

A rare lesion of the vagina: tubulo-squamous polyp

Vajinanın nadir bir lezyonu: túbüloskuamoz polip

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Abstract

Vaginal polyps are uncommon and consist of a heterogeneous group of lesions. Most of vaginal polypoid lesions are fibroepithelial polyps. However, a variety of lesions (leiomyoma, superficial myofibroblastoma of the lower female genital tract, rhabdomyoma, and embryonal rhabdomyosarcoma etc.) may present macroscopically as a polypoid mass. Tubulo-squamous polyp of the vagina is a rare benign lesion that has been described recently. Histologically, it is characterized by both epithelial and mesenchymal component, consisting of squamous nests and tubules, embedded in a fibrous stroma. Focal immunoreactivity for prostate-specific antigen (PSA) and/or prostatic acid phosphatase (PSAP) may be observed in some lesions, supporting the possibility that it originates from paraurethral Skene's glands. Herein, we report a 60-year-old female with a tubulo-squamous polyp of the vagina. A brief review of the literature on this novel entity is also provided.

Keywords: Polyps; tubulo-squamous; vagina

Özet

Vajinal polipler nadirdir ve heterojen bir grup lezyondan oluşmaktadır. Fibroepitelyal polipler en sık vajinal polipoid lezyonlardır. Ancak çok çeşitli lezyonlar (leiomyom, alt kadın genital sistemin yüzeyel myofibroblastomu, rbdomyom ve embryonel rbdomyosarkom vs.) makroskopik olarak vajinal polipoid kitle şeklinde ortaya çıkabilmektedir. Túbüloskuamoz polip ise vajinanın yakın zamanda tanımlanan nadir bir benign lezyonudur. Histolojik olarak fibröz stroma içerisinde skuamoz adalar ve túbüllerden oluşan epitelyal ve mezenkimal komponentler ile karakterlidir. Bazı lezyonlarda paraurethral Skene bezlerinden köken alabileceğini destekleyen prostat spesifik antijen (PSA) ve/veya prostatik asit fosfataz (PSAP) ile fokal immünreaktivite saptanabilmektedir. Biz burada 60 yaşında kadın hastaya ait bir vajinal túbüloskuamoz polibi sunmaktayız. Ayrıca bu yeni antite ile ilgili kısa bir literatür özeti de verilmiştir.

Anahtar kelimeler: Polipler; túbüloskuamoz; vajina

Introduction

Vaginal polyps are uncommon and consist of a heterogeneous group of lesions. Most of vaginal polypoid lesions are fibroepithelial polyps. However, a variety of lesions (leiomyoma, superficial myofibroblastoma of the lower female genital tract, rhabdomyoma, and embryonal rhabdomyosarcoma etc.) may present macroscopically as a polypoid mass (1,2). Tubulo-squamous polyp of the vagina is a distinct histopathologic entity that has been recently described in a series of ten cases in 2007 (2). Tubulo-squamous polyps occur in women, aged from 36 to 86 years, mostly in the postmenopausal period (1-3). Tubulo-squamous polyps may either be asymptomatic and found incidentally during physical examination or may be presented with vaginal discomfort, discharge or bleeding. The polyps often range from 1.0 to 3.0 cm in diameter and are usually located in the upper part of the vagina (2). Histologically, the polyps include well-demarcated

squamous nests accompanied by tubules in a fibrous stroma. The tubules are located in the squamous nests or around them, and are lined by one or two layers of cuboidal epithelial cells or squamous cells. Some of the squamous nests contain central necrosis with or without calcification, or keratin pearl-like material (2).

Case Report

A 60-year-old female was admitted with vaginal discharge and a vaginal polyp on the upper 1/3 of the vagina was observed incidentally on gynecological examination. It was excised and sent for pathological examination. Grossly, the polyp was measured 1.2x0.9x0.8 cm. Histologically, the surface of the polyp was covered by hyperplastic and glycogenated squamous epithelium. The polyp was composed of well-circumscribed nests of glycogenated squamous cells with bland nuclei in a fibrovascular stroma with moderate chronic inflammatory cells (Figure 1). Some of the squamous nests showed central spaces filled with necrotic debris or keratin-like material (Figure 2).

This case report was presented at 19th National Pathology Congress in 2009 in Cyprus.

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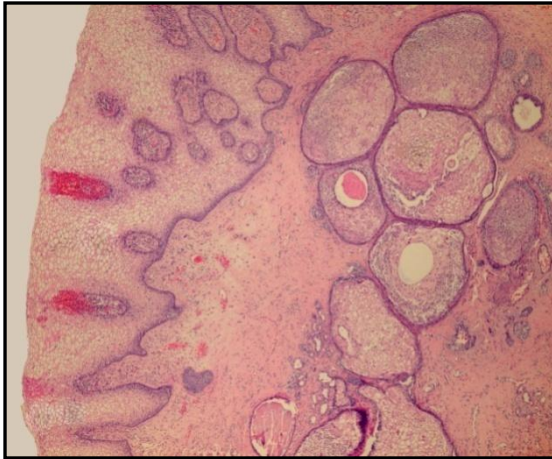


Figure 1. Low-power view of the tubulo-squamous polyp covered by glucogenated and hyperplastic squamous epithelium, and including well-circumscribed squamous nests and small tubules in the stroma (Hematoxylin and eosin stain, x40).

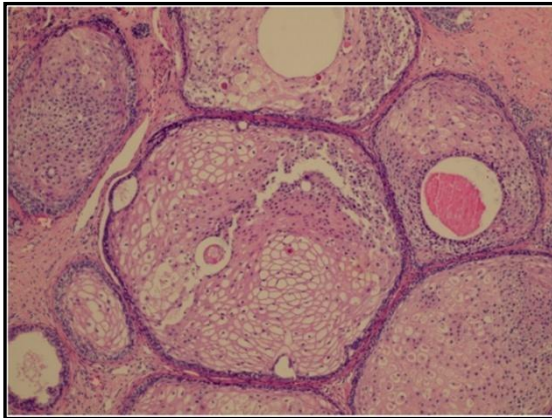


Figure 2. Squamous nests and small tubules, containing eosinophilic keratin-like material (Hematoxylin and eosin stain, x100).

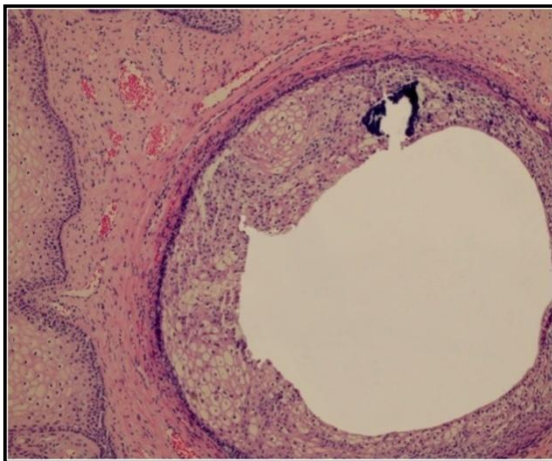


Figure 3. Calcification in a squamous nest within inflamed fibrovascular stroma (Hematoxylin and eosin stain, x100).

Foci of calcification were present in some squamous nests (Figure 3). There were some small tubules in the squamous nests or at the periphery of the nests, that were lined by single or double layers of cuboidal

cells (Figures 1, 2, and 4). There was no dysplasia or malignant change in the lesion. PSA and PSAP were performed immunohistochemically with positive controls and the lesion was entirely negative with them. Pancytokeratin and CK7 were positive in the squamous nests and the tubules; both estrogen receptor and progesterone receptor were positive extensively in the stroma, and showed focal positivity in the squamous nests and the tubules; desmin was positive in the stroma as well as CD34 and SMA that revealed the muscular component of the stroma. Ki-67 proliferation index was low (<1%).

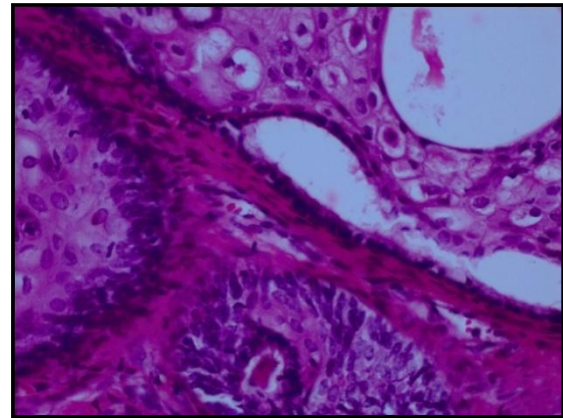


Figure 4. High-power view of the squamous nests and small tubules (Hematoxylin and eosin stain, x400).

Discussion

Tubulo-squamous polyp of the vagina is a rare entity with a distinct morphology that has been recently described by McCluggage and Young (2). To the best of our knowledge, a few case reports about this novel entity have been submitted to date, describing additional or different histopathological features (1, 3-5).

Dundr et al. (3) reported a case of a tubulo-squamous polyp of the vagina that had some large mucinous glands showing squamous metaplasia in a fibrous rather than hypocellular stroma. Stewart (6) reported prominent basaloid epithelial differentiation in an additional case of tubulo-squamous polyp that potentially could raise diagnostic difficulty with other basaloid and/or endocrin tumors. Chaturvedi and Padel (5) reported a case of vaginal tubulo-squamous polyp that had sebaceous glands. Tong et al. (1) reported a tubulo-squamous polyp with goblet cell and mucinous differentiation. Vassallo et al. (4) reported a tubulo-squamous polyp showing "angiomyofibroblastic-like" stroma which could lead to confusion with other mesenchymal lesions of the vagina. Wachter et al. (7) reported a tubulo-squamous polyp raised in a mature cystic teratoma of the ovary recently.

Possible theories are claimed about the histogenesis of tubulo-squamous polyp, including a Mullerian origin, derivation from mesonephric remnants or

urogenital sinus-derived epithelium (2). Although our case was negative with PSA and PSAP, some of the tubulo-squamous polyps reported in the literature, showed immunoreactivity with PSA and/or PSAP (1,2). Thus, it is suggested that these lesions are originated from paraurethral Skene glands (the female equivalent of prostatic glands in the male) or ectopic prostate tissue (2,6). However, none of these theories has been proved to date.

The differential diagnosis of tubulo-squamous polyp may include fibroepithelial stromal polyp, vaginal mixed tumor (spindle cell epithelioma), Brenner tumor and ectopic prostate tissue (2,3). Histologic features such as the presence of epithelial elements within the stroma and tubules are the main properties of tubulo-squamous polyps. Mixed tumors are composed of both stromal and epithelial elements but they have predominant cellular spindle cell component compared to tubulo-squamous polyp, and have predilection for the hymeneal region (3). Vaginal Brenner tumor is a rare tumor that has similar histology with tubulo-squamous polyp. Moreover, it is suggested that some tubulo-squamous lesions might be misdiagnosed and reported as Brenner tumor in the literature (2). Squamous morphology rather than transitional morphology may be a hint in the differential diagnosis of tubulo-squamous polyp compared to the Brenner tumor. Although ectopic prostatic tissue in the vagina is extremely rare, it should be noted when examining a vaginal polyp. The differential diagnosis of ectopic prostatic tissue showing an extensive squamous differentiation with real tubulo-squamous polyps might sometimes be impossible.

In conclusion, tubulo-squamous polyp of the vagina is a rare novel entity, and further knowledge about the histogenesis and the morphologic spectrum of this lesion is required to aid pathologists in its recognition and diagnosis.

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