



### Anogenital Lesions – Human Papilloma Virus (HPV)

<b>DEFINITION</b>	<p>1. External HPV lesions are warty growths which can be found on the penis, vulva, perineum, vagina, cervix, urethra, and perianal areas. 90% of anogenital warts are caused by non-oncogenic HPV types 6 or 11. Oncogenic, high-risk HPV infection (e.g., HPV types 16 and 18) causes the majority of cervical, penile, vulvar, vaginal, anal, and oropharyngeal cancers and precancers, Persistent oncogenic HPV infection is the strongest risk factor for development of HPV-attributable precancers and cancers, however the only HPV-associated cancer for which routine screening is recommended is cervical cancer.</p> <p>Most sexually active persons become infected with HPV at least once in their lifetime.</p>
<b>SUBJECTIVE</b>	<p>May include:</p> <ol style="list-style-type: none"><li>1. HPV lesions on or near the genital area</li><li>2. Pruritic and/or postcoital burning sensation or spotting</li><li>3. Known contact of a HPV infected person</li><li>4. No symptoms</li></ol>
<b>OBJECTIVE</b>	<p>Diagnosis is typically made from clinical presentation.</p> <p>May include:</p> <ol style="list-style-type: none"><li>1. Small to large, dry wart-like growths on or near the genital area, or oral areas.</li><li>2. Single or multiple soft, fleshy, papillary keratinized growths.</li><li>3. Acetopositive lesions on or near the genital area. (Acetic acid application is not a specific test for HPV infections and is not generally recommended).</li><li>4. This is a repeat of what is already listed above.</li></ol>
<b>LABORATORY</b>	<p>May include:</p> <ol style="list-style-type: none"><li>1. Vaginitis/cervicitis screening, as appropriate.</li><li>2. STI testing as indicated</li><li>3. Pap smear with or without HPV testing, as age appropriate.</li><li>4. RPR, as indicated to rule out Syphilis.</li></ol> <p>*HPV typing is not recommended for anogenital wart diagnosis; it is not confirmatory and does not guide treatment.</p>
<b>ASSESSMENT</b>	Anogenital HPV
<b>PLAN</b>	<ol style="list-style-type: none"><li>1. If left untreated, anogenital warts can resolve spontaneously, remain unchanged or increase in size or number. Because warts might spontaneously resolve within 1 year, an acceptable alternative for some persons is to forego treatment and wait for spontaneous resolution.</li><li>2. Recommended <b>patient applied</b> treatment regimens for external HPV:<ol style="list-style-type: none"><li>a. Imiquimod 3.75% or 5% cream. Apply thin layer of cream to lesions 3 times a week at bedtime; rub the cream until it vanishes. Wash hands after application. Leave on for 6-10 hours and then wash the area with mild soap and water. Continue treatment until HPV lesions are resolved for up to 16 weeks. Imiquimod 3.75% is applied the same way as above but is used nightly for &lt; 8 weeks. <b>OR</b></li><li>b. Podofilox 0.5% solution or gel. Apply 2 times/day for 3 days, then no treatment for 4 days. May repeat for 4 cycles. Wash hands after application. Not recommended in pregnancy. <b>OR</b></li><li>c. Sinecatechins 15% ointment. Apply to HPV lesions 3 times/day for up to 16 weeks. Wash hands after application. Not approved for use in pregnancy. May weaken condoms and diaphragms.</li></ol></li><li>3. <b>Recommended Provider applied</b> therapies:</li></ol>



	<ol style="list-style-type: none"> <li>a. Cryotherapy with liquid nitrogen. Apply liquid nitrogen to lesion and base of lesion for a few seconds, allow thawing then repeat freeze x1 or x2. May reapply treatment every 7-14 days. <b>OR</b></li> <li>b. Trichloroacetic acid (TCA 80-90%) solution (only available through compounding pharmacy) or bichloroacetic acid (BCA 80-90%) solution. Apply a small amount to the HPV lesions and allow to dry. Avoid contact with surrounding skin. Reapply every 1-2 weeks. May be used on vaginal/introital HPV lesions as well. <b>OR</b></li> <li>c. Surgical removal by tangential scissor excision, tangential shave excision, curettage, laser, or electro-surgery.</li> </ol> <p>4. Most anogenital warts respond within 3 months of therapy. A new treatment modality should be selected if there is no significant response after complete course of treatment or if there are therapy related side effects.</p>
<b>CLIENT EDUCATION</b>	<ol style="list-style-type: none"> <li>2. Provide client education handout(s). Review manufacturer's instructions. Review symptoms, treatment options, and medication side effects.</li> <li>3. Advise client to avoid intercourse during course of treatment. Latex condoms and diaphragms may be weakened by Imiquimod .</li> <li>4. Instruct on genital self-exam.</li> <li>5. Recommend client RTC prn for treatment, annually, and prn problems.</li> <li>6. Advise client on available HPV vaccinations.</li> <li>7. Explain that treatment does not eradicate the HPV virus and that HPV lesions may reoccur.</li> <li>8. Provide education on safer sex practices.</li> </ol>
<b>CONSULT/ REFER TO PHYSICIAN</b>	<ol style="list-style-type: none"> <li>1. Vaginal wall lesions or visible lesions on the cervix.</li> <li>2. Palpable or suspected rectal wall lesions.</li> <li>3. Lesions non-responsive to treatment.</li> <li>4. Immunocompromised patient.</li> <li>5. Surgical removal for extensive HPV lesions.</li> <li>6. Biopsy to confirm or determine diagnosis of lesion if diagnosis is uncertain.</li> <li>7. Refer or consult if pregnant.</li> </ol>

**References:**

1. Hatcher RA, Nelson A, Trussell J, Cwiak C, Cason P, Policar MS, Edelman A, Aiken ARA, Marrasso J, Kowel D, eds. Contraceptive Technology. 21 edition. New York, NY: Ayer Company Publishers, Inc., 2018. Pp.607-609.
2. <https://www.cdc.gov/std/treatment-guidelines/STI-Guidelines-2021.pdf>
3. STD Facts - Human papillomavirus (HPV) (cdc.gov) 2021