HPV-RELATED BASALOID SQUAMOUS CELL CARCINOMA OF THE BLADDER ASSOCIATED WITH GENITAL TRACT HPV INFECTION

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Few studies on the relationship between HPV and bladder BSCC have suggested that the virus may exert its oncogenic activity in the bladder.

The basaloid SCC (BSCC) is a variant of squamous cell carcinoma found mainly in the head and neck region and associated to HPV infection.

Recently, two cases of BSCC have been reported in the bladder of patients with neurogenic bladder, repeated catheterizations and human papillomavirus (HPV) infection of the genital and urinary tract.

Herein, we describe an additional case.
A 46-year-old woman with a long standing neurogenic bladder presented with gross hematuria.

In 2000 she underwent cervical conization for a high-grade squamous dysplasia associated with HPV type 16 infection.

A cystoscopy revealed several nodular lesions. Biopsies showed the infiltration of bladder mucosa by a poorly differentiated SCC, composed of small basaloid cells without prominent keratinization. Non keratinizing squamous metaplasia with koilocytic changes was present in adjacent urothelium.

A cystectomy was performed.
• On gross examination, many hard, whitish plaque-like lesions were identified in the bladder.
• Microscopically, well demarcated nests of small, basaloid cells with scant cytoplasm and peripheral palisading infiltrated the mucosa and the internal layer of tonaca muscolaris.
• The remaining bladder epithelium showed extensive areas of squamous in situ carcinoma and squamous metaplasia with koilocytic changes.
- Both the in situ and invasive components showed diffuse strong positivity for p16.
- HPV type 16 DNA was detected in the bladder specimens through pyrosequencing.
- So a diagnosis of BSCC was made.
• This case confirms the potential role of HPV in bladder carcinogenesis and strength the hypothesis of a pathogenetic link between HPV genital tract infection, repeated catheterizations and BSCC of the bladder.