

Pseudoglandular (adenoid, acantholytic) squamous cell carcinoma of the penis. A case report

Zámečník M.¹, Mukenšnabl P.², Chlumská A.^{2, 3}

¹Medicyt, s.r.o., laboratory Trenčín, Slovak Republic

²Šíkl's Department of Pathology, Faculty Hospital, Charles University, Plzeň, Czech Republic

³Laboratory of Surgical Pathology, Plzeň, Czech Republic

SUMMARY

A case of so-called pseudoglandular (adenoid, acantholytic) squamous cell carcinoma (SCC) of the penis occurring in a 60-year-old man is described. The tumor showed, in addition to the pattern of conventional moderately to poorly differentiated SCC, a component of tubular-appearing pseudoglandular SCC. No precancerous dysplastic lesion was found near the lesion. Immunohistochemically, the tumor cells expressed pancytokeratin, p53 and p63, and they were negative for endothelial markers, carcinoembryonic antigen and p16. Stains for mucin were negative. Metastases were found in the regional lymph nodes and spermatic cord. Four weeks after the penectomy, multiple cutaneous/subcutaneous metastases appeared and metastases in the pelvic lymph nodes were visualized through a CT scan. The advanced stage of the tumor seen in the present case further confirms that pseudoglandular SCC represents a highly aggressive tumor.

Key words: adenosquamous carcinoma - pseudoglandular (adenoid, acantholytic) squamous cell carcinoma - penis - p16 - p53

Pseudoglandulárny (adenoidný, akantolytický) dlaždicovobunkový karcinóm penisu. Popis prípadu

SÚHRN

Prezentovaný je prípad pseudoglandulárneho (adenoidného, akantolytického) dlaždicovobunkového karcinómu penisu u 60-ročného pacienta. Tumor obsahoval okrem štruktúr konvenčného dlaždicovobunkového karcinómu komponent pseudoglandulárny, ktorý napodobňoval tubuly adenokarcinómu. V epidermis vedľa tumoru nebola nájdená prekurzorová dysplastická lézia. Imunohistochemicky exprimovali bunky nádoru pancytokeratín AE1/AE3, p53 a p63, a boli negatívne na endotelové markery, CEA a p16. Farbenia na mucus boli negatívne. Metastázy boli prítomné v regionálnych lymfatických uzlinách a vo funiculus spermaticus. Štyri týždne po operácii sa objavili početné kožné/podkožné metastázy v podbrúšku, v oboch ingvínach a na prednej mediálnej strane stehien. Vyšetrenie CT zistilo pakety metastaticky postihnutých lymfatických uzlín v panve. Vysoké štadium pri prezentácii tumoru a ďalší priebeh potvrzuju, že pseudoglandulárny dlaždicovobunkový karcinóm penisu je vysoko agresívny tumor.

Kľúčové slová: adenoskvamózny karcinóm - pseudoglandulárny (adenoidný, akantolytický) dlaždicovobunkový karcinóm - penis - p16 - p53

Cesk Patol 2011; 47 (1): 15-18

So-called pseudoglandular (adenoid, acantholytic) squamous cell carcinoma is a rare type of squamous cell carcinoma (SCC) that was described in the skin (1-3), oral cavity (4), breast (1,5), lung (1,6), bladder (7), uterine cervix (8) and vulva (7,8). In the penile location, pseudoglandular SCC was described quite recently by Cunha et al. (9). The tumor represents a highly malignant type of penile squamous cell carcinoma (SCC) that contains a tubular-appearing acantholytic pattern strongly mimicking adenocarcinoma. After the first publication, two further cases were added by Co-

lechia and Insabato (10). Because no additional reports were published, we would like to present our recent case of this rare tumor.

MATERIALS AND METHODS

The tissue of the excised tumor was fixed in 4% formalin and processed routinely. The sections were stained with hematoxylin and eosin, PAS, PAS with diastase pretreatment, alcian blue at pH 2.5, and mucicarmine. Following primary antibodies were used for immunohistochemistry: p53 (clone DO-7), CD31 (JC70A), epithelial membrane antigen (EMA, E29), carcinoembryonic antigen (CEA, II-7) (all from Dako Cytomation), and p16 (JC8), pancytokeratin (AE1/AE3), CD34 (Qbend 10) (all from LabVision). Immunostaining was performed according to the standard protocols using avidin-biotin complex labeled with peroxidase or alkaline phosphatase. Microwave antigen pretreatment was performed prior to applying the primary antibodies with exception of CD34. Appropriate positive and negative controls were applied.

Correspondence address:

M. Zámečník, M.D.
Medicyt, s.r.o.
Legionárska 28
91171 Trenčín
Slovak Republic
Phone: +421-32-3936956
E-mail: zamecnikm@seznam.cz