A Rare Polypoid Mass of Vagina; Tubulo-Villous Adenoma - A Case Report

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Abstract

Tubulo-villous adenoma is a common polyp in the gasterointestinal tract but is rarely found in other locations such as vagina. Herein we present a case of tubulo-villous adenoma in a 78-year old white female with a polypoid mass in the vagina. Given that adenocarcinomas have been shown to develop from pre-existing tubulo-villous adenomas, precise morphological examinations are recommended in order to ensure early detection of adenocarcinoma.

Keywords: Tubulo-villous adenoma; Vaginal mass; Enteric type glandular neoplasm; Vaginal adenocarcinoma

Introduction

Enteric type glandular neoplasms are rarely documented in the vagina. Documented enteric type tumors of the vagina include rectal mucosal prolapse-like polyps, intestinal-type adenosis, tubulo-villous adenoma, and adenocarcinma[1,2]. Tubulo-villous adenoma is an extremely uncommon enteric tumor arising in the vagina[2,3].

Case History

A 78-year old white female with a past medical history of renal cell cancer, transabdominal hysterectomy and a right salpingo-oophorectomy presented to her gynecologist with postmenopausal bleeding. Clinical examination via colposcopy was significant for a grey-brown polypoid vaginal mass at 6 O’clock over the hymenal ring that looked like granulation tissue that measured 2 by 2 centimeters. Highest on the differential diagnosis clinically was rectovaginal fistula, however given patient history of renal cell carcinoma and hysterectomy for unknown disease metastasis malignancy from renal and gynecological origin needed be excluded. Rectal exam was normal making rectovaginal fistula less likely and histological exam was required to exclude other entities. The lesion was excised in its entirety en-block at Saint Alphonsus Regional Medical Center. Operative course was without complications.

Pathological Findings

Macroscopically, the specimen consisted of a 1.5 x 1.3 x 0.8-centimeter tan-pink tissue with a central cavity, which opened to the surface. The specimen was serially sectioned and entirely submitted for processing.

Microscopically, the lesion exhibited papillary and glandular architecture. The neoplastic cells were columnar with cytoplasmic mucin and goblet cells in keeping with intestinal differentiation. The nuclei were enlarged and elongated, and there were scattered mitoses and apoptotic bodies (Figure 1). The immunohistochemical profile performed was diffuse strong membranous & cytoplasmic positivity for CK7 and CK20, diffuse nuclear positive for CDX-2 (marker of intestinal differentiation) and Pax-8(supporting gynecologic origin). ER and vimentin negative (Figure 2). The morphologic and immunohistochemical features were those of a tubulo-villous adenoma of gynecological origin. Rectovaginal fis-
tula involving by colonic adenoma excluded by physical exam, normal rectal biopsy, and strong diffuse CK7 and PAX8 staining. Histomorphology was not compatible with metastatic renal cell carcinoma despite positive PAX8. Metastasis from gynecological neoplasm excluded from clinical follow up as previous hysterectomy was for benign disease, leiomyomata, with no previous history of mucinous neoplasia.

Discussion

Although tubulo-villous adenomas are commonly documented to be of gastrointestinal tract origin, they can be found in other organs including the urinary bladder, urethra, and the female genital tract. Vaginal tubulo-villous adenoma possesses unclear risk factors and its etiology is still unknown. However, a potential cause of this neoplasm formation has been cited to be the growth of displaced embryological remnants during fetal development.

Patients presenting with tubulo-villous adenoma of the vagina frequently are asymptomatic, however some may occasionally present with abnormal vaginal bleeding, vaginal itching and discharge.

Vaginal tubulo-villous adenomas are usually benign lesions with excellent prognoses. In some rare cases, however, they may associate with intraepithelial dysplasia and develop into intestinal type adenocarcinoma.

We are presenting this case because of the rare nature of tubulo-villous adenoma in the vagina and for the distinct treatment pathway that not only requires complete excision of the neoplasm through surgical intervention, but also demands long-term follow-ups for early detection of a possible recurrence and/or development of dysplasia. Our patient has been asymptomatic now for 45 months status posts procedure negative for recurrence, or higher grade lesion.

Conclusion

Enteric type glandular neoplasms of the vagina are rare and tubulo-villous adenoma even rarer. Several studies indicate that adenocarcinoma may arise from pre-existing vaginal adenomas. Therefore, morphological evaluation of the specimen for abnormal findings such as cellular pleomorphism, atypical mitosis, and stromal invasion are warranted. Of course, metastatic adenocarcinoma, included in the differential diagnosis must be excluded.

References
