

Adenosquamous Carcinoma Arising in the Vaginal Apex

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ARTICLE INFO

Received: 📅 July 06, 2023

Published: 📅 July 27, 2023

Citation: Satoshi Ichigo, Tsuneko Ikeda, Hiroshi Takagi, Hazuki Kagawa, Kazutoshi Matsunami and Atsushi Imai. Adenosquamous Carcinoma Arising in the Vaginal Apex. Biomed J Sci & Tech Res 51(5)-2023. BJSTR. MS.ID.008165.

ABSTRACT

Primary vaginal nonsquamous carcinomas are exceptionally rare malignant neoplasms. We encountered a fascinating case of a woman with a medical history of a total abdominal hysterectomy and bilateral salpingectomy for a uterine fibroid, who presented with a polypoid mass at the stump of the vagina. Subsequent diagnosis revealed it to be a de novo vaginal adenosquamous carcinoma. This case emphasizes the significance of considering a broad range of differential diagnoses for women with masses in the vaginal stump.

Introduction

Primary vaginal carcinoma is an infrequent occurrence, comprising merely 1-2% of all malignancies affecting the female genital tract and a mere 10% of vaginal malignant neoplasms [1,2]. Squamous carcinoma is the prevailing histologic subtype, accounting for 90% of cases, while adenocarcinoma, a non-squamous variant, represents approximately 8-10% of the remaining cases. Lymphomas, sarcomas, melanomas, and adenosquamous carcinoma are exceedingly rare [3,4]. Literature concerning primary vaginal adenosquamous carcinoma is exceedingly scarce [2,5]. Herein, we present an intriguing case of a woman with a history of a total abdominal hysterectomy and bilateral salpingectomy for a uterine fibroid, who manifested a polypoid mass at the apex of the vagina, ultimately diagnosed as de novo vaginal adenosquamous carcinoma.

Case Report

A 53-year-old woman, para 3, was admitted to our hospital due to atypical genital bleeding. She had previously undergone a total abdominal hysterectomy and bilateral salpingectomy nine years earlier

to address a uterine fibroid. Gynecological examination revealed a macroscopic, irregularly shaped, friable, verrucous growth measuring 1.5 cm in size at the vaginal apex. No inguinal or femoral lymph nodes were palpable. Biopsy of the vaginal apex confirmed the presence of adenocarcinoma, as evidenced by positive immunostaining for CK 17. Human papilloma virus DNA was not detected in the tumor cells. Magnetic resonance (MR) imaging revealed no involvement of the adnexa or parametrium. Consequently, the patient underwent laparotomic bilateral oophorectomy, omentectomy, pelvic lymph node dissection, and simple upper vaginectomy with a 1 cm margin. Intraoperatively, both ovaries appeared normal, and no evidence of residual disease was observed. Histological examination revealed an unequivocal area of glandular and squamous differentiation. Immunohistochemistry for CK7, P16, and P40 exhibited positive results for all tumor components. Additionally, P63 demonstrated positivity in the squamous component (Figure 1). No distant metastases were detected, leading to a diagnosis of stage I vaginal cancer, according to the International Federation of Gynecology and Obstetrics classification. The patient declined any further adjuvant therapy.

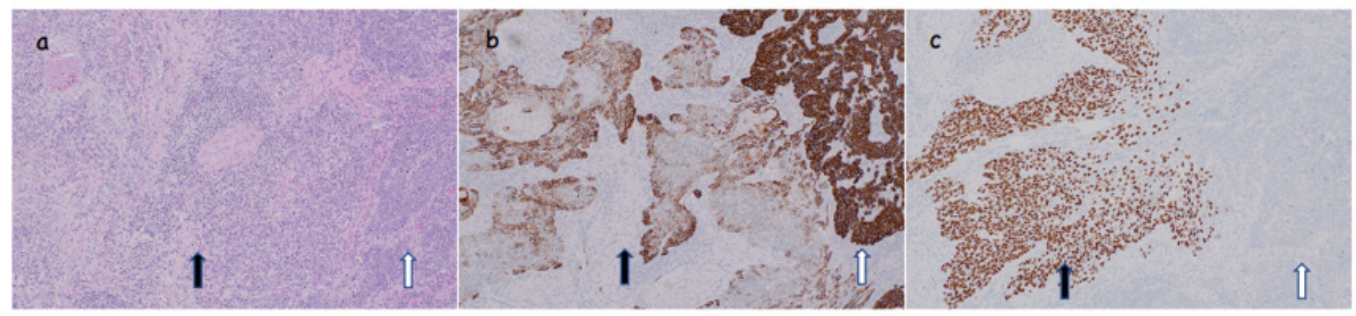


Figure 1: Adenosquamous carcinoma of the vaginal apex.

- Histological findings (H&E x20). The squamous component (black arrow) and the glandular component (white arrow).
- CK17 immunostaining. Strong and diffuse positivity of the squamous component (black arrow) and multifocal positivity of the glandular component (white arrow) (x400).
- P63 immunostaining. Positivity of the squamous component (black arrow) but not the glandular component (white arrow) (x100).

Discussion

A broad range of differential diagnosis for women presenting with a polypoid mass at the vaginal stump comes from the timing (recent or distant history) or indication of hysterectomy. For women who have had a hysterectomy with cervix preservation, potential diagnoses for a mass at the apex of the vagina include cervical dysplasia, cervical cancer, fibroids, prolapse of endocervical polyps, Nabothian cysts, or other malignancies. For recent total hysterectomy, possible etiologies include abscess, hematoma, granulation tissue, or dehiscence with removal of the organ. Organs that protrude through the vaginal dehiscence have been reported to include omentum, intestine, appendix, and fallopian tubes [6]. For women with a distant history of total hysterectomy for benign indications, the differential diagnosis of apical mass is more limited, including tubal prolapse, vaginal dysplasia, and de novo vaginal cancer [7]. Adenosquamous carcinomas represent malignant tumors demonstrating both squamous and glandular differentiation. Clinically, this tumor exhibits aggressive behavior, a poor prognosis, rapid growth, frequent distant metastasis, and relative resistance to conventional treatment modalities such as surgery, radiotherapy, and chemotherapy in the majority of cases [1,2,5]. Although achieving a favorable local control rate, the incidence of distant metastasis (including the lungs) remains substantial [4]. Despite ongoing intensive follow-up of the patient, the discouraging

prognosis associated with this disease underscores the importance of considering a broad range of differential diagnoses for women with masses at the vaginal stump.

Conflict of Interest

The authors declare that they have no conflict of interest.

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ISSN: 2574-1241

DOI: 10.26717/BJSTR.2023.51.008165

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