

STD TREATMENT GUIDELINES TABLES: Genital warts Biopsy

<i>Author/Citation</i>	<i>Study Design</i>	<i>Population, Sample Size</i>	<i>Outcome</i>	<i>Summary Points</i>
Maniar KP, et al. Am J Surg Path 2013	Case series	Females: 1 institution, 11 cases of concurrent VIN and condyloma, all cases immunocompromised (HIV or posttransplant)	Details of condyloma and VIN by immunohistochemistry and pathology	<ul style="list-style-type: none"> ➤ Among the 11 cases of concurrent high-grade VIN and condyloma, the lesions were directly adjacent to one another in 5 cases (with 2 of these demonstrating an intimate admixture of lesions), and in 6 cases the lesions were found in separate tissue sections from the same specimen. ➤ The restriction of LRHPV to condyloma and HR HPV to high-grade VIN in adjacent lesions suggests these are independent lesions caused by different HPV types.
Baydor DE, 2013	Case series	Males: 58 consecutive patients with penile condyloma, immunocompetent	Immunohistochemistry and genotyping of condyloma, pathology	<ul style="list-style-type: none"> ➤ 13 lesions had dysplasia, 50% of these lesions had HR HPV present (none of the non-dysplastic lesions had HR HPV present). ➤ There was no clear clinical pattern that differentiated dysplastic from non-dysplastic lesions ➤ P16 was negative in most of the dysplastic lesions.
Blomberg M, JID 2012	Cohort analysis	Danish cohort of 50,000 persons dx with genital warts	Evaluation of SIR for different cancers—link of GW dx to cancer registry, number of cancers compared to that in the general population. Mean f/u in cohort 12-13 years	<ul style="list-style-type: none"> ➤ Diagnosis of GW was strongly related to anal (SIR for men, 21.5; SIR for women, 7.8), vulvar (SIR, 14.8), vaginal (SIR, 5.9), cervical (SIR, 1.5), penile (SIR, 8.2), and head and neck cancer (SIR, 2.8), including subsites of head and neck cancer with confirmed HPV association (SIR for men, 3.5; SIR for women, 4.8). ➤ The highest risk estimate was found for anal cancer in men. On the basis of 29 anal cancers, men with former GW had a SIR of 21.5 (95% CI, 14.4–30.9).

<p>Massad SL, Obstet Gyn 2011</p>	<p>Multicenter cohort study (WIHS)</p>	<p>2,791 HIV-infected and 953 uninfected women followed for up to 13 years</p>	<p>Prevalence and incidence of warts, VIN, and regression of warts</p>	<ul style="list-style-type: none"> ➤ Prevalence of warts was 4.4% (5.3% for HIV-seropositive women and 1.9% for HIV-seronegative women, $P<.001$). ➤ Cumulative incidence of warts was 33% (95% confidence interval [CI] 30–36%) in HIV-seropositive and 9% (95% CI 6–12%) in HIV-seronegative women ($P<.001$). Lower CD4 lymphocyte count, younger age, and current smoking were strongly associated with risk for incident warts. ➤ Among 501 HIV positive and 43 HIV-negative women, warts regressed in 410 (82%) seropositive and 41 (95%) seronegative women ($P<.02$), most in the first year after diagnosis. Regression was negatively associated with HIV status and lower CD4 count as well as older age. ➤ Incident VIN of any grade occurred more frequently among HIV-seropositive than HIV-seronegative women: 0.42 (0.33–0.53) compared with 0.07 (0.02–0.18) per 100 person years ($P<.001$). Positivity for VIN 2 was found in 58 women (55 with and three without HIV, $P<.001$). Two women with HIV developed stage IB squamous cell vulvar cancers.
<p>Schlecht HP, CID 2010</p>	<p>Retrospective cohort</p>	<p>319 MSM referred to a single university-affiliated surgical practice for ablation of anal condylomata from May 2002 through April 2007</p> <p>159 HIV-seropositive subjects and 160 HIV-seronegative subjects</p>	<p>Evaluation of HGIN or Squamous cell carcinoma with anal condyloma</p>	<ul style="list-style-type: none"> ➤ High-grade intraepithelial neoplasia or squamous cell cancer in 75 (47%) of 159 HIV-seropositive men who have sex with men (MSM) and in 42 (26%) of 160 HIV negative MSM with anal condylomata meriting surgery ➤ Not clear if anal condyloma found in same site as HGIN.

References:

1. Maniar KP, et al. Coexisting High-grade Vulvar Intraepithelial Neoplasia (VIN) and Condyloma Acuminatum: Independent lesions due to different HPV types occurring in immunocompromised patients. *Am J Surg Path* 2013;37:53-60.
2. Baydor DE, et al. Occurrence of Dysplasia and Human Papilloma Virus Typing in Penile Condylomas . *Urology* 2013 211.e9–211.e15;
3. Blomberg M, et al. Genital Warts and Risk of Cancer: A Danish Study of Nearly 50 000 Patients With Genital Warts. *JID* 2012;205:1544-1553.
4. Massad SL, et al. Genital warts and Vulvar Intraepithelial Neoplasia. *Obstet Gyn* 2011;118:831-839.
5. Schlecht HP, et al. Frequency of Occult High-Grade Squamous Intraepithelial Neoplasia and Invasive Cancer within Anal Condylomata in Men Who Have Sex with Men. *Clin Infect Dis* 2010;51:107-110.