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Short Communication

Contagion and Cyst-Condylomata Acuminatum

Anubha Bajaj*

Consultant, Histopathologist, A.B., Diagnostics, India

***Corresponding Author:** Anubha Bajaj, Consultant, Histopathologist, A.B., Diagnostics, India.

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Condyloma acuminatum exemplifies a benign, wart-like lesion constituted of stratified squamous epithelium. The benign epithelial lesion with a warty countenance may be associated with human papilloma virus (HPV) infection and preponderantly appears to be confined to the anogenital region. Upon morphological assessment, implicated squamous epithelium exhibits bland, papillomatous hyperplasia. Giant condyloma or Buschke-Löwenstein tumour may ensue due to confluence of extensive condyloma acuminata of extended duration. The lesion demonstrates a propensity for malignant metamorphosis with the occurrence of invasive carcinoma. Lesion is additionally designated as genital wart or condylomatous low grade squamous intraepithelial lesion (LSIL). Condylomata acuminatum preponderantly incriminates sexually active adults. Peak age of disease incidence appears between 20 years to 29 years. Additionally, infection with human immunodeficiency virus (HIV) predisposes to emergence of condylomata acuminatum. Alternatively, Buschke-Löwenstein tumour is preponderantly enunciated within the fifth decade and appears subsequent to diagnosis of condylomata acuminatum within a median duration of 5 years [1,2]. Condylomata acuminatum predominantly implicates anogenital sites such as labia majora, vestibule, perineum, vagina or perianal region. Extra-genital lesions are exceptionally encountered [1,2]. Commonly, infection with low risk variants of human papilloma virus (HPV) as subtypes 6 and 11 are posited to induce condylomata acuminatum. Notwithstanding, high risk subtypes of human papilloma virus (HPV) may engender up to 42% of lesions [2,3]. Condylomata acuminatum may appear as distinct lesions discernible upon colposcopy. Generally, miniature papules or multiple, enlarged tumour masses with cauliflower-like extraneous appearance may be enunciated [4,5]. Upon clinical assessment, Buschke-Löwenstein tumour exhibits an expansive neoplastic pattern which is associated with localized tissue destruction. However, criterion of distinctive tumour magnitude for segregating Buschke-Löwenstein tumour from enlarged condylomata remains debatable [4,5].

Upon microscopy, lesions comprehensively display a verrucous or warty architecture. Superimposed squamous epithelium exhibits foci of acanthosis, papillomatosis, hyperkeratosis and hypergranulosis. Lesion is comprised of broad papillae encompassed within bulbous edges. Squamous epithelial papillae delineate fusion at the base. Cytopathic influences of infecting viruses emerge as absent, inconspicuous or variable koilocytosis, bi-nucleated epithelial cells and lack of stromal inflammation [4,5]. Giant condyloma or Buschke-Löwenstein tumour exemplifies morphological features demonstrating significant endophytic tumour evolution in the absence of neoplastic invasion [4,5].

Condylomata acuminatum may display the confluence of infecting human papilloma virus (HPV) as discerned with ribonucleic acid (RNA) in situ hybridization or immunohistochemistry adopted for demonstration of L1 capsid protein [6,7].

Immune stain with p16 appearing as a patchy, non-block stain may be encountered within lesions of condylomata acuminatum. Alternatively, lesion appears immune non-reactive to p16 [6,7].

Condylomata acuminatum requires segregation from conditions such as seborrheic keratosis, vestibular papillomatosis, squamous papilloma, condylomata with high grade squamous intraepithelial lesion (HSIL), verrucous carcinoma, condylomata lata or secondary syphilis, familial benign pemphigus, infection with herpes simplex virus, benign nevi, vulvar neurofibromatosis, molluscum conta-

giosum, lichen planus, psoriasis, various malignant disorders incriminating superimposed stratified squamous epithelium, pearly penile papules, acrochordon, sebaceous cysts or Buschke-Löwenstein tumour [6,7]. Condylomata acuminatum can be appropriately discerned upon assessment of cogent clinical countenance and surgical tissue samples obtained with punch biopsy [6,7]. Condylomata acuminatum can be optimally treated with localized surgical extermination of the lesion. Alternatively, laser ablation may be beneficially employed. Topical application of imiquimod appears advantageous [6,7]. Condylomata acuminatum is a benign condition demonstrating frequent relapses. Nevertheless, spontaneous retrogression of lesions may ensue [6,7]. Buschke-Löwenstein tumour exemplifies focal emergence of invasive squamous epithelial carcinoma in ~50% lesions. Distant metastasis is exceptionally observed. Disease associated mortality ensues at ~20%. Following therapy, disease reoccurrence is enunciated in ~50% lesions [6,7].

Cytological features	Immature squamous metaplasia	HSIL
Nuclear features		
Chromatin pattern	Fine, granular, evenly distributed chromatin	Coarse, granular, clumped chromatin
Nuclear membrane	Smooth	Sharp, grooved, undulating
Nucleoli	Frequently discerned	Absent
Cytoplasmic features		
Cytoplasmic processes	Present	Absent
Amount	Appreciable	Scanty, indiscernible
Nucleocytoplasmic ratio	Low	Enhanced

Table 1: Differentiation between immature squamous metaplasia and HSIL [3].

HSIL: High grade squamous intraepithelial lesion.

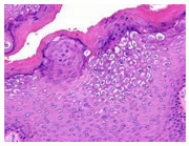

Figure 1: Condylomata acuminatum demonstrating warty architecture with acanthosis, hyperkeratosis and hypergranulosis of superimposed squamous epithelial cell layer. Broad papillae with bulbous edges are observed. Koilocytosis is variable [8].

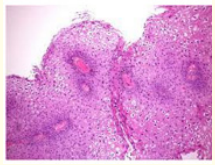

Figure 2: Condylomata acuminatum delineating warty architecture with acanthosis, hyperkeratosis and hypergranulosis of superficial squamous epithelial cell layer. Broad papillae with bulbous edges are observed. Koilocytosis is variable [9].

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8. Image 1 Courtesy: Dermet.com

9. Image 2 Courtesy: Science direct