healthy diet. In general, this diet has lots of vegetables, fruits, nuts, beans, and whole grains. It also limits foods that are high in saturated fat, such as meats, cheeses, and fried foods. If you have blood sugar problems, try to eat about the same amount of carbohydrate at each meal. A registered dietitian can help you make a meal plan.
- Most women who have PCOS can benefit from losing weight. Even losing 10 lbs. (4.5 kg) may help get your hormones in balance and regulate your menstrual cycle. PCOS can make it hard to lose weight, so work with your doctor to make a plan that can help you succeed.
- If you smoke, consider quitting. Women who smoke have higher androgen levels that may contribute to PCOS symptoms. Smoking also increases the risk for heart disease.

A doctor may also prescribe medicines, such as:

- Birth control pills. They can help your periods be regular and can reduce symptoms such as excess facial hair and acne. An androgen-lowering medicine, spironolactone, may be used with birth control pills to help reduce symptoms even more. These medicines are not used if you are trying to get pregnant.
- A diabetes medicine called metformin. It can help restore regular menstrual cycles and fertility.
- Fertility medicines, if you are trying to get pregnant.

It is important to see your doctor for follow-up to make sure treatment is working and to adjust it if needed. You may also need regular tests to check for diabetes, high blood pressure, and other possible problems.

It may take a while for treatments to help with symptoms such as facial hair or acne. In the meantime:

- Over-the-counter or prescription acne medicines may help with skin problems.
- Waxing, tweezing, and shaving are easy ways to get rid of unwanted hair. Electrolysis or laser treatments can permanently remove the hair but are more expensive. Your doctor can also prescribe a skin cream that slows hair growth for as long as you use it regularly.

It can be hard to deal with having PCOS. If you are feeling sad or depressed, it may help to talk to a counselor or to other women who have PCOS. Ask your doctor about local support groups, or look for an online group. It can make a big difference to know that you are not alone.

Problems with Insulin and Sugar Metabolism

Insulin is a hormone that helps your body's cells get the sugar they need for energy. Sometimes these cells do not fully respond to the action of insulin. This is called insulin resistance. Insulin resistance can lead to an increase in blood sugar and diabetes.

Up to 40% of women with PCOS have insulin resistance, and up to 10% get type 2 diabetes by the time they reach age 40. Insulin levels also rise in people with insulin resistance. High insulin levels can increase the production of male hormones and make your PCOS worse.

Serious health problems linked to insulin resistance include:

- High blood pressure.
- High triglycerides.
- Low HDL ("good") cholesterol.
- High blood sugar.
- Excess body fat (particularly abdominal obesity).

Heart and Blood Circulation Problems

It is possible that high insulin from PCOS makes heart and blood vessel problems worse. These problems include:

- Hardening of the arteries (atherosclerosis).
- Coronary artery disease and heart attack.
- High blood pressure.
- High cholesterol.
- Stroke.

Breathing/Sleep Problems

Women who have PCOS have a higher risk of breathing problems while sleeping (obstructive sleep apnea). This is linked to both obesity and insulin resistance.

Surgery

Surgical treatment is sometimes used for women with infertility caused by polycystic ovary syndrome (PCOS) who do not start ovulating after taking medicine. During surgery, ovarian function is improved by reducing the number of small cysts.

Surgery Choices

- Ovarian wedge resection is the surgical removal of part of an ovary. This is done to help regulate menstrual cycles and start normal ovulation. It is rarely used now because of the possibility of damaging the ovary and creating scar tissue.
- Laparoscopic ovarian drilling is a surgical treatment that can trigger ovulation in women who have PCOS and who have not responded to weight loss and fertility medicine. Electrocautery or a laser is used to destroy portions of the ovaries. Studies of women with PCOS have reported that ovarian drilling results in an 80% ovulation rate and a 50% pregnancy rate, but other studies have shown less success. Younger women and those with a body mass index in the normal range are most likely to benefit from laparoscopic ovarian drilling.

What to Think About

There is no known cure for PCOS. Surgery for PCOS may be recommended only if you have not responded to any other treatment for PCOS. Each woman will want to discuss the risks and benefits of this surgery with her doctor. Surgery is less likely to lead to multiple pregnancies than taking fertility medicines. It is not known how long the benefits from surgery will last. There is some concern that ovarian surgery can cause scar tissue, which can lead to pain or more fertility problems.

Endometriosis, it's more Common Than You Think

<http://www.womans-essence.com/endometriosis-its-more-common-than-you-think>

More and more women are being told they have endometriosis and starting at a young age. Years ago it was rarely diagnosed because of the difficulty of a diagnosis and how long the diagnosis could take.

[Endometriosis](#) occurs when bits of the uterus lining grow outside the uterus, causing pelvic pain, extremely painful periods, sometimes painful intercourse, discomfort, bleeding between periods, irregular cycles and even infertility.

According to Christiane Northrup M.D., the infertility is not caused by the endometriosis. Whatever is causing endometriosis may also cause infertility, but one does not cause the other. So in that case, what causes the endometriosis?

[Endometriosis](#) is an estrogen sensitive disease. Basically, estrogen levels have to be lowered through food choices, herbs, and nutrients that balance hormones, reduce inflammation and support the liver. The liver is mentioned because it not only secretes estrogen but also breaks down the harmful estradiol into estriol, a safer form of estrogen. A high ratio of estriol to estradiol limits the amount of endometrial tissue that is produced and also reduces the pain.

Our food choices also contribute to the cause of endometriosis. Meat and dairy products should be avoided, since excess estrogen contributes to endometriosis. It would be beneficial to also avoid chocolate, soy products, refined sugar, salt, coffee, fried and processed foods. Heavy alcohol should also be avoided, since it stresses the liver and can raise estrogen levels. Just to help calm the endometriosis, a vegetarian diet should be considered.



In addition to avoiding all these foods, there are also foods to include. Foods high in iodine are important, since a deficiency of iodine can trigger endometriosis. Seaweeds (which are good cooked or boiled) such as kelp and dulse are rich sources of iodine. Whole grains, nuts and seeds, and lots of vegetables need to be included as well. To help reduce inflammation, include fatty acids, such as flaxseed, olive, grape seed or canola oil in your diet. Another alternative is to try tumeric and ginger in your cooking.

Many vitamins and minerals can help treat endometriosis. B vitamins help the liver to break down and excrete oxygen. Since free radical damage is also involved with [endometriosis](#), antioxidants such as vitamins A, E and C are recommended. Iron is needed to replace the iron that is lost during heavy bleeding. Get

an iron supplement made from a natural source. Anything synthetic will go straight to your liver, and your liver cannot break it down as it should. Sea vegetables and herbs such as alfalfa, spirulina and chlorella are also rich in iron. Calcium, magnesium and potassium help prevent painful cramping.

Something you can do at home is a foot bath. Use very hot water on your feet for about thirty minutes a day while putting a cold pack on your abdomen to draw away inflammation and to stimulate the immune system.

Some women even may want to try Acupuncture, which the Chinese medicine has helped for many, many years. These suggestions may work for those who have stage one or stage two.

By: [Amanda Bears C.H.C.](#)
www.myfertilityawareness.com

How To Help Dysmenorrhoea, the cry of painful periods

<http://www.womans-essence.com/how-to-help-dysmenorrhoea-the-cry-of-painful-periods>

If you have ever before endured a painful cycle before, you might find relief in our few tips to help the pain of a period. Dreaded by so many women because of the painful cramping cycles tend to bring on. Periods don't really mean pain; we can help cramping by rebalancing the underlying problem, and soon be relieved of those cramps. According to Linda Woven, who wrote the book Naturopathic Encyclopedia, as many as 60% of women suffer from painful periods. 10% of them, the pain is extremely severe that it is incapacitating. A painful period needs to be more addressed, as it's a health problem.

You may often experience before/during a period starts, bowel changes, vomiting, nausea, diarrhea, headaches, fatigue, lower back pain, dizziness, fainting along with cramps, bloating, weight gain, breast tenderness, and irritability. So what causes these painful periods known as Dysmenorrhoea?

It is possible that there may be a more underlying health condition causing painful periods, such as endometriosis, fibroids, infection or cysts. If there is no severe underlying health condition, the pain could be a result of abnormal prostaglandin production, which causes uterine contractions as well as inflammation. Women with severe cramping have high levels of the hormone prostaglandin F2 alpha in the menstrual blood. This hormone sends the uterus into spasm, which causes the severe cramping. A sluggish liver (which can be corrected with a good detox and diet changes), blockage in the liver, or blood stagnation, or heat can also be a cause of dysmenorrhea. Bad diet, stress, poor fitness, poor blood flow, candida, and bowel toxicity can also be a contributing factor.



Let's start with the diet, fix it. Let's eliminate arachidonic acid, which is found in meat, chicken, turkey, and dairy products. Ease this slowly, and not at once. According to Tori Hudson N.D., dietary changes and improvements alone can relieve menstrual cramping. Focus on whole foods, vegetables, grains, nuts, legumes, seeds, and be low in hydrogenated and saturated fats. Avoid frequent coffee intake, alcohol, chocolate, soda pop, sugar, and refined carbohydrates. Frequent use of salt can also be a cause of dysmenorrhea.

Herbs can also help. There are some herbals that can help ease the pain of cramping on top of fixing the diet.

Black Haw, which is a warming herbal, can be used before a menstrual period to relieve cramping, as well as Dong Quai. They work in bringing warmth to the pelvic region, and also encouraging blood flow. Do not take during menstrual bleed. Passionflower is an antispasmodic herbal, which means it affects the nervous system and can help relieve pain. Motherwort is also a very powerful antispasmodic herb; this herbal is often combined with cramp bark or dong quai. For liver herbals, milk thistle, Oregon Grape Root, yellow dock, and dandelion root can clear out a sluggish or clogged liver.

Vitamins and Minerals can also help relieve cramps; a few main ones are more Vitamin B6, along with calcium and magnesium, vitamin E and bromelain. Make sure you are getting enough of your vitamins through your foods, or even supplement. We suggest an equal amount each day to help with cramping. Always remember, that with over the counter relief such as Midol, or Tylenol, this contributes to a sluggish and clogged liver, as the liver is where the toxins and chemicals end up, since our bodies cannot properly break down these.

By: [Amanda Bears C.H.C.](http://www.myfertilityawareness.com)
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Menstruation

Normal Bleeding

- Clotting, caused from tissue small/size of a dime or quarter is normal
- Menstrual bleeding can last three to seven days
- Color/red/dark red/brown as it ends

Not normal Bleeding

- Clotting bigger than or of size of fist associated with pain (indicate fibroids)
- Menstrual bleeding lasting more than 11 days

Excessive bleeding causes (known as Menorrhagia)

Some causes are fibroids, cysts, tumors, hormonal imbalances, polyps, infections, fragile blood vessels, circulatory issues, stress, smoking, toxins, food sensitivities, and endometriosis. Heavy bleeding is normally the result of imbalances of various organ systems of the body, especially the thyroid and liver.

Lack of Periods (known as Amenorrhoea)

One of the causes for amenorrhoea is improper diet, anorexia or bulimia, or even excessive exercise (athletes). Other causes:

- emotional stress
- obesity
- BC pills (birth control)
- hormonal imbalances
- toxins
- anemia
- low cholesterol
- adrenal tumors
- PCOS
- thyroid imbalance

(Women who have amenorrhoea have been known to have a deficiency of B6 and zinc)
Women with prolonged amenorrhoea are at serious risk in developing osteoporosis because estrogen deficiency decreases the rate of absorption of calcium. (That's according to Hudson, T, Women's Encyclopedia of Natural Medicine-published in 1999)

Painful Periods- (known as dysmenorrhoea)

As many as 60% of women suffer from this.

- Iron is needed, especially in the first half of the cycle (Follicular phase) to make up for all the blood loss during the blood flow

Imbalance of hormones

Yes this can cause PMS, (which is attributed to a deficiency of low magnesium, poor liver function (if the liver is not working efficiently it can lead to a build-up of estrogen since it's not being properly detoxified, causing PMS), There was a study in "The New England Journal of Medicine" that stated, for women with PMS to get their thyroid checked, as many as 94% of women with PMS suffered from Low Thyroid Function. B6 also helps.

Obviously, an imbalance of hormones means an irregular period- which means there is more of an underlying cause to this. Thyroid, PCOS, endometriosis, sometimes cysts, fibroids, diet, obesity, anorexia, and on-going stress (high cortisol levels).

Defining a regular vs. irregular cycle

26-35 days is normal (according to WebMD, and Linda Woolven) - imbalance would be- 35 (one cycle) 49 (next cycle) 32 (next cycle) 61 (next cycle) and so on...

Too frequent periods- (known as Polymenorrhea)

This is also a cause of imbalance of hormones, which this leads to anemia. Thyroid dysfunction and abnormal thickening of the uterine lining (which happens due to hormonal imbalances). Estrogen causes the uterine lining to grow, and be thick, and progesterone thins out the lining (When a woman ovulates her corpus leuteum produces progesterone, which helps prepare the lining for implantation, and thins it, however if she is getting too frequent periods, she isn't ovulating and not producing progesterone to thin the lining, causing a thick growth of estrogen build up, normally this happens to those of us that have endometriosis- It's best we avoid estrogens.

Fibroids can also be a cause of too frequent periods, sometimes the bleeding happens nearly a week after the actual period, and sometimes lasts for another week. Periods that are less than 23 days apart are normally categorized as polymenorrhea.

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Herbal Programs to Help Balance Hormones and Regulate Menses

The following programs are from *Footprints on the Path* by HerbAllure.

Female

Primary Formulas:

Female Comfort, Dong Quai or FCS II

General:

X-Action for Women (female emotional/physical support)

Vitamin E Compete w/Selenium – Antioxidant/Female

Black Currant Oil – For metabolism of hormones

Coral Calcium or Nature's Sea Calcium – For bone mineral density

IGF-I – For women over 30

Evening Primrose Oil

Red Raspberry (Female Tonic)

Blessed Thistle (Hormone balance and general tonic)

Damiana (Hormone Regulator)

C-X or Black Cohosh

Phyto-Soy – For estrogen-like properties

Master Gland (Hormone Balance)

Super Algae, Alfalfa or Kelp (Trace Minerals)

Thai-Go or Super Antioxidant

Liver Balance, Chinese – Promotes functions unique to the female body

Homeopathic: Feminine Tonic

Essential Oils:

Geranium – Used as a douche to tone the vaginal area and uterus, stimulate adrenal cortex to balance the reproductive system

Rosemary – To regulate the ovaries

Frankincense – As a female tonic

Lemon Bio – For uterine infections

Bergamot, Ylang Ylang – May help with hormone balance

Hot Flashes:

Flash-Ease, C-X or Black Cohosh

Natural Changes 9Menopause Packets)

Pro-G-Yam Cream – For progesterone

Wild Yam/Chaste Tree – For progesterone

FCS II (Female Hormone Corrective)

Damiana (Hormone Regulator)

Vitamin E Complete w/Selenium (Antioxidant/Female)

SUMA Combination – Helps many women

Adrenal Support, Licorice Root or DHEA-F (Adults only)

Eleuthero – Regulates Hypothalamus

Homeopathic: Menopause Remedy

Essential Oils: Bergamot, Clary Sage

Ovarian Cysts:

Tea Tree – As a suppository in empty capsules or soak a tampon

V-X – As a suppository

Facial Hair:

Mineral Chi Tonic – Nervous Fatigue Formula – If caused by Adrenal stress

Sage – To eliminate facial hair

Eleuthero, X-A, Damiana or Pro-G-Yam cream

Natural Changes – If caused by hormone imbalance

The following is from “The Pocket Notebook on Herbal Remedies”

Endometriosis:

Herbs: Red Raspberry: 2 caps 3x daily

Lymph Gland Cleanse (IGS II): 2 caps 3x daily or every 2 hours for serious infection

Blue Cohosh: 1 cap 2x daily; NF-X: 2 caps 3x daily

Vitamins and Supplements: Vitamin E: 400 IU daily. Increase slowly to 1000 IU.

Hormones:

Herbs: Black Cohosh: 1 cap 1-2x daily; Sarsaparilla: 2 caps 2x daily; Damiana: 2 caps 2x daily; NF-X: 2 caps 3x daily; C-X: 2 caps 3x daily; Wild Yam/Chaste Tree Combination: 1 or 2 caps 2x daily; FCS II: 2 caps 3x daily; X-Action, Women’s: 2 caps 3x daily

Vitamins and Supplements: Master Gland: 2 caps with breakfast and 2 caps with lunch daily.

Hot Flashes:

Herbs: Damiana: 2 caps w/2 meals; Black Cohosh: 1 cap 1-2x daily; FCS II: 2 caps w/3 meals start with small amount and work up to best; Female Support: 2 caps w/3 meals, start with small amount and work up to best; NF-X: 2 caps w/3 meals; C-X: 2 caps w/3 meals work up to this gradually; X-A: 1 cap w/3 meals.

Vitamins & Supplements: Master Gland: 2 caps with breakfast and 2 caps with lunch daily.

The following Programs are from “Herb Foot Recipes by Body System”

Fibroid Cyst Program:

Pau d’Arco

Black Currant Oil and/or Vitamin E

All Cell Detox

Ovarian Cyst Program:

Horsetail

Black Walnut

(If lymph nodes, add Echinacea)

Hormone balancers are helpful.

Add Pau d’Arco if possibly cancerous.

Endometriosis:

Inflammation of the lining of the womb or Leucorrhoea: (whitish discharge from the womb.)

All Cell Detox - Cleanses toxins from the female tract

Lymph Gland Cleanse – Infection fighting combination and anti-inflammatory (caution: anemia, high blood pressure, or postpartum weakness if hypoglycemia use Lymph Gland Cleanse-HY)

Alternate with PLS II

Bayberry – Cleanses the female tract

Female Comfort – Anti-inflammatory and healing the womb

Helpful to add: 100,000 IU of vitamin A & D

**CERTIFIED WOMAN'S HEALTH COUNSELOR ONLINE COURSE - SESSION 3
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 mail it back to us at iridology@netzero.net or P.O. Box 485, Weimar, CA, 95736-0485. We will grade your question & answer session and will let you know if we have any questions or concerns. **Please use a separate sheet to do this assignment.**

1. The lower third of the uterus is called the _____.
2. Six hormones serve as chemical messengers to your reproductive system. These hormones include:
3. Estrogen and progesterone levels are at their lowest during _____.
4. What is FSH?
5. What is the luteal phase?
6. What are uterine polyps?
7. List the 6 types of uterine fibroids and how they differ.
8. What is a myomectomy?
9. What are the reasons for a hysterectomy?
10. What is the cause of cervical polyps?
11. What are endometrial polyps?
12. What is Lupus and how is it diagnosed?
13. What is an NSAID and how does it work?
14. Do you know anyone who has had side effects from an NSAID? If so, please describe.
15. What is an Anti-malarial and why would anyone want to take them?
16. Who would need to take corticosteroids?
17. What are the possible side effects to taking immunosuppressives?
18. What is an anti-rheumatic drug used for?
19. What is pelvic inflammatory disease and what are its symptoms?
20. What is the best protection against PID and other STD's?
21. _____ significantly increases your risk of developing pelvic inflammatory disease and other pelvic infections and is not recommended.
22. What is an IUD?