Disclaimer

The Treatment Resources Program at the Toronto People With AIDS Foundation provides information and resources to empower people living with HIV/AIDS to be proactive around their health by working in partnership with their health providers. We do not recommend or promote any treatment in particular. We strongly urge those interested in any specific treatment to consult a wide range of resources including a qualified medical and/or complementary therapy practitioner who has experience working with HIV+ patients.

For treatment information and resources,
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HPV & Cervical Dysplasia

What is Cervical Dysplasia?
The cervix is an inch-long opening that is located between the top of the vagina and the lower end of the uterus. Cervical Dysplasia is the presence of abnormal cells on the surface of the cervix. Cervical dysplasia is considered a pre-cancerous condition meaning that there is a possibility that it will develop into cancer. In the majority of cases, our immune system is able to resolve cervical dysplasia on its own or the abnormal cells grow at a very slow pace.

What Causes Cervical Dysplasia?
Most cases of Cervical Dysplasia are linked with the Human Papilloma Virus (HPV). There are over 100 strains of HPV with approximately 30 strains that can be transmitted through sexual activity. HPV is commonly spread through skin-to-skin contact during vaginal or anal sex with someone who has the infection. It can infect the genital area including the vulva, vagina, cervix, anus and the penis. There are certain types of HPV which can cause external genital warts on the vulva, penis or around the anus. It is important to remember that not all forms of HPV cause cancer. The majority of cases of cervical cancer are associated with the more aggressive HPV strains 16, 18, 31, 33 and 45.

Am I At Risk?
HIV-positive women are more likely to be infected with HPV than HIV-negative women. This is due to the suppressed immune system which is the result of HIV. HIV-positive women are more likely to have chronic HPV infection, be infected with HPV strains that are more linked to cancer, to be infected with several strains of HPV at once and to have HPV that does not respond well to standard therapies. This risk also appears to increase if CD4 counts drop below 500. Other risk factors include;

- Smoking cigarettes
- Having multiple sexual partners or being sexually active from a young age
- Not practicing safer sex by using condoms
- A history of Sexually Transmitted Infections (STIs)

Signs & Symptoms
Cervical dysplasia is usually difficult to diagnose because there are not many visible signs or symptoms outside of changes to the cells of the cervix. HPV can also cause Genital Warts in both men and women. Genital Warts are much easier to diagnose because there are usually changes on skin and mucous membranes outside of the cervix. Some signs of Genital Warts include;

- Raised, flesh-colored lesions on the genitals, anus, or surrounding skin
- Cauliflower-like growths around the anus or genitals
- Increased dampness or moisture in the area of the growths
- ITching of the penis, scrotum, anal area, or a vulvar itch
- Increased vaginal discharge
- Abnormal vaginal bleeding not associated with a menstrual period after sexual intercourse
Managing HPV with Medical Treatment

The Human Papilloma Virus (HPV) is responsible for most cases of cervical dysplasia. Even if you already have HPV or cervical dysplasia, you will automatically develop cervical cancer. Since HPV is a virus, it can be more difficult to treat than a bacterial or fungal infection. Some medical treatment options are listed below;

1. **Have An Annual Pap Smear**
   - This is a screening test that checks for changes in the cervix. All HIV-positive women should get yearly Pap Smears and women who have symptomatic HIV infection and/or have previously had cervical dysplasia should have a Pap smear every six months.

2. **Cryotherapy**
   - This treatment destroys the abnormal cervical cells or lesions by freezing. This procedure can be done in the doctor’s office. There can be some discomfort, pain, spotting or watery discharge after this procedure.

3. **Laser Therapy**
   - This treatment destroys the abnormal cervical cells or lesions with a beam of light (laser). This is often an outpatient surgery. There can be pain and discomfort as well as spotting or discharge following the treatment.

4. **Loop Electrosurgical Excision Procedure (LOOP)**
   - This procedure uses an electrical current to surgically remove the abnormal cells or lesion.

5. **Cold-knife cone biopsy**
   - This procedure involves removing a cone-shaped piece of tissue from the opening of the cervix. It can be done with a laser or a scalpel either in a hospital or a day-surgery clinic. Patients receiving this treatment usually receive an anesthetic. Many patients experience a certain amount of bleeding, pain or discomfort after this treatment.

6. **Gardasil Vaccine**
   - This is first vaccine that works by preventing specific strains of HPV by targeting strains (6, 11, 16 and 18) if you do not already have HPV. There have been no clinical trials about the efficacy of this vaccine for HIV-positive women or men. There are concerns about this vaccine because some people developed Guillain-Barre Syndrome from the vaccine and there are no conclusive studies about long-term side effects. It is important to practice safer sex using a condom because this vaccine will not protect against other Sexually Transmitted Infections. The Canadian Women’s Health Network has more information about this vaccine at [http://www.cwhn.ca/resources/cwhn/hpv-brief.html](http://www.cwhn.ca/resources/cwhn/hpv-brief.html).
Managing HPV with Nutrition

HIV-positive women are more than ten times likely to develop HPV-related conditions of cervical dysplasia and genital warts than HIV-negative women. Although HPV tends to resolve itself in approximately 80% of cases, this is a less common outcome for HIV-positive women. Nutrition can help in keeping cervical dysplasia and genital warts under control. The following are some useful tips;

1. **Boost Your Immune System**
   Viruses like HPV are more common if you have a lowered or suppressed immune system. You can optimize your immune system by taking anti-oxidant vitamins such as; **Vitamin A** (2 000 IU per day); **Vitamin C** (1 000 to 1 500 mg three times per day) **Vitamin E** (400 IU per day), **Zinc** (15 to 30 mg per day) and **Selenium** (200 mcg per day). B complex (50 to 100 mg per day) is useful in reducing the effects of stress which can weaken your immune system.

2. **Eat More Vegetables**
   There is actually a really good reason to eat your veggies! Eating vegetables high in anti-oxidants help maintain a healthy immune system. Some examples include colourful vegetables such as peppers and squash as well as green vegetables such as kale, bok choy and broccoli. Certain berries such as blueberries and strawberries are also rich in anti-oxidants. In a recent study, women with diets high in vegetables were more than 50% less likely to have long-lasting HPV infections. This also meant they might be less likely to develop cervical cancer, according a report in the journal *Cancer Epidemiology, Biomarkers & Prevention* (Vol. 11, No. 9: 876-884).

3. **Other Dietary Tips**
   There are some simple changes you can make to your diet to improve your immune system. For example, Dr. Jon Kaiser, an HIV specialist in San Francisco recommends the following tips;
   - Eat a healthy breakfast every day
   - Eat lots of onions, garlic and ginger
   - Limit your consumption of dairy products to 10% of your diet;
   - Avoid sugar, caffeine and alcohol;
   - Avoid raw foods such as sushi, runny eggs and seafood because they may contain infectious bacteria and intestinal parasites.
   - Increase whole grains, fresh vegetables, fruits, legumes and essential fatty acids (nuts, seeds and cold-water fish).

4. **Stop Smoking**
   There is a definite connection between smoking and cervical dysplasia. Researchers have actually found cancer causing chemicals (benzyrene) from cigarettes in the cervical mucous of women who smoke. Researchers believe that these chemicals damage the cells of the cervix especially those that help fight against HPV. Furthermore, you have a greater risk of developing squamous cell cervical cancer if you smoke. In other words, if you are an HIV-positive woman who smokes, you are more than doubling the risk that HPV will eventually develop into cervical cancer.

5. **Natural Remedies for Warts (including Genital Warts)**
   
   *Talk to your doctor about natural therapies and herbal supplements to make sure that they won’t interact with your HAART regimen.*

   Garlic, amino acid L-cysteine and coenzyme Q10 have been found to be helpful. There are some herbs that have an affinity for treating warts. Some of these herbs include chelidonium, mullein, thuja, goldenseal, calendula, pau d’arco and wintergreen. Remember that herbs work differently for each person and it is recommended that you consult a trained herbalist or traditional healer when you use herbal medicine.
Managing HPV with Homeopathy

It is important to consult a qualified and trained Homeopathic Physician in the treatment of acute and chronic conditions. Please do not attempt to treat yourself.

Homeopathy is a naturally-based form of medicine which targets the underlying cause of disease by assisting the natural tendency of the body to heal itself. Homeopathy has a very successful record in treating both cervical dysplasia and genital warts. The most effective homeopathic treatment is always based on assessing the unique symptoms of each patient. This means that in most cases, there are no specific remedies for cervical dysplasia or genital warts. The following are some remedies useful in the treatment of cervical dysplasia and/or genital warts.

**Calcarea-Carbonica** - polyps in the vagina, cystic growths, papillomata growths (HPV), soft and spongy growths that bleed easily, burning soreness in the genitals, sensitivity to cold air, weakness, worse from exertion.

**Lycopodium Clavatum** - inflammation of the uterus and ovaries, burning in the vagina before and after sexual intercourse, suppression of menses, craves open air, weakness after exertion.

**Mercurius** - inflammation of the vagina, ulcers and chancre, inflammation of the external genitals, with rawness and excoriated spots; ulceration on the female genitals, itching of the genitals from contact with urine, symptoms are worse at night and from the warmth of the bed.

**Nitric Acid** - burning, itching and bleeding condylomata on the genitalia, growths on the cervix, burning of the vagina, itching aggravated by cold and touch, thirstlessness, pricking pains as if there were a splinter in the affected part.

**Sepia Officinalis** - ulceration and congestion of the cervix, warts on the genitals, pain in the uterus, sensation of bearing down in the pelvic organs, symptoms are better for violent exertion.

**Thuja Occidentalis** - cauliflower growths on the cervix, around the anus, the labia and mucous membranes; moist, bleeding and offensive warts on the female genitals; honey-sweet odour from the genitals, warts itch and bleed from the rubbing of clothing against them, primarily affects the left side.
Wellness Resource Guide

Health Promotion Services at PWA:

Contact Rebecca, Treatment Resources Coordinator for:
- Student Massage Clinic
- Holistic Treatment Counselling
- Community Naturopathic Clinic for People with HIV
- Harm Reduction

Contact Kevin, Programs Coordinator for:
- Volunteer Massage Program
- Reiki
- Therapeutic Touch

Contact Greg, Speakers Bureau Coordinator for:
- The Energy Healing Circle

Contact Llewellyn, Treatment Access Coordinator for:
- Trillium
- Compassion Access to Medications (H-MAP)

Treatment Websites:

CATIE  www.catie.ca
The Body  www.thebody.com
AIDSinfonet (New Mexico AIDS Project)  www.aidsinfonet.org
AIDS Map  www.aidsmap.org
AIDS Treatment News  www.aidsnews.org
HIV/AIDS Medications  www.aidsmeds.com
Multilingual HIV Treatment Information  www.treathivglobally.ca
The Well Project (geared towards women)  www.thewellproject.org
Project Inform  www.projectinform.org

Nutrition:

Jon Kaiser  www.jonkaiser.com
Jon Kaiser  Immune Power: The Comprehensive Healing Program for HIV
Lark Lands  www.larklands.net
CATIE  A Practical Guide to Nutrition for People Living with HIV

Complementary Therapies:

CATIE  Practical Guide to Complementary Therapies
Complementary Therapists List  www.actoronto.org
Homeopathy  http://www.csoh.ca/Homeopathy_Introduction.htm
Traditional Chinese Medicine  www.docmisha.com
Nutrition Services:  www.stmichaelshospital.com/programs/nutrition
Community Naturopathic Clinic  416-324-4187 (to book an appointment)

Community Resources:

Toronto People With AIDS Foundation  www.pwatoronto.org
VOICES of Positive Women  www.vopw.org
Black Coalition for AIDS Prevention  www.black-cap.com
Asian Community AIDS Services  www.acas.org
Alliance for South Asian AIDS Prevention  www.asaap.ca