



TEXAS UROLOGY

CONDYLOMA

If you're like a lot of people, you may not have even heard of the human papillomavirus (HPV, or condyloma) until it affected you. You may not have known whether to panic or brush it off; you may have wondered how a sexually transmitted disease could just sneak up on you this way. And most of all, you probably had questions. "How serious is it? Where did I get it? And more importantly, when can I get the prescription to make it go away?"

Some of your questions probably even the best doctor couldn't answer – for the simple reason that not all answers are yet known. You may feel even more frustrated and confused when you tried to explain this lack of definite answers to your partner. And worst of all, you may have found out that there is no pill, no prescription to make HPV simply disappear.

There are approximately 70 known types of the human papillomavirus – the virus that causes warts. Some target the hands and feet; others the face; and others still, the genital tract. HPV infections in the genital tract sometimes cause warts which are immediately visible to the naked eye. On the other hand, HPV also can cause infections which cannot readily be seen; these are often called "subclinical infections". Some can be detected with a magnifying lens and strong light; others can be detected only with laboratory tests.

It may seem as though HPV is a totally new virus, suddenly bursting on the scene in epidemic proportions. In fact, HPV is an extremely common virus that dates back thousands of years. Several factors, however, have made HPV much more noticeable in recent years. First, there has been a rapid improvement in the tools used to detect the virus. In other words, what seems like an exploding epidemic may actually be, at least partly, the result of greater detection by the medical community. As tests become increasingly sophisticated, more and more adults are found to have some form of genital HPV.

At the same time that record numbers of people are learning they have been exposed to HPV, they're also being hit with publicity surrounding the recently discovered link between HPV and cervical cancer. In fact, depending upon what you read, it may seem that a wart will give you cancer – or that any wart you now have is just waiting to turn into cancer.

In truth, the connection is not nearly so clear, or inevitable. Researchers agree that while some types of genital HPV do play a role in the development of cervical cancer, the virus alone does not cause this condition. What's more, the HPV types that cause warts are the least likely to have any role in genital cancers such as cervical cancer. Researchers also agree that regular Pap smears combined with appropriate follow-up treatment can virtually eliminate an individual woman's risk.

But those struggling with HPV may be understandably troubled by the notion of an unseen virus hiding in the skin – on which, depending upon what magazine you read, may or may not increase the risk of cancer. Add the fact that this virus is primarily transmitted by sexual contact, and it's no mystery why the emotional pitch of the problem increases.

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HOW HPV IS SPREAD

How is genital HPV spread? As is the case with warts on other parts of the body, direct skin-to-skin contact spreads the infection most easily – the virus is not transmitted via blood or body fluid. Genital forms of the virus target the moist, usually pink or red tissue known as mucus membranes and also the areas surrounding the genitals. Therefore, the most common means of transmission for genital HPV is direct contact between infected skin on the penis, scrotum, vagina, vulva, or anus and uninfected skin in the same areas of the partner's body.

This would seem sufficiently straightforward that no one could ever unwittingly spread the infection, but several factors work together to cloud the issue of transmission. First, some of those areas, such as the inside of the vagina, are not easily inspected for the presence of warts. Next, genital skin is covered with its share of bumps anyway, so knowing for sure which are warts and which are not can be difficult. Even when warts are present, genital HPV rarely causes pain. And finally, even subclinical infections, those that can't be seen with the naked eye, can be contagious. Which means you – or someone else – could quite unknowingly pass the virus along.

Sexual contact, while by far the most common form of transmission among adults, is not the only way that one can be exposed to the virus.

It is possible that HPV is transmitted by "fomites" – that is, objects that carry infectious material from one person to another. Some experts believe that in rare cases HPV may be transmitted through shared bath towels; for example, they are rubbed into the genital area. This is still an area of controversy, however. In the end, science simply doesn't have the tools to pin down explanations for these rare instances of alleged nonsexual transmission.

As if determining where you got the virus weren't confusing enough, there's also the long latency period that can make dating your exposure almost impossible.

Often, warts will appear three to six months after exposure. Yet latency periods of many months, or even years, have been reported before the emergence of warts or cervical abnormalities. Such inconsistencies can be difficult to understand or accept – especially for partners in long-term relationships who feel that some recent infidelity must be to blame. But convincing evidence for such extended latency periods is continually growing.

Unfortunately, researchers are unable to reliably detect the virus in its latent stage. Thus it is impossible to know whether in some cases the immune system completely clears the virus from the body, or whether the virus remains at undetectable levels, capable of re-emerging if the immune system weakens.

DIAGNOSIS

Diagnosing HPV is sometimes a very straightforward process. If you have one of the types that cause visible genital warts, you or your health care provider may have seen the flesh-colored bumps. They may be raised or flat, single or multiple, small or large, or even cauliflower-like. Most often, they are painless and cause no other symptoms; however, they can occasionally cause itching, irritation and bleeding.

In looking for visible warts, your health care provider will examine the areas of genital skin which rub against your partner's skin during sex. For women, that means the vulva, vagina, anus, and cervix. For men, it means the penis, scrotum, and anus. In both sexes, it is possible that genital HPV could be spread through oral sex to the mucus membranes of the mouth, or from the mouth to the genital skin. However, the mouth appears to be a far less friendly environment for HPV, and such types of transmission are relatively rare.

Unfortunately, diagnosis isn't always easy. Some warts, for example, are small or located in an area, such as the scrotum or vulva that already has a few lumps and bumps. Therefore, many health care providers will use other methods to get a closer look at the skin.

One of the more widely used diagnostic tools is colposcopy, which uses a magnifying scope that allows the physician to see the skin much more closely. Colposcopy also enables the physician to take samples specifically from suspicious looking areas for biopsy. This is especially useful for examining the cervix and other difficult to reach areas.

The Pap smear's primary function is to pick up evidence of cancerous or pre-cancerous changes of the cervix – not HPV. Finding such changes could be an indication to look for HPV, but the Pap alone is not a definite diagnostic test for the virus. The underlying concern behind this debate is the known link between HPV, especially subclinical infections, and increased risk of cervical cancer in women. High-risk HPV types also have been linked to anal cancer and to penile cancer in men, though there is no widely accepted protocol to screen for these conditions.

HPV AND CERVICAL CANCER

What is the relationship between HPV and cervical cancer? First, HPV is linked to cancer in relatively few cases. Millions of women are known to be infected with HPV, yet very few actually develop cancer. On the other hand, researchers have found HPV in approximately 90% of cervical cancer tissues. A few HPV types, most notably 16 and 18, are most often found: these are called "high-risk" HPV types. Significantly, these types are also known to cause subclinical infections – but not visible warts.

Does this mean that high-risk HPV type alone cause cancer in some people? Fortunately, the answer is no. As researchers began to notice the connection between HPV and cervical cancer, they also had to answer the question why, with tens of millions of women infected in this country, only 16,000 actually develop cancer in a given year. Ultimately, it became clear that some other factors must also be present to cause the progression to cancer. To use a simple analogy, one might consider the cervix as the soil, the high-risk HPV types as seed, and these "other factors" (sometimes called "cofactors") as a kind of fertilizer.

Many possible cofactors have been suggested. And the relative risks of each have yet to be determined. However, some of the most commonly implicated cofactors include: smoking, use of oral contraceptives, a weakened immune system, poor diet (possibly deficiency of vitamin A or folic acid), presence of other infections, history of many sexual partners (or a partner with such a history), history of STDs, sex at an early age, or possibly having many children.

Because so many of these cofactors go back to behavior – and specifically sexual behavior – there is a natural tendency for people with HPV to blame themselves or dwell on their risk as a punishment for past behavior. Others feel blamed by society, physicians, or partners. But it's important to remember that these risk factors represent only educated guesses. And many of them describe behaviors that are quite common.

TREATMENT FOR GENITAL WARTS

The goal of treating warts, according to the Centers for Disease Control and Prevention (CDC) is to remove visible genital warts and get rid of annoying symptoms. If the warts are eliminated, the patient is considered “cleared”.

Does “cleared” mean “cured”? Actually, even after treatment, these patients probably still carry HPV in the surrounding tissue since, at present, no treatment is capable of directly disabling or destroying the virus itself. Yet this doesn't mean that treatment is useless. If you have warts that are causing pain or other symptoms, the right treatment may eliminate your symptoms. Plus, removing the warts probably does reduce (though not eliminate) the chance of transmission.

Finding the right treatment can take some work. All of the treatment options currently available involve some drawbacks, such as pain, possible scarring, and expense. Additionally, a percentage of those cleared initially will have recurrences necessitating further treatment later on. The following summary should give you an idea of the major differences between the most commonly prescribed treatments. As to effectiveness, the chart at the end offers some relevant data from scientific studies. Keep in mind, however, that these therapies generally have not been evaluated “head-to-head”, and the “clearance rates” and “recurrence rates” cited are only approximations.

CONDYLOX

Podophyllin, an extract of the May apple plant, has been used to treat genital warts for over 50 years. Purified podophyllin, in a more standardized form, has also been used to treat warts. PODOFILOX (or Condylox), as it is called, is a topical solution which offers patients the advantage of being able to treat themselves, though it's not appropriate for difficult to reach places. Its cost is similar to that of podophyllin, but as a patient-applied therapy may prove less expensive given a reduced number of office visits.

TRICHLORACETIC ACID

Caustic acids, such as TCA and BCA (trichloroacetic acid and bichloroacetic acid) have frequently been used to treat warts. These can cause scarring and intense, though short-lived, pain.

LIQUID NITROGEN

Another commonly prescribed treatment for warts is CRYOTHERAPY, in which tissue is literally frozen with super-cold liquid or gas (usually liquid nitrogen). This procedure is used both for external warts and for warts on the cervix or other internal tissue. After treatment, the outer layer of tissue forms a blister and eventually breaks off from the deeper layers, taking most of the affected tissue with it. Cryotherapy may cause some discomfort. In spite of its drawbacks, however, it is a relatively effective measure with little risk of scarring.

CAUTERY

Electrosurgery is another form of HPV therapy. While noted for its high clearance rates, this method does require real expertise; only a physician with a great deal of experience and skill can get optimum results. In experienced hands, the electrified blade, wire, or needle can precisely remove the affected tissue with little or no scarring.

SURGERY

Some physicians prefer traditional surgery methods rather than the electrified blade. Also called scissor excision, traditional surgery removes warts or HPV-related lesions with a knife or scissors in the doctor's office. For the physician who is more comfortable and experienced with this method, the results can be comparable to electrosurgery.

LASER

For extensive infection, laser therapy is sometimes recommended. This is because the high-intensity light, used in conjunction with a microscope, can be adjusted precisely for area and depth, leading to little scarring and good cosmetic results. However, anesthesia, a long recovery period and occasionally an out-patient hospital visit is required, making this method more appropriate for very extensive warts or areas that could not be reached by other, simpler methods. Once again, the expertise of the physician is paramount. If mistakes are made, they can lead to a prolonged and painful healing process.

INTERFERON

One other method is injections of Interferon directly into a wart. This method is expensive; causes uncomfortable side effects such as flu-like symptoms, headache, and fever.

FUTURE

Also on the horizon are so-called "antisense" drugs designed to combat disease by infiltrating the genetic structure of a virus or bacteria and blocking its ability to grow or replicate inside the body. At least one such drug is already being tested in hopes that it will be able to target and disrupt the genetic structure of HPV without interfering with normal cells. Vaccine development is another area of active research, and several different approaches are being tested in animal models, including "therapeutic" vaccines that might help those already infected.

COMING TO TERMS WITH HPV

TALKING WITH YOUR PROVIDER

Your doctor or other health care provider was likely the first person you talked with about HPV- and you may have found the conversation difficult or upsetting. Many people feel that their providers are judgmental or critical, seeming to imply that a sexually transmitted disease is deserved punishment for a "bad" or "immoral" lifestyle.

But even if your provider has none of these shortcomings, the conversation still may be strained and uncomfortable. Providers and patients alike often find sex an awkward subject. Also consider that HPV is still not fully understood and that even a doctor well informed about this virus can't answer every question. It's easy to see why the best intended provider/patient conversations often go awry.

If you're having trouble communicating, then, it may be time to take practical steps. Perhaps you are uncomfortable speaking about sex with a physician. Perhaps you need to let your provider know he is using jargon you don't understand. Perhaps you need to take notes in advance of your appointment because you find it hard to remember your questions in the office – and the answers once you're home. Perhaps you'd rather read materials about HPV recommended by your provider rather than talking in person. A call to the National STD Hotline (1-800-227-8922) is another option if you need a chance to establish some basic facts outside the clinic context.

Of course there are some people out there who won't react well to this news. But you'll probably be surprised by how many people will. And by speaking about this difficult subject early on, you are demonstrating the value you place on your partner's health – and on your own. After all, the person you're talking to just as easily may have something they need to tell you about their medical history. And now that you have one sexually transmitted infection, you know how important it is to protect yourself and your future partner(s). Talking about this issue now establishes that you wish to make honesty and trustworthiness a two-way street in your relationship.

PREVENTION

When it comes to protecting yourself – and your partners – from most STDs, the answer seems simple: condoms. But in the case of HPV, the question of protection is more complicated.

Before you throw out the latex, remember that condoms are still the best protection we have against most forms of sexually transmitted disease, including AIDS. Like HPV, a number of other common STDs may not cause signs or symptoms but can be easily spread during unprotected sex. So condoms make a lot of sense. Condoms also are available now in both latex and a soft plastic material that can be used with all sorts of lubricants, with modes for both men and women. But, if you're looking for reassurance that you'll never get – or give- an HPV infection, unfortunately you won't find it in a pack of condoms.

Rather than being spread by semen, vaginal secretions, or blood, HPV is most often spread when infected skin rubs against uninfected skin. And HPV can affect a much larger area of tissue than is covered by either the male or the female condom; thus condoms do leave the possibility of such skin-to-skin contact. Of course, condoms also provide a physical barrier that protects the most common sites of infection, and by doing so; they do lower the overall risk. How much? No one can say for sure.

Another issue still unresolved by the scientific community is when and for how long an HPV infection remains contagious. In general, researchers believe that warts may offer the greatest possibility for transmission, and that treating warts decreases that possibility. However, most researchers believe that subclinical infections also are contagious. And even those whose lesions have been cleared through treatment may harbor HPV for some time. If you have been successfully treated for genital HPV and have had no warts or cervical abnormalities for a year or more, some experts would consider the risk of HPV transmission extremely low. Unfortunately, no one knows for sure how long the period of infectivity might last, or when it might recur.

Given these ambiguities, what are the reasonable steps for a person with HPV to take? First, with any new partner, condoms are important. Even if they don't entirely protect your partner from HPV - they do protect both of you from other STDs.

For couples in long-term monogamous relationships, the value of condoms is more debatable. Many researchers feel there is no point in trying to protect the presumed uninfected partner since, over time, both have probably been infected, even if only one is showing signs. Others point to the likelihood that condoms offer some protection. But in any case, the decision to use or to forego condoms in this situation should be made as a couple - with both parties' full understanding.

Many people are so devastated by the diagnosis of a sexually transmitted disease that they have difficulty understanding or accepting anything a provider says. Feelings of anger, guilt, and resentment are common. Many want to find the person who gave them this disease and punish them for it. Or they simply want to punish themselves for what they now perceive as past mistakes.

If issues like these are impairing your ability to communicate to your doctor, you may wish to consider taking a close friend or counselor into your confidence. Though you may understandably not wish to share your medical history with the entire world, talking with a few close friends can keep you from thinking of your HPV infection as a shameful secret - and remind you that a virus doesn't discriminate between so-called "good" and "bad" people. Anyone can get HPV. In fact, it's so prevalent that it could just as easily be your friend talking about his or her infection and you listening.

TALKING WITH YOUR PARTNER

Accepting HPV in your life will also help with other crucial relationships; those with current or future partner. You will be in a better position to discuss HPV with a partner if you have dealt with your own feelings of guilt and anger, talked with your provider enough to learn what's currently known about HPV, and taken appropriate steps to care for your own health.

Speaking with current or potential partners gives those close friends the opportunity to understand HPV as you do - and put it in perspective as a common infection that generally poses no major health threat. Though it may be tempting at times, keeping this part of your medical history a secret is at odds with the type of trust and honesty most of us want in our relationships. Forcing yourself to deal with this infection all alone not only places too much responsibility on you, it also denies your partner the opportunity to offer love and support. (For more on how to protect partners, see the section on Prevention.)

But do you have to discuss it? Like all ethical questions, this issue is highly personal. Telling partners about HPV is the safest course. Some experts believe that your ability to transmit HPV decreases with time, but at present no one can tell you if and when the risk becomes zero.

If you have been diagnosed with HPV in the course of an ongoing relationship, either you or your partner may feel guilty or feel responsible for giving the virus to the other. You may feel angry for having been infected. You may even question your partner's fidelity. YET WITH THE LONG INCUBATION PERIOD SEEN WITH HPV AND THE LARGE NUMBER OF SUBCLINICAL INFECTIONS, IT'S IMPORTANT NOT TO RUSH TO ANY CONCLUSIONS. IT'S POSSIBLE THAT ONE OR EVEN BOTH OF YOU WERE EXPOSED MANY YEARS PREVIOUSLY, HAVE CARRIED THE VIRUS IN A LATENT FORM, AND THEREFORE NEVER SHOWED ANY SYMPTOMS.

In fact, regardless of who gave what to whom, by the time one person in a relationship is diagnosed with HPV, the other has probably been exposed, making further discussion of blame largely academic.

If you are considering a new relationship and looking for ways to talk to a new partner, think through what you want to say before initiating a conversation. Choose a time conducive to discussion. Remembering how confused and disturbed you may have been when you first learned of HPV may make it easier to understand your partner's initial reaction. Reassure your partner that HPV is a common virus, that it is most often asymptomatic, and that it is carried by a large percentage of sexually active people. It may help to supply as much information as possible (such as this handout) or suggest a call to the National STD Hotline.

It is possible to transmit an HPV infection through oral sex, though the mouth appears to be a less hospitable environment for HPV than the genital area. As with other STDs, condoms can be used for oral sex, and flat sheets of latex or household plastic food wrap can be used for cunnilingus.

If you find that all this seems to create more questions than it answers, you're not alone. The important thing to remember is that, until more is known about this virus and how to protect people from it, condoms do offer some benefit. Any current or prospective partners need to know about these benefits – and the limitations. Probably your best protection against HPV becoming a problem in your relationship isn't latex, but communication.

SUMMARY OF TREATMENT OPTIONS

Recommended Forms of Treatment	Appropriate Usage	Clearance Rate	Recurrent Rate	Pain
Podofilox	External genital Warts	45-88%	33-60%	Mild
Cryotherapy	External genital Perianal, vaginal Cervical, urethral, Anal, or oral warts	35-88%	21-39%	Mild to Moderate
Electrosurgery	External genital or Perianal warts Oral warts	35-94%	22%	Moderate (local anesthesia)
TCA	External genital Perianal warts Anal warts		36%	Moderate
Surgery	Extensive external Genital or perianal Warts, oral or anal Warts	93%	29%	Moderate (local anesthesia)
Laser Therapy	Extensive external Genital warts	60%	20%	Moderate to severe (local or general Anesthesia)
Interferon	External genital Or perianal warts	80%	20%	Flu-like Symptoms

NOTE: Condensed from American Social Health Association's "Patient Guide: HPV in Perspective".