

# Primary vaginal squamous cell carcinoma arising in a squamous inclusion cyst: Case report

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## SUMMARY

We report the case of a 39-year-old female with primary vaginal squamous cell carcinoma arising from a squamous inclusion cyst of the posterior wall. The tumor was located in the vaginal wall and extended into the rectovaginal septum. The overlying mucosa was intact. Histologically, there was invagination of the surface squamous vaginal epithelium forming a cystic lesion. In some areas of this invagination, the squamous epithelium showed dysplastic changes (VAIN3) transitioning into invasive squamous cell carcinoma. To the best of our knowledge, we have documented the first case of primary squamous cell carcinoma arising in a vaginal cyst in a patient without having undergone a previous hysterectomy.

**Keywords:** squamous cell carcinoma – vagina – squamous inclusion cyst – embryonal remnants – rectovaginal septum

## Primární dlaždicobuněčný karcinom vagíny vzniklý na podkladě skvamózní inkluzní cysty zadní stěny vagíny – popis případu

### SOUHRN

Prezentujeme případ 39 leté ženy s primárním vaginálním dlaždicobuněčným karcinomem vzniklým na podkladě skvamózní inkluzní cysty zadní stěny vagíny. Nádor byl lokalizován ve stěně vagíny a šířil se do rektovaginálního septa. Sliznice nad nádorem byla intaktní. Mikroskopicky byla zastižena invaginace povrchového dlaždicového epitelu, která tvořila cystickou lézi. V některých místech invaginace byly v epitelu zastiženy dysplastické změny (VAIN3) s přechodem v invazivní dlaždicobuněčný karcinom. Prezentujeme první případ primárního dlaždicobuněčného karcinomu vyrůstajícího ve vaginální cystě u pacientky, která neprodělala hysterektomii.

**Klíčová slova:** dlaždicobuněčný karcinom vagíny – skvamózní inkluzní cista – embryonální zbytky – rektovaginální septum

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Vaginal squamous cell carcinomas (SCCs) are rare tumors, accounting for approximately 1–2 % of all malignant neoplasms of the female genital tract (1,2). The risk factor of vaginal carcinoma is similar to that of cervical cancer, which includes a strong association with persistent human papillomavirus infection. Painless vaginal bleeding is the most common symptom of vaginal cancer. Other symptoms frequently reported include increased vaginal discharge, dyspareunia and postcoital bleeding. Most tumors occur in the upper third of the vagina and are located on the posterior wall. We report a patient with primary vaginal SCC arising from a squamous inclusion cyst of the posterior wall.

## CASE REPORT

A 39-year-old woman, 2-para with a short history of dyspareunia and postcoital bleeding was referred with a palpable vaginal

tumor to the Oncogynecological center. The patient had not yet been treated for any malignancy, and had had no history of pelvic irradiation. Her last Papanicolaou smear screening, which had been done six months prior to her referral, was normal. The initial vaginal colposcopy showed the intact vaginal mucosa without any abnormality. Colonoscopic and rectoscopic examination was normal too. However, the transrectal and endovaginal ultrasound, as well as the MRI and PET, revealed a tumor, suspected to be malignant, localised in the rectovaginal septum. The spread of disease was not apparent, and both tumor markers (CA-125 and SCCA) were negative. An ultrasound-guided tru-cut biopsy from the rectovaginal septum showed a moderately differentiated nonkeratinizing invasive SCC. Subsequently, the patient underwent a radical hysterectomy type C2, partial colpectomy and the resection of the rectosigmoid bowel with terminal colostomy. No adjuvant treatment was indicated. The patient has been under regular follow-up controls every three months for 9 months without any sign of disease recurrence.

## MATERIALS AND METHODS

Sections from formalin-fixed, paraffin-embedded tissue blocks were stained with hematoxylin-eosin. Selected sections were analysed immunohistochemically using the avidin-biotin complex method with the antibody directed against p16 (ready to use, Dako).

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