Genital warts are caused by the Human Papillomavirus or HPV. Most people who become infected with genital HPV will not have any symptoms (subclinical infection). Genital warts are one manifestation of genital HPV infection. Less frequently, HPV causes cervical, anal, oropharyngeal, or penile precancerous changes or cancer.

Genital HPV is the most common sexually transmitted infection in the United States. About 6.2 million cases are diagnosed in the United States each year. Up to 80% of men and women will become infected at some time in their life.

500,000 to one million cases of external genital warts are diagnosed in women each year. EGQ affects about 1% of all sexually active women ages 18-45. The estimated prevalence of any type of HPV infection in men is 45%.

What is HPV?
HPV, like all viruses, is a submicroscopic infectious agent that is unable to reproduce outside a host cell. The virus reprograms the cell, using the cell’s protein, RNA, and DNA to make many copies of the infecting virus. There are more than 120 known types of HPV. Some types cause warts on the hands or feet. Other types cause anogenital warts (condylomata acuminate). The types of HPV which cause external genital warts are different from those which cause oral, anal, and genital precancerous changes and cancer. Genital warts are caused by “low-risk” types, primarily 6 and 11, less often by 40, 42, 43, 44, 54, 61, 72, 73, and 81. These low risk types may also cause benign cervical changes but rarely, if ever, cancer.

There are also “high-risk” types of HPV that infect the cervix (lower part of the uterus), anus, oral cavity, pharynx, or penis where they can cause potentially precancerous cell changes or cancer. (Refer to McKinley Health Center’s Human Papillomavirus handout). Most cervical, oropharyngeal, anal and penile HPV-mediated cancers are caused by types 16 and 18. (Other high-risk types are 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, and 82). However, HPV 16 is also commonly found in women who have no cancer. A person can be infected simultaneously with multiple HPV types.

How do you get HPV?
HPV infection is usually spread by direct skin-to-skin contact during vaginal, oral, or anal sex with an infected individual. Genital HPV infection is extremely rare in persons who have not had sex. After exposure, manifestations may take weeks, months or even years to appear; or they may never appear at all. For this reason, it is usually impossible to determine when, or from whom, someone gets the virus. Most men and women are unaware that they have the virus – they spread it unknowingly to their sexual partners. Men and women can develop warts from a partner who does not have any visible signs of the virus. Male or female condoms do not provide complete protection from the virus. However, consistent (100%) use of condoms by a male partner will reduce the risk of a female acquiring HPV by about 705. The greater the number of lifetime partners; the higher the risk of exposure to the virus. If you have oral sex, consider dental dams/condoms to decrease transmission of the virus.

How would you know if you had genital warts?
Genital warts are skin colored or whitish rough surfaced bumps or growths. Warts appear on the vulva, in or around the vagina or anus, on the cervix, and on the penis, scrotum, groin, or thigh. The warts may be raised or flat, single or multiple, small or large. Some may cluster together to form a cauliflower-like shape. Sometimes it can be hard to tell the difference between warts and normal bumps on the genital areas. Often warts are not noticed because they are small and/or painless. Other warts, depending on the location and size, may itch, feel irritated, or bleed. Sometimes warts will be detected during a physical exam.

Can genital warts and HPV go away?
Genital warts can disappear but the virus may remain present for a longer period. Warts may or may not return after the first episode. A person’s immune system fights the virus and eventually, most HPV infections resolve spontaneously in 1-2 years.

If you have genital warts and they go away, can you get them again?
Most couples who have sex share HPV types until their bodies’ immune systems get rid of them. Partners who have sex only with each other do not pass the virus back and forth.
After the spontaneous resolution (in 1-2 years), the body’s immune system will remember the virus type and keep you from getting that particular type of HPV again. Because there are many types of HPV, developing immunity to one HPV type does not offer protection from other types. If exposed to another type of HPV, genital warts can reappear.

**How can genital warts be treated?**
Currently, there is no treatment to cure HPV. However, there are many treatment options for genital warts. The guidelines of the U.S. Centers for Disease Control include the following information:

“The goal of treatment is to remove symptomatic warts. Treatment can induce wart-free periods in most people. No evidence indicates that currently available treatments eradicate or affect the natural history of HPV. Wart removal may or may not decrease infectivity. Untreated warts may resolve on their own, remain unchanged, or increase in size and number. No evidence indicates that the treatment of visible warts affects the development of cervical cancer.” The treatments for warts are either patient applied or provider administered.

**Patient applied:**
- **Podofilox solution (condylox)** is a topical liquid that causes wart destruction. It is applied twice a day, three times each week, for up to four weeks.
- **Imiquimod cream (Aldara)** is a topical immune enhancer. It is different from all other treatments. Other treatments work by destroying the wart tissue whereas Aldara actually boosts the immune system to fight the virus. It is applied three times a week for up to four months.
- **Sinecatechins**, a botanical treatment derived from green tea, is an ointment applied three times a day for 16 weeks.

**Provider administered:**
- **Cryotherapy** is freezing the wart with liquid nitrogen. This treatment usually requires more than one office visit.
- **Trichoroacetic acid (TCA)** burns the wart tissue. This usually requires more than one office visit.
- **Podophyllin** also burns the wart tissue. This usually requires more than one office visit.
- **Laser** uses intense light to destroy the wart. It is used for larger or more extensive warts, especially those that have not responded well to other treatments.
- **Surgical removal** of the wart can be by excision or electrosurgery. This has the advantage of removing warts in one office visit.
- **Interferon** is an immune protein with antiviral effects that is injected into the wart. It is rarely used any more due to its toxic side effects and high cost.

**Points to remember:**
- Ask your provider about the recommended treatment, including benefits, side effects, and cost.
- Be sure to understand the follow-up and potential side effects.
- Changing or combining treatment methods may be recommended.
- Inform your provider if you are or may be pregnant. Some treatments should not be used in pregnancy.
- **Do not use over-the-counter treatment wart treatments for genital warts.** They are not intended for use in the genital area.

**What should you do after you have been diagnosed and treated for genital warts?**
- Sex partners need an exam only if any unusual bumps in the genital area are present. Also, routine annual exams for women partners are recommended.
- If you have genital contact (vaginal, oral, or anal), consider using condoms or dental dams.
- Women should have regular Pap smears every six months after being diagnosed with genital warts.
- Keep your immune system strong. Maintain a high level of wellness. Eat nutritious food, and get adequate exercise and rest. Do not smoke. Avoid drugs and limit alcohol intake.

**What about pregnancy and genital warts?**
Genital warts or subclinical HPV do not affect a woman’s ability to get pregnant. Most pregnant women who had genital warts in the past, but not currently, experience no complications or problems during pregnancy or birth. Most children are born healthy to women with a history of genital warts.

Because of hormone changes in the body during pregnancy, warts can grow in size and number, bleed, or, in extremely rare cases, make delivery harder. Very rarely, babies exposed to the wart types of HPV during birth develop growths in the throat. Despite this risk, a woman with genital warts does not need to have a cesarean section delivery unless warts are blocking the birth canal.
The risk of a cesarean section is greater than the very rare risk to the baby of getting warts. It is important that a pregnant woman notify her doctor or clinic if she or her partner(s) has had genital warts. This way clinicians can determine if they need to treat the warts or not during the pregnancy.

Is it normal to feel upset about genital warts?
Yes, it is normal. You may feel very upset. You may feel ashamed, fearful, confused, less attractive or less interested in sex. You also may feel depressed, have a fear of rejection by your partner or have concern about spreading the infection to others. You may feel angry at your sex partner(s), even though it is usually not possible to know exactly when or from whom the virus was spread. You may be afraid that the genital warts could lead to cancer or that you will never be able to find a sexual partner again. It is normal to have all, some or none of these feelings. It may take some time, but it is important to know that it is still possible to have a normal, healthy life; even with genital warts. A sexuality educator is available at McKinley Health Center to counsel students about HPV. To make an appointment call 333-2714.

How can you talk to your partner about genital warts?
Before you approach you partner, deal with your own emotions. A positive attitude will help you cope with genital warts. Learn as much as you can about genital HPV so you will be prepared to answer their questions.

Points to remember:
- Try to emphasize the positive fact that you are being honest, even though it is hard. Let your partner know you are telling the truth because you care.
- Be prepared for the possibility of rejection at first.
- Remember that your partner will feel emotional and confused, as you did when you were first diagnosed. Expect a lot of questions.
- Explain that although HPV has no cure, there are many treatments available to get rid of genital warts. Also be sure to explain that the virus goes away completely in most people in 1-2 years. Discuss the fact that safer sex reduces the risk of passing the infection. Also, let your partner know that not everyone who is exposed to genital warts gets infected.

References

If you are a registered University of Illinois student and you have questions or concerns, or need to make an appointment, please call: Dial-A-Nurse at 333-2700

If you are concerned about any difference in your treatment plan and the information in this handout, you are advised to contact your health care provider.

Visit the McKinley Health Center Web site at: http://www.mckinley.uiuc.edu

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