# An Atlas of Lumps and Bumps, Part 2

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**EDITOR'S NOTE:** This article is part 2 of a series describing and differentiating dermatologic lumps and bumps. To access previously published articles in the series, visit https://bit.ly/35J111v.

# **Genital Warts**

enital warts (also known as condylomata acuminata or anogenital warts) are the most common clinical manifestations of genital human papilloma virus (HPV) infections.<sup>1,2</sup> It is estimated that 1% of sexually active individuals aged 16 to 35 years have clinically evident genital warts.<sup>2</sup> Men are more commonly affected.<sup>1</sup> Approximately 90% of genital warts are caused by HPV 6 and HPV 11.<sup>1,2</sup> HPV strains 1, 2, 3, 4, 16, 18, 40, 42, 43, 44, 54, 70, 72, and 81 account for the rest.<sup>2</sup> In adults, genital HPV infection is predominately transmitted by penetrative intercourse and less commonly by oral sex, skin-to-skin transmission, and fomites.<sup>1-3</sup> In children, HPV infection may result from sexual abuse, vertical transmission, autoinoculation, heteroinoculation, and transmission via fomites.<sup>2,4</sup>

Genital warts are usually asymptomatic but may at times cause discomfort, itching, burning, bleeding, and pain. <sup>1-3</sup> They are most commonly found on the external genitalia. In men, genital warts are usually located on the frenulum, glans penis,



Figure 1.

Figure 2.

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### DISCLOSURES:

Dr Leung is the series editor. He was not involved with the handling of this paper, which was sent out for external peer review.

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Figure 3.



Figure 4.



Figure 5.



Figure 6.



Figure 7.

Figure 8.

# Photo Essay





Figure 9. Figure 10.





Figure 11. Figure 12

inner surface of the prepuce, coronal sulcus, and scrotum. <sup>1,2,5</sup> In women, genital warts may be found in the vagina, on the vulva, and on the cervix. <sup>5</sup> There is a predilection for the smooth, moist mucosa of the posterior vaginal introitus and the labia. <sup>1</sup> In both sexes, genital warts can be found in or around the anus. Genital warts can occur separately or in clusters. <sup>2,3</sup> They can be pedunculated or sessile. <sup>1,2</sup>

Genital warts typically present as small, discrete, soft, smooth, pearly, dome-shaped papules at onset.<sup>2,6</sup> With time, the papules may coalesce into plaques.<sup>2</sup> Lesions may be flat, papular, filiform, exophytic, papillomatous, verrucous, hyperkeratotic, cerebriform, fungating, or cauliflower-like (Figures 1 to 12).<sup>1,2,5-7</sup> The color varies and may be flesh-colored, light and pearly, whitish, pink,

erythematous, gray, brown, violaceous, dark purple, or hyperpigmented.<sup>2,5,8</sup> Buschke-Löwenstein tumor, also called giant condylomata acuminatum, is a verrucous carcinoma in the anogenital and perianal areas, often associated with HPV 6 and HPV 11.<sup>9</sup>

The diagnosis is mainly clinical, based on the history of venereal exposure and physical findings. Dermatoscopy and in-vivo reflectance confocal microscopy help to increase the diagnostic accuracy. The dermoscopic features may vary from finger-like to knob-like patterns, and the vascular pattern may vary from glomerular, to hairpin, to dotted. Skin biopsy is warranted if the diagnosis is in doubt.

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