

VAGINAL HEALTH

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UNDERSTANDING VAGINAL HEALTH

The vagina is usually a wonderfully efficient, self-maintaining, dynamic environment.

It undergoes cyclical changes and self-cleanses itself through menstruation and natural secretions. It defends itself against infection, but sometimes an imbalance occurs in the vagina that can affect our well-being. Vaginal infections can be transmitted through sexual or intimate contact, or may arise spontaneously.

By gaining an understanding of how our vagina works we can recognize which changes are normal and which are unusual. We can learn what factors contribute to infection and this knowledge can help us reduce or eliminate recurrent vaginal infections.

The vagina is a cavity in the body much like the mouth cavity. Both are open to the outside air and have similar mucous membrane linings that stay moist from secretions. Neither is sterile. Several protective systems keep the vagina healthy and clean. The most important of these are the acid balance and the cervical mucus.

A healthy vagina is usually slightly acidic. It registers about four to five on the pH scale that runs from 1, most acidic to 14, most alkaline. Acidity prevents many different kinds of

bothersome bacteria and other microorganisms from flourishing.

"Friendly" bacteria called lactobacilli or Doderlein's bacilli keeps the vagina acidic. If it weren't for the lactobacilli, the vagina might always be a sugary, alkaline breeding ground for infections. The cells of the vaginal walls store sugar in the form of glucose. Droplets of fluid form on the walls of the vagina and mix with dead cells that are sloughed off. The glucose is released when the cells are sloughed off. Protozoa or microscopic one-celled animals and bacteria and fungi feed off that sugar. The lactobacilli also thrive on sugar. Unlike the other organisms, the lactobacilli convert the sugar into a weak acid called lactic acid. This acidity kills off the "bad" organisms.

Another important protective system is the cervical mucus. The cervix is the base of the uterus that extends into the vagina. The endocervical canal leads from the cervical opening, or os, up into the uterus. Glands located in this canal secrete mucus. The mucus is thicker than the vaginal secretion and also bathes the vaginal walls, washing away dead cells and debris. It helps moisten and lubricate the vaginal walls, thereby protecting them from damage. And it "plugs" the cervical opening to defend the sterile uterus from the invasion by microorganisms.

Normal vaginal discharge has a mild, pleasant odor and fluctuates between a clear egg-white consistency and a milky white paste, during your menstrual cycle. Hormonal changes in the menstrual cycle affect the cervix and amount of mucus secretions. By checking mucus regularly, you can get to know the varying textures and amounts of mucus in your own cycle. Some women have heavy secretions throughout their cycle and other women say they have very little secretion at any time of the month.

Even though the ecology of the vagina is constantly changing, the arrival of a new microorganism, even sexually transmitted, isn't enough to start an infection. There are many conditions that can make your vagina more or less susceptible to infections. Some of the following may contribute to you getting an infection or recurrent infections.

Cervical mucus is slightly more alkaline when you're most fertile, right before ovulation. During menstruation your vagina is at its most alkaline because the blood that flows through the vagina is a sweet, alkaline medium. The menstrual flow can be a cleaning process for the vagina because the blood can bathe the vagina as it flows, or it can act as a sugary food for infections. Right before and right after menstruation the vagina may be drier than at other times, because the cervical mucus has formed a thick plug at the opening of the cervix. At this time in a woman's cycle, the mucus is not bathing and lubricating the vaginal walls. Some women find that symptoms of infections escalate during or after their periods.

Pregnancy is also a time when women may tend to suffer from infections. Hormonal changes cause the vaginal walls to store more sugar. The alkaline level increases as a result. Also some women develop abnormal Pap smear results while pregnant because of the changes in the cells. Hormones, like those in The Pill, can also cause similar effects. Women who take them may be more prone to cervical inflammations and vaginal infections.

Hormonal changes occur during and after menopause. There are lowered levels of estrogen and thus lower levels of glucose in the cells of the vagina. There may not be enough glucose in those cells to support lactobacilli and maintain an acidic vaginal environment.

Antibiotics are often prescribed for vaginal infections. Some treatments are available over the counter. The antibiotics work by wiping out all bacteria, both bad and good. So after finishing off the antibiotics, the vagina may be too alkaline and harbour infection.

The natural ecology of the vagina can be changed by any kind of condition or foreign object that gets into the vagina. Douching, for example, dries out the mucous membrane lining and can irritate or damage the vaginal walls and upset the acid balance. The vaginal walls can be irritated by the chemicals in commercially prepared douches. Frequent douching can also erode the mucous plug that acts as the protective barrier to the uterus.

IUD strings may cause an inflammation of the cervix where the string lies on the cervix. The string can act as a wick for bacteria to travel on, descending from the cervix into the vagina or ascending from the vagina to the uterus.

Ananything that scratches or irritates the vaginal walls can cause trouble by providing bacteria or viruses with safe harbour and feeding grounds. You can scratch yourself with anything from a fingernail to a plastic tampon applicator. Spermicides like nonoxynol 9 may irritate some women and cause breaks in the vaginal wall.

Tampons should not be left in too long because they can breed bacteria. Change your tampon every four to six hours. Avoid using super absorbency tampons as they can absorb the mucous lining. They cause the vaginal walls to lose needed protective moisture and interfere with the washing process. Change your tampon immediately after swimming in a chlorinated pool or whirlpool. Tampons absorb the chlorine which kills all bacteria in the vagina, including the lactobacilli. At the same time the sweet menstrual fluid can feed an infection. Tampon use has been associated with toxic shock syndrome, a rare but serious infection. This risk can be decreased significantly by changing tampons frequently and using a lower absorbency tampon or using menstrual pads instead of tampons.

The vagina and cervix can affect each other. A red cervix can indicate that a vaginal infection is present and irritating the cervix. Redness in conjunction with an unusual discharge, spotting or

bleeding from the inflamed area of the cervix or pain may indicate that an infection is present. The effect that a vaginal infection can have on the cervix is not always detected by the naked eye, but can be seen by looking at a Pap smear through a microscope.

Redness on the cervix is a frequent, and usually harmless phenomena that can be caused by a variety of things. A woman can watch her cervix, by using a plastic speculum and looking at the cervix in a mirror, regularly to determine if the redness is temporary or related to her menstrual cycle. If it is cyclical, the redness will disappear after a few days. If the redness persists, it may mean a number of things.

A red area around the os is sometimes just the lining of the cervical canal extending into the vagina. Young women who have not fully matured and women on oral contraceptives can have this happen. These red cells are not as tough as vaginal cells. Infection and viruses can penetrate them more easily, particularly HIV and chlamydia.

Scarring on the cervix can result from giving birth or from tears that sometimes result from the metal instrument used to hold the cervix steady during an abortion. A woman may be more prone to redness on the cervix because the scarred areas on the cervix provide a place for bacteria to grow. Bacteria can also inflame the glands in the endocervical canal and cause inflammation on the cervix.

Vigorous vaginal penetration by fingers or penis can irritate the cervix and the

vaginal walls. Sexual assault can also damage these areas.

The foods we eat can also affect the vaginal balance. Refined carbohydrates and sugars can increase the level of sugar in the bloodstream as well as make our system more alkaline. Many women and women's health-care practitioners believe that cutting down on sugar cuts down infections. Since the cells in the vaginal wall contain sugar that is released as the cells are sloughed off, it's possible to have an overload of sugar in your system. Diabetes, pregnancy and The Pill also increase the amount of sugar stored. Drinking huge amounts of fruit juice or eating a great deal of fruit can also increase the level of sugar in the bloodstream.

A balanced diet is important to good health. Coffee and alcohol intake can deplete your body of B vitamins that are necessary for general health and resistance.

Stress and anxiety and lack of sleep can lower your immunity and may even lower vaginal acidity.

The right clothes can also mean the difference between an organism flourishing or dying. A hot, moist environment encourages infections. Always wear cotton panties or panties with a cotton crotch and make sure they're loose enough to allow the vaginal area to breathe. Avoid wearing tight jeans and synthetic fibers.

Never share towels. Although it's rare, a used warm towel can harbor a few infections.

To prevent anal bacteria from getting into the vagina or urethra there are a few precautions you can take to reduce your risks. After urinating, always wipe your vulva from front to back. Always wipe your anus from front to back after a bowel movement. Don't insert anything into your vagina that has been in your anus unless the item is carefully washed in between uses. Avoid washing the anal area before the vaginal area with the same washcloth. Wash your external genitals and anal area regularly. This is important especially after sex, even if you choose to bathe the following day. Wiping the lips of the vagina is sufficient to cleanse the cavity. You can wash with plain water or if you use soap ensure you rinse well after washing. Many women find their vaginal area is irritated by scented soaps or bubble baths.

Talk to your sexual partners about possible infections. There are things you can see on your partner's genitals such as herpes sores or warts.

Maintaining good vaginal health is an important part of taking care of ourselves as women.

Gardnerella Vaginitis

Gardnerella vaginitis or hemophilus is caused by a bacteria called gardnerella or hemophilus vaginalis. An infection can occur when there is an abundant growth of gardnerella bacteria in the *vagina*.

Symptoms

The most common symptom of gardnerella in women is a thick white sticky discharge. The discharge resembles flour paste and may have a grey or yellowish tinge. The discharge is often foul smelling and women may notice a fishy odour. During heterosexual intercourse the semen reacts with the discharge causing the fishy odour. This distinct smell may be the first warning that an infection is present. There may be some inflammation or irritation of the *vulva* or *vagina*, but this is usually less severe than with yeast or trichomonas. Some women may experience a burning sensation when urinating or pain with intercourse. Many people with gardnerella experience no symptoms at all.

Gardnerella vaginitis is often present in women who have either a yeast or trichomonas infection. It is therefore important to have a vaginal culture done in order to determine what type of infection(s) is (are) present.

Causes

There is some uncertainty about the conditions that cause a gardnerella infection to occur. Some people have

suggested that gardnerella is normally present in the vagina. When the vaginal ecosystem or ph balance is disturbed, an overgrowth of gardnerella may result.

Factors such as stress, poor diet, lack of sleep, tight pants or nylon underwear may all contribute to the risk of symptoms developing.

Others believe that gardnerella is almost always transmitted by sexual contact. Gardnerella can infect the urinary tract in men, although they may not present any symptoms. Men can pass it to their partner during sexual intercourse. Lesbians are also at risk if the infected vaginal secretions of a woman contact her partner's vulva.

Some people think gardnerella may be transmitted by douche nozzles, washcloths or bath water used by an infected person. Bacteria can be transmitted in many ways. It is a good idea not to share these items as a health precaution.

The incubation period for Gardnerella is five to ten days. If a woman thinks she has an infection, a gynecological exam should be done and a sample of her vaginal secretions taken. This sample will be sent to a lab and cultured to check for the presence of gardnerella.

Complications

Gardnerella bacteria can be passed from the vaginal opening to the *urethra* and result in a urinary tract infection.

After urination, wipe the vulva from front to back to reduce the possibility of getting a urinary tract infection.

There appears to be a connection between Gardnerella infections and abnormal Pap smears. If you have an abnormal Pap smear ask to have a vaginal culture taken to see if you have an infection. If you have Gardnerella, try to clear up the infection and then repeat the Pap test in three months. Many women find their Pap results return to normal.

Treatment

If a culture shows that another infection is present with the Gardnerella, try treating the other infection first and the Gardnerella may clear up at the same time.

There are a variety of natural treatments that can be used to treat Gardnerella. These are safer and less expensive than the popular drug treatments. Contact The Vancouver Women's Health Information Centre for a copy of "Natural Remedies For Vaginal Health." **The Encyclopedia of Natural Medicine** also includes treatment suggestions.

The most common drug used to treat Gardnerella is the antibiotic metronidazole commonly known as Flagyl. Flagyl is a very potent drug and should be used with caution. Side effects may include diarrhea, itching, dizziness, cramps, dry mouth and vagina. Flagyl kills some white blood cells which help fight infections. In laboratory tests Flagyl has caused gene mutations in bacteria, birth defects in animals and cancer in

mice.

Flagyl should not be taken in the following situations: if you have a history of blood disease, are undergoing anticoagulant therapy, have other infections present, have a central nervous system disease, have peptic ulcers or are pregnant. The effects on the fetus are not known, but the drug crosses the placental barrier and enters fetal circulation rapidly. Do not use Flagyl while breast feeding. The drug is passed through your breast milk to the baby.

Flagyl does kill some white blood cells. It is advisable to wait at least six weeks before using Flagyl again, so the body has time to replace the white blood cells. A white blood cell count should be done before, during and soon after taking Flagyl the second time.

Prevention

Regular sexual partners should be treated to avoid reinfection. Avoid vaginal penetration unless a male partner is using a condom. If you are heterosexual or lesbian, be cautious of close contact with vaginal secretions until you are certain the Gardnerella has cleared up. Do not share towels, washcloths, bath water or douche equipment.

Glossary

Urethra: a canal for the discharge of urine extending from the bladder to the outside

Vagina: canal from the vulva to the uterus

Vulva: the outer fleshy area of the vagina including the lips

Chlamydia

Chlamydia (klam-ih-DEE-ah) or Chlamydia Trachomatis is the most commonly reported sexually transmitted disease in Canada. It is a bacterial infection which may not display any symptoms and can remain unnoticed for years. Chlamydia is sometimes only recognized when a woman has pelvic pain. Chlamydia can cause infertility. The fallopian tubes may be blocked with scar tissue caused by a chlamydial infection. This is unfortunate because Chlamydia can be treated very effectively with antibiotics in the early stages. Both heterosexual women and lesbians are at risk.

Symptoms

Most of the time, women have no early symptoms of chlamydia. The most common visible symptoms of Chlamydia are an infection of the cervix or an erosion of the cervix resulting in a reddened, raw area or a yellowish vaginal or cervical discharge. Women can also have an infection of the urethra and experience a burning sensation when urinating or feel they need to urinate frequently. If there are symptoms, they usually appear 10-20 days after contact with an infected person.

In men, chlamydia is usually called NGU or non-gonococcal urethritis. Men may experience a slight burning on urination, itching in the urethra or a discharge of clear white or yellow fluid from the end of the penis. The symptoms may be very slight and often are

unnoticed and therefore untreated.

Both women and men can get proctitis, an inflammation of the rectum, via anal contact with an infected object. Chlamydia can also infect the eyes by way of hand to eye contact of genital secretions causing conjunctivitis. Conjunctivitis is an inflammation of the mucus membranes around the eyeball.

A pregnant woman with an untreated chlamydial infection can pass the infection to her baby during vaginal delivery. Babies can develop conjunctivitis and infections of the ear, throat and intestines. Chlamydia may be linked with low birth weights, stillbirths and infections of the uterine lining after delivery.

Treatment

Some women use natural remedies when they have a chlamydial infection. Zinc sulfate and Betadine, an iodine based solution work well in some instances. Have a vaginal culture done to determine the specific type(s) of infection you have before using any natural or drug treatments.

The common treatment for chlamydia is tetracycline. This antibiotic has been shown to cause birth defects and should not be taken by women who are pregnant or breast feeding or by babies or young children. Erythromycin may also be prescribed for the treatment of Chlamydia.

Antibiotic treatments are usually effective but sometimes chlamydial bacteria persist. In women it is easier to get rid of an infection that is near the cervix than one that spreads to the uterus or tubes. Symptoms may disappear with treatment, but the infection may still be present. The reasons for this are not clearly understood although some possible causes have been suggested. Chlamydia may be resistant to antibiotics in some people. Other people may stop the medication when symptoms disappear, but before the infection is completely gone. Symptoms may disappear, but the Chlamydia may persist deep in cells for many years. Therefore, an outbreak of the infection is not necessarily connected with an immediate past sexual contact. It has also been suggested that caffeine and alcohol may aggravate occurrences of chlamydia. You and your partner(s) should be tested five to six weeks after treatment to make sure you are cured.

Diagnosis

Chlamydia can be difficult to detect and requires a medical exam. Request that your health practitioner does a culture and not just a swab. Neither test is fully accurate, however, culturing is the most sensitive method and has the best chance of finding Chlamydia. Health practitioners will take a swab while doing a pelvic exam for women or a urethral swab for men.

Getting Good Medical Care

Many health practitioners are not knowledgeable about sexually transmitted diseases and chlamydia in

particular. They may not read current literature and may therefore be unfamiliar with recent diagnostic techniques and treatments. Sometimes symptoms may be misdiagnosed or one infection is treated without checking to see if there are other infections present. For instance, chlamydia and gonorrhea can both be present at the same time and symptoms can seem similar. If you suspect you have chlamydia or have been exposed to it, ask your doctor to do a swab and culture that tests specifically for chlamydia. You may also contact an area sexually transmitted disease clinic or a practitioner who is an infectious disease specialist. Many women get tested a number of times before finding anything, because chlamydia is hard to detect.

Any one who is sexually active can contract chlamydia. There appears to be a higher incidence of chlamydial infections among teenage women than older women. Young women's cervixes seem to be more susceptible to infections because their hormones are not stabilized and their vaginal areas are not fully developed. Also, women on the birth control pill have chlamydia more frequently because the pill makes the vagina less acidic and more susceptible to infections when exposed to them. Women whose male partners use a condom are less likely to have chlamydia. Transmission between women having sex with other women is rare, but does occur.

Chlamydia And Abnormal Pap Smear Results

The presence of Chlamydia can result in an abnormal Pap smear. Chlamydia infection in the eyes has been associated

with cellular changes similar to mild dysplasia or abnormal cell development. Sometimes Pap smear results can return to normal after women are treated for chlamydia and the infection cleared up. Ask your health practitioner to test for if you have an abnormal Pap smear, particularly if there seems to be no other explanation for the abnormal result.

Women with chlamydia bacteria on their cervixes or in their vaginas are at risk for P.I.D. or Pelvic Inflammatory Disease. PID can result from an infection like chlamydia or gonorrhea, traveling up from the vagina through the cervical canal to the uterus and tubes and becoming inflamed. For more information on P.I.D., contact the PID Society. There is also information available at the Vancouver Women's Health Collective, located at #219, 1675 W. 8th Avenue, Vancouver.

Yeast (vaginitis)

Yeast, also known as Candida Albicans, are organisms normally found in the vagina and the digestive tract. The term "infection", which is commonly used by the medical system, is misleading. A yeast "infection" is not really an "infection" at all but, more accurately, an overgrowth. Women are not "infected" by yeast but rather they experience an "overgrowth" of yeast. In the case of a mild overgrowth one of the most common symptoms is an irritation of the vagina called Vaginitis.

Yeast overgrowth usually happens when the environment in the vagina changes. The vagina is usually mildly acidic (ph 4-5) and this keeps the growth of yeast in check. If the vagina becomes less acidic, and therefore more alkaline, or if the sugar content in vaginal secretions increases, the yeast are encouraged to multiply quickly causing an overgrowth.

Health practitioners are generally silent about the nature and prevention of Vaginitis. They opt for the quick fix, expensive and often messy treatments, after the fact. Women are rarely told about simple, inexpensive, common sense approaches to their bodies and how to treat themselves to avoid yeast overgrowth.

How Do I Know What To Look For?

- ★ burning, redness and itching, in the vulva and vagina.

- ★ a vaginal discharge with "cottage cheese" curds.
- ★ a vaginal discharge with an odor like bread dough or the fermenting yeast smell of beer being brewed.
- ★ during self-exam with a speculum, there will be white patches sticking on the vaginal wall. If a patch is removed the area under it will look red.

What Causes Yeast Overgrowth?

Taking antibiotics is one of the greatest contributors to yeast overgrowth. Health practitioners prescribe antibiotics such as tetracycline* and ampicillin* and also Flagyl* to kill bacteria which cause vaginal irritations like Trichomonas* and Hemophilus.* These antibiotics kill off all kinds of bacteria in the body including necessary bacteria like lactobacillus. This lactobacillus bacteria helps maintain a mildly acidic environment in the vagina to prevent yeast from growing out of control. If a woman takes antibiotics as a treatment she should also use yogurt culture tablets as vaginal suppositories.

Yogurt is made up of lactobacillus acidophilus bacteria. It is this bacteria which will help restore the mildly acidic pH balance of the vagina. Using yogurt tablet suppositories during and right after an antibiotic treatment, and eating plenty of yogurt (check the label to make sure it is free of sugar and has lactobacillus bacteria in it, not all brands do) will help prevent yeast overgrowth. Lactobacillus can also be found in a non-dairy pill form and can be eaten or used as suppositories.

Some studies have shown that women who are pregnant, post menopausal or

using birth control pills are more prone to yeast overgrowth. Increases in the hormone progesterone are thought to disrupt the pH balance in the vagina making it less acidic and therefore more of a home for yeast growth.

Because yeast feeds on sugars in vaginal secretions, too much sugar and refined carbohydrates* in the diet can cause conditions in the vagina that favor yeast growth. Alcohol is converted into sugar, so drinking a lot of alcohol can have the same effect.

Women who are diabetic have sugar in their urine, and more than the normal amount of sugar in vaginal secretions. This extra sugar becomes food for the yeast. Therefore diabetic women are more prone to yeast overgrowth.

Women are most prone to yeast overgrowth when the immune system weak. When the immune system is functioning well it keeps the yeast from growing out of control. Many factors can lead to a weakening of the immune system, however, drugs such as cortisone*, cortico-steroids*, and cancer chemotherapy* interfere with the bodies immune system. Also, being run down, not getting enough sleep, and stress play a big role in weakening the immune system and making you more prone to yeast overgrowth.

Using bubble baths, soap on the vagina, perfumed soap and other irritants, because they are alkaline, may cause the vagina to become less acidic which helps yeast to grow. They may also dry the vulva, causing irritation and inflammation.

Yeast overgrowth happens more often just before, during and directly after menstruation. The vagina is less acidic during menstruation. Menstrual blood is slightly alkaline and it changes vaginal acidity. Either right before or right after menstruation, the vagina may be drier than at other times because the cervical mucus has formed a thick plug at the opening of the cervix. Therefore the mucus is not bathing and lubricating the walls of the vagina and dead cells from the walls are not being washed out. They stay and provide sugars to feed the yeast.

There is some debate as to whether yeast can also be passed on through sexual contact. Because many organisms are known to be passed on sexually, it may be worth taking precautions, during the yeast overgrowth, by avoiding genital contact and using a condom during intercourse. You may want to avoid oral genital sex during a yeast overgrowth because yeast can thrive in the mouth and throat, causing a painful condition called thrush.

How do I treat Yeast Overgrowth?

What health practitioners have not been telling women is how to avoid yeast overgrowth in the first place. We are taught to expect to have yeast and that a prescription drug is the only treatment. Nothing could be further from the truth. Women can learn to listen to their bodies and to detect changes when they first occur. This way it is possible to stop yeast overgrowth from getting out of control (refer to Vaginal Health Fact Sheet). If you sense the beginning of vaginal irritation it is wise to first see a health practitioner for a test to determine

the problem so that you know how best to treat it.

Treating ourselves with a healthful diet, plenty of rest and exercise keeps our immune systems healthy and working well. A healthy immune system is the best treatment against bacteria overgrowth.

Chronic Yeast Overgrowth

Many women suffer from chronic yeast overgrowth in the digestive tract. For these women recurring vaginitis is just one of a host of symptoms. Other symptoms range from; premenstrual tension, abdominal pain, menstrual problems, loss of sexual feeling, recurrent digestive problems, fatigue, depression, poor memory, nervousness, hives or chronic skin rashes, headaches, muscle and joint pain, and incoordination. For further information on chronic candida albicans overgrowth see the Vancouver Women's Health Collective's Candida book.

Glossary

Glucose - An important carbohydrate found in food which is converted into natural sugar in our digestive system.

Refined carbohydrate - are sugars and starches in the food we eat.

Tetracyline, Ampicillin and Flagyl - are antibiotic medication used by doctors to treat bacterial vaginal infections.

Trichomonas and Hemophilus - are bacterial organisms which cause vaginitis and are medically treated with antibiotics.

Cortisone and Cortico-steroids - are some drugs which are hard on the body's immune system making it harder for use to ward off harmful bacteria.

Trichomonas Vaginitis

What is Trichomonas?

Trichomonas Vaginitis, or "Trich" as it is commonly called, is caused by a one celled animal (protozoa) called Trichomonas Vaginalis. These Trichomonads live in small numbers in the vaginas of some women without causing any problem. An infection happens when the Trichomonads grow in large enough numbers to cause irritation. Other Trichomonads live in the mouth and intestines without causing disease.

Trich is most often transmitted by sexual contact. The Trichomonads can survive under the foreskin of a man's penis or in his urethra* or prostate*, usually without causing any symptoms. Then they are passed during intercourse. The male lover(s) of a woman who has Trich is often treated to make sure she does not become re-infected. Trich can also be passed during sexual contact between two women. This may happen if infected vaginal secretions from one woman contact her partner's vulva*. Signs of the infection show up between 4 and 28 days after contact.

Non-sexual transmission is possible. Trichomonads survive best in warm, moist places, so Trich can be passed in whirlpools or from moist objects such as towels or washcloths.

How do I know if I have Trich?

The most common symptom for women is more than usual discharge. It can be white, yellowish or greenish and is often frothy. It is usually foul smelling. Sometimes the discharge causes irritation of the vulva which can become sore and itchy. When urinating the urine can cause a burning sensation upon contact with the vulva*. The urethra* may also become infected making urination uncomfortable.

The best way to know for sure if you have Trich is to have a vaginal swab done. This means that a sample of your vaginal discharge is taken and tested. Usually the sample will be sent to a lab to be examined. The trichomonads can be seen moving in the fluids under a microscope and this can confirm the infection.

Sometimes Trichomonads can confuse the results of a pap test (test for cervical cancer) and make the pap difficult to read. The trichomonad infection should be treated followed by a retest 3 to 6 months later to make sure the treatment worked and the infection is over. The pap test should then be repeated.

Conventional Treatment

Unfortunately, the fastest relief from the Trich infection is this dangerous drug called Flagyl (the antibiotic metronidazole) which has many side effects. Recently it has been discovered that this conventional medical treatment is a dangerous treatment. Many of the long term side effects of this treatment are unknown. Considering the possible

health risks, it would be wise to become familiar with other methods of treatment. Women who should never take Flagyl are those women with a history of blood disease who are undergoing anti-coagulant therapy, have other infections in your body, those with diseases of the central nervous system, those who have peptic ulcers. Pregnant women should not take Flagyl because its effect on the fetus is not known. Flagyl crosses the placental barrier between the mother and fetus. This means that it enters the circulation of the fetus very quickly. Flagyl is also passed in breast milk and so should not be used during breast-feeding.

Flagyl is a strong and dangerous drug. Studies show that it can affect the whole body. Tests and research show that Flagyl has caused gene mutations in bacteria, birth defects in animals, and cancer in rats and mice. The bottom line is that traditional medicine does not yet know the full extent of the damage that Flagyl may cause. We do know that Flagyl kills important white blood cells that help fight infection. Because of this a white blood cell count should be done before and after taking Flagyl. A person should wait at least 6 weeks for a second treatment.

Avoid Flagyl at all costs, if at all possible. Try other natural treatments to see if they work for you first.

Herbal Treatment

Natural remedies work for many women. They may not work for all women. Try them out to see which works for you. Keep in mind too that a healthy diet and life style may help you recover faster as well as even prevent

some infections from happening in the first place. You may have to make some changes in your diet, such as eating less refined sugar and avoiding caffeine as well as paying attention to levels of stress in your life. During treatment you may consider giving your vagina a rest by avoiding vaginal sex. You can learn more about how lifestyle and diet play a part in vaginal infections by reading the article entitled "Understanding Vaginal Health".

How do I prevent Trichomonas?

Regular male sexual partners should be treated to prevent reinfection of the woman. Or a couple can use condoms for 6 weeks, as most male infections go away without treatment. Uncircumcised men could wash under the foreskin with a betadine solution (1/2 Betadine 1/2 water). Vaginal penetration by the penis (unless the man is wearing a condom) or close contact with a women's vaginal secretions should be avoided during the treatment. Avoiding a women's vaginal secretions provides some protection from passing the infection between women. Infected women should also stay out of wirl pools and heated public baths.

***Glossary

Prostate - A gland which surrounds the neck of the bladder and the urethra in the male.

Urethra - A canal for the discharge of urine extending from the bladder to the outside.

Vulva - The outer fleshy area of the vagina, including the lips.

NATURAL REMEDIES FOR VAGINAL HEALTH

Many women have experienced the annoying and sometimes painful symptoms of vaginitis. The term vaginitis covers a broad range of vaginal irritations. For more specifics, please see the handouts on vaginal health put out by The Vancouver Women's Health Information Centre.

Some doctors treat the irritations as a woman's fate or repeatedly prescribe antibiotics which can aggravate other problems. A woman may be labeled promiscuous or viewed to be wasting the doctor's time with trivial complaints. Ideally every woman would have a health practitioner who listened to her concerns, provided accurate information and supported varying health treatments. Most women don't, so this article considers various natural remedies for vaginal discharges, overgrowths and infections.

The treatments are easy to use, and less costly than most prescribed medications. These treatments also give women some control over their own health choices. Women often know they have a problem before it is visible enough to be deemed treatable by a doctor. Home remedies can often be used without unwanted side effects, and then if the problem persists, you can seek help from your health practitioner. These treatments do not work for every woman and you may have to experiment to find the most effective treatments for yourself.

The vagina is self cleaning and has normal secretions which help protect your health. These secretions vary throughout the menstrual cycle, but do not burn, itch or have an unpleasant odor. Routine douching is not necessary, for vaginal cleanliness, but can be helpful if you experience symptoms of vaginal irritation. The risk of getting vaginitis arises when the vagina's acidity decreases or the bacteria which fight harmful organisms are damaged.

Society perpetuates the myth that women's bodies are dirty. In fact, menstruation and natural vaginal secretions do not have to be deodorized or denied as part of women's bodily functions. Deodorant tampons and feminine hygiene sprays can aggravate vaginal irritation and may mask a problem beneath layers of chemicals and perfumes. Having a vaginal discharge or irritation does not mean you are dirty, and actually, some discharge can be normal and healthy. These are common concerns of many women. You can learn how to determine the difference between discharges and alleviate the symptoms that are from irritation and infection. You can also learn how to prevent them from recurring.

If you suspect you have an infection of any type it is helpful to be tested and have a vaginal culture done. This ensures that you know what kind of infection(s) you have. You can determine how you

want to proceed with treatment and what natural remedies may be most beneficial.

The following three treatments are useful for slight itchiness or irritation.

- ★ **Garlic Suppositories:** Garlic contains sulphur and acts as a natural antibiotic. Peel a clove of garlic being careful not to nick the edge since the juice may cause a burning sensation. Place the clove in a piece of gauze about one foot long and 3/4 inch wide. Fold the gauze in half and twist it below the clove to make a tampon with a gauze tail. Then dip the garlic end in vegetable oil to make it easier to insert. Insert into vagina. Change it with a fresh clove at least every 12 hours.
- ★ **Betadine Douche & Vagisec Suppositories:** Betadine is an antibacterial agent available at drugstores. Douche every morning with 1 tsp. Betadine in a pint of warm water. Insert one Vagisec suppository either before bed and or after intercourse. Continue this treatment through one complete menstrual cycle. Do not use this douche if you are allergic to iodine. Also Betadine stains a bright brown.
- ★ **Vinegar Douche:** Mix 2 tbs. white vinegar with 1 quart water. Do not use apple cider or wine vinegar as they can worsen the infection. Both contain sugar and are produced by fermentation involving yeast. The vinegar solution can be used as a douche or in a sitz bath. A menstrual sponge can be soaked in the solution. The juice of half a lemon or 1 tbs. of

vitamin C powder can be used instead of vinegar.

For yeast infections you can also try the following remedies:

- ★ **Yogurt or Acidophilus tablets:** You want your vagina to favor the growth of friendly bacteria called lactobacillus bacteria. These friendly bacteria create an acidic environment in the vagina by turning sugars into lactic acid. Yeasts hate acidic environments because they can't grow there. Buy the tablets without sugar such as Swiss Herbal. At bedtime insert one tablet high in the vagina and one near the vaginal entrance. For mild yeast infections don't use too much lactobacillus. A lactobacillus overgrowth could result causing an itchy discharge. The yeast infection may have cleared up, but now you have another itch and treatment will have to start from scratch. To control the growth of bacteria alternate lactobacillus tablets with vinegar douches for several days.
- ★ **Yogurt or Cottage Cheese:** Yogurt is a soothing douche or can be spooned into the vagina. A poultice of natural cottage cheese can be spread on a menstrual pad to help alleviate itching.
- ★ **White oak or bayberry tea:** Add 1 tsp. bayberry bark and 1 tsp. white oak bark to a pint of boiling water. Let solution steep until lukewarm. Strain and douche with this once or twice daily or take a sitz bath with this tea.

- ★ **Juniper:** Soak a handful of juniper berries in water overnight. Add the berries to 1 quart of boiling water and let simmer for 1/2 hour. Let cool and then strain and use liquid as a douche. This seems helpful for diabetic women who have a hard time getting rid of yeast infections, as the yeast thrives on the excess sugar in their systems.
- ★ **Boric Acid:** Put the boric acid powder into a gelatin capsule. Use as an overnight suppository for 1-3 days.
- ★ **Nyastatin:** often prescribed by doctors, an anti-fungal cream that kills the yeast in the vagina. It is expensive and messier than most home remedies. If yeast can be treated in the early stages the expense of medications can be avoided.

For trichomonas the following remedies may be helpful

- ★ **Goldenseal/Myrrh Douche:** To 1 pint boiling water add 1 tbs. myrrh, 1tbsp goldenseal and 1 tsp. bayberry bark. Let steep for twenty minutes. Strain mixture and douche when cool. Use twice daily for one or two weeks.
- ★ **Chickweed Douche:** Boil 1 quart of water. Remove from heat and add 3 tbs. chickweed. Cover and let sit for five to ten minutes. Strain and douche daily for one week.
- ★ **Garlic suppositories:** Insert a new clove every 12 hours for three to five days. See notes on insertion on previous page.

- ★ **Ointments:** Goldenseal and comfrey are both available as ointments. Thuja, a fungicide that is supposed to kill trichomonas comes in an ointment as well. Smear ointments on a tampon and insert vaginally or spread the ointment with your fingers inside the vagina and around the lips of the vulva.

For gardnerella try the following remedies:

- ★ **Garlic suppositories and vinegar douches:** Insert garlic in the morning. Discard that evening and replace with another clove. Next morning remove garlic and use a vinegar douche to balance the pH of the vagina. Continue to use the garlic suppositories overnight and a vinegar douche in the morning for seven to ten days.
- ★ **Comfrey:** Mix equal parts of comfrey leaves, goldenseal powder, chamomile and sage. Steep 1 level tsp. of the mixture in 1 quart of boiling water for twenty minutes. Cool, strain and use as a douche solution once or twice a day for three to five days.

There are many other natural treatments for vaginal infections. For further information see The Encyclopedia of Natural Medicine.

Menopause and Hormone Replacement Therapy

With the cultural stigma surrounding women's aging, it is no wonder that the North American medical community sought a "cure" to the problem of aging. Its answer has been the "Youth Pill", or more accurately Estrogen Replacement Therapy (ERT).

When we look at our North American cultural beliefs it is not difficult to understand why women spend 48 million dollars annually on eye make up alone. And why clinical depression is a common experience for aging women in our culture. And most importantly why millions of women would rather risk cancer than give up replacement estrogen.

There are many facts and myths about menopause. As far as we know there are only two symptoms of menopause. These symptom are caused by shifts in the levels of hormones. These hormones are called estrogen and progesteron. The most common symptoms of menopause are hot flashes and a decrease in moisture and elasticity in the vagina.

Hot flashes are common and not well understood. We still do not know what causes them.

Decreases in moisture in the vagina is medically referred to as "vaginal atrophy". The use of the medical term "Atrophy" suggests that vaginal dryness leads to the shrivelling up and wasting away of the

vagina. The word is misleading and therefore dangerous. The fact that this term is used at all says a great deal about how the medical system views aging women. Surely, a woman doesn't want to identify with something that is thought to be shrivelling!

Other symptoms which are thought to be tied to menopause include dizziness, headaches, joint pains, the inability to sleep, irritability, feelings of anxiety, feelings of depression. In most cases these symptoms have not been shown to be related to the drop in estrogen levels. In part it may be that those of us who define ourselves in terms of our fertility and maternal role are much more likely to experience menopause as a traumatizing change.

The History

In 1966, a physician named Robert Wilson published a book called *Feminine Forever*. Despite that fact that there was growing evidence linking supplemental estrogen to uterine cancer, Wilson promised that women no longer had to suffer "the horror of this living decay," instead menopause could be averted and aging slowed down with Estrogen Replacement Therapy (ERT).

Excerpts from Wilson's book appeared in *Look* and *Vogue*, and sold 100,000 copies in the first seven months. The fear of aging was further exploited and

manipulated by David Reuben who in one of his bestsellers writes:

"As the Estrogen is shut off, the decline of breasts and female genitalia all contribute to a masculine appearance. Not really a man but no longer a functional woman... A woman's unique femininity is a precious and fragile flower. Unless it is nurtured, it quickly wilts. Ten doses of estrogen at the beginning of the 'change of life' are worth a thousand doses 6 months later."

Women understood what Wilson and Reuben were promising. The demand for the "youth Pill" sky rocketed. Gynecologists happily prescribed it. Since 1975 Premarin, a conjugated estrogen, has been the fifth most popular drug in the United States. Women in their thirties began taking Premarin, along with the Pill, in order to prevent aging. What is rarely mentioned is that many of the estrogen compounds were mixed with antidepressants and tranquillizers so that women on (ERT) were often, without knowing it, taking potentially harmful additives along with their estrogen.

What (ERT) promises and what it delivers are very different. Supplemental estrogen relieved the symptoms of menopause, hot flashes and vaginal dryness (for some women), for as long as a woman takes the estrogen. If she stops the ERT the symptoms return, often with greater severity. As a result, many women look forward to a life committed to ERT.

There is no medical evidence which supports the belief that ERT relieves any of the other symptoms thought to be

related to menopause. There is medical evidence that ERT results in adverse side effects.

On the labels for Evex, a conjugated estrogen, (labelling is generally seen by physicians only, not by patients), the drug company, Syntex, warns physicians that the following reactions might occur. These are: thrombophlebitis, pulmonary embolism, cerebral thrombosis, nausea, vomiting, edema, breakthrough bleeding, breast tenderness and enlargement, allergic rash, return of endometriosis, migraine and headaches, cholestatic jaundice, loss of scalp hair, nervousness, dizziness, fatigue, hyperplasia, mental depression (to mention but a few).

These are labelled the "side effects". Not included in the list of side effects is the increased risk of cancer in women on ERT.

In 1974 the New England Journal of Medicine reported that ERT increases the risk of gall bladder disease 2 1/2 times.

In 1975, research showed that women who used conjugated estrogens for seven years or longer developed endometrial cancer at a rate 14 times higher than women who had not used it.

Women who used conjugated estrogen for one to five years developed cancer at a rate of 5.5 times higher than non-users. What is most frightening is that endometrial cancer is difficult to detect and is not reliably detected by a Pap test.

In 1976, the New England Journal of Medicine reported a link between ERT

and breast cancer (uterine forms of cancer are curable on early detection, breast cancer often is not). The research found that women who used ERT for 15 years, with the usual daily dose prescribed (1.2 or 2.5 mg), have twice as much breast cancer as women who have never used it.

Many of the early studies were published prior to 1976 and were available to professionals in the field. Regardless, in 1974, Reuben published *How to Get More Out of Sex* and advocated estrogen for all women. And in December, 1975, one San Francisco gynecologist told the *New York Times*: "Most women develop some symptoms whether they are aware of them or not. So I prescribe estrogens for virtually all menopausal women for an indefinite period"

The medical establishment along with our cultural beliefs, work against women. Women who know about the increased risk of uterine cancer and who believe in ERT refuse to give up their estrogen, opting instead for hysterectomies.

The medical establishment has done a disservice to women by medicalizing a natural transition in women's lives. Menopause is no more a disease than is the onset of puberty.

Recently much research has been done into Hormone Replacement Therapy (HRT)

In 1992 Dr. Jerilynn Prior, an endocrinologist, is challenging the currently accepted practice of giving estrogen to postmenopausal women. She criticises the medical establishment for

making menopause an estrogen deficiency disease. She says that "calling menopause an estrogen deficiency disease is like calling a headache an aspirin deficiency disease."

Dr. Prior is against widespread use of hormone replacement therapy for women who have no problem symptoms of menopause. She does acknowledge that some individuals require therapy however. For these women she believes a physician patient partnership is the best route with women charting their own symptoms. Counselling on lifestyle such as diet, weight control and exercise are important factors in learning to cope with symptoms of menopause.

To break free from the confining role that our culture has built for us, women must first be defined in ways which are more flexible, which include not just our reproductive powers but many other powers as well. We must struggle to change the distorted value given to the worship of youth. We must take control of our bodies and become our own expert in caring for ourselves.

Thanks to:

Kathryn Morgan., 1979 based on the original article *In Praise of Older Women*.

PAP SMEARS

The Pap smear is a screening test used to detect the presence of abnormal cells on the cervix. Cells are scraped from the cervix, which is the base of the uterus that extends into the vagina. The cells are examined under a microscope to observe any changes that would indicate an abnormal, pre-cancerous or cancerous condition.

How Often To Have A Pap Smear

A woman should start having Pap smears in her late teens or when she becomes sexually active. The medical association recommends annual cervical smears for two years. After two consecutive, satisfactory tests, the Pap smear is suggested every second year, until age 69, as long as the smears remain normal. Women over age 70 show lower incidence of cervical cancers, but may wish to continue having Pap tests done as part of their routine health care.

Pap smears should continue to be done after a hysterectomy if the cervix or part of the cervix is left intact.

Pregnant women should be screened at their first pre-natal visit and again 4-6 weeks post-partum. A pre-natal smear will not harm the fetus.

Part of the rationale for doing Pap smears less frequently is because cervical cancers and pre-cancerous changes are generally slow to develop. Two years is considered a sufficient interval to detect cellular changes. Also, pre-cancerous

changes peak by certain ages and therefore some women are thought to be at less risk.

The two year recommendation for Pap smears has some flaws. First, there are faster growing types of cancers and some women with previously normal smears develop moderate to severe abnormal smears in under two years. Second the government's efforts to save money through reduction of preventative health care services may be more costly in the long run as an annual Pap smear is far less expensive than the cost of cervical cancer treatments.

Talk with your health practitioner about your lifestyle and possible risk factors. This will help to determine how often you should have a Pap smear. Be sure to have one done at least every two years.

It is suggested you have a Pap test every six months if you:

- have taken or are taking hormones for symptoms of menopause
- have taken or are taking birth control pills
- have previously had an abnormal Pap smear
- use an IUD
- are HIV positive

These groups often display an increase in cervical cellular changes. By monitoring the changes more regularly, it may be possible to detect pre-cancerous conditions earlier if they develop.

Preparation For A Pap Smear

- do not have a Pap smear done during your period. Blood cells can cover the cervical cells and make them difficult to see under the microscope.
- do not douche or take a tub bath for 24 hours before the test because there is a chance that the surface cells will be washed away. You can, however, have a shower.
- do not use vaginal medication, lubricant or contraceptive jelly or foam for 24 hours prior to a Pap test.
- treat any vaginal infection prior to having a Pap smear taken. An infection can cause a change in the cells that might give you an abnormal Pap result. A culture of your vaginal secretions can be taken to check for infection.
- if you have herpes or venereal warts, do not have a Pap test done when they are active and you have sores. Herpes virus and the virus that causes venereal warts can change the cervical cells so that your Pap test result could be abnormal

The best time to have a Pap smear taken is at ovulation or mid-cycle. The estrogen level is higher and the cells are flatter and easier to read at that time. This is important for women who are having repeat Pap smears or who are watching changes in their results, but is not crucial for routine pap smears.

How A Pap Is Done

A speculum is inserted into the vagina so that the cervix can be seen at the back of the vagina. The round or slit like opening in the cervix is the os or opening into the uterus. By using a mirror and a flashlight you can see the inside of your vagina and cervix, yourself.

Cells are gently scraped from around the os with a small wooden spatula and spread on a glass slide. There is frequently mild discomfort with this procedure, but it is seldom painful. Pain, if it occurred, could be due to inflammation from an infection or recent injury.

In B.C., all Pap smears go to the Central Cytology Lab of the Cancer Control Agency of B.C. where they are examined microscopically by technicians. The results are computerized and kept on record there.

What Pap Results Mean

The lab returns the results to the doctor or clinic that submitted them with the following information:

- a descriptive diagnosis of any samples showing benign abnormalities, pre cancerous lesions or cancers
- a possible recommendation for further investigation
- other relevant information like presence of infection

To understand the results, it is important to have the written information as well as the classification. Here is what the results mean:

Negative or Normal:
no atypical cells are seen.

Atypical:
these cells are considered abnormal and are classed into two categories:

i: Benign Atypia
these cells are slightly abnormal, possibly as a result of irritation, inflammation, infection or hormonal changes of the cervix.

ii: Pre-Malignant Atypia
cell changes are associated with dysplasia on the surface of the cervix. The cellular abnormalities, (dysplasia) are pre-cancerous and may be mild, moderate or severe. This condition is also known as CIN - Cervical Intraepithelial Neoplasia.

Often when a smear is labeled atypical no immediate treatment course is prescribed as the majority of abnormalities return to normal without treatment. Factors that may contribute to an abnormal smear include stress, diet, infection, and lab error. Atypical smears may be repeated three to six months later to check for any further changes in the cells. If the problem persists a colposcopic examination is recommended.

The exam involves the careful examination of the cervix and vagina with a magnifying instrument called a colposcope. A speculum is inserted into the vagina and centered on the cervix and then the colposcope is focused on the

area. The cervix is swabbed with acetic acid to wash away any mucus and make abnormal areas more visible. Inflamed areas show up white and the texture of these areas and variation between the white and normal areas are compared.

Suspicious Cells:
this term is applied to a smear that contains cells suspicious for pre-invasive cancer. A colposcopy exam is recommended.

Malignant or Positive Cells:
applies to a smear with cells that have a malignant appearance. A colposcopy or biopsy of the cervix will be done.

A biopsy is the removal of a small piece of tissue, about the size of a match head, from a suspected area or several areas. The tissue is snipped or punched from the cervix and then examined under a microscope. The biopsy contains several layers of cells and the pattern and depth of any abnormal changes beneath the surface can be observed.

What To Do If You Have An Abnormal Pap Result:

Check to see if a vaginal culture was taken at the same time as the Pap smear. If a culture is taken and you have an infection, treat the infection and then repeat the Pap smear after the infection has cleared. It is advisable to wait at least three months before having a repeat Pap. Cervical cells may take 1-3 months to regenerate and if you repeat a Pap sooner, the same cells that were changed by the infection will be taken again in the Pap.

Discuss the report with your health practitioner and the options for treatment. Take time to evaluate what course of treatment is right for you. Often women feel pressured to make a decision before they have sufficient information for themselves. You may wish to have the Pap smear repeated in three months to see what changes, if any have occurred.

If you are interested in further reading, see:

- **A Feminist Approach To Pap Tests** by Robin Barnett and Rebecca Fox, The Vancouver Women's Health Collective, Vancouver, 1986.
- **How To Stay Out of The Gynecologist's Office** by the Federation of Feminist Women's Health Centres, Peace Press Inc., 3828 Willat Avenue, Culver City, CA. 90230, 1981
- **A New View Of A Woman's Body** by the Federation of Feminist Women's Health Centres, Simon and Schuster, New York, 1981
- **Our Bodies, Ourselves** by the Boston Women's Health Book Collective, Simon and Schuster New York, 1984, 1992

Other written information is available in the files at The Vancouver Women's Health Information Centre. The Centre is located at #219, 1675 W. 8th Avenue, Vancouver B.C.