Angiomyofibroblastoma of the Vagina in a Pregnant Woman

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Introduction

Angiomyofibroblastoma (AMFB) is a rare mesenchymal soft tissue tumor arising from the lower genital tract in middle aged woman. It is characterized by being well circumscribed, arising from the subcutaneous tissue, with a slow growth pattern and benign in nature. It is a non-aggressive tumor based on two major components: abundant small blood vessels and band-looking stroma [1]. The tumor occurs mainly, but not exclusively, in the vulva of premenopausal women. It can also arise in other sites such as perineum, inguinal area, fallopian tube, vaginal portion of cervix and vagina in females and scrotum in males. It has been distinguished from a malignant variant called Aggressive Angiomyxoma (AAM) which is a unique stromal myxedematous mesenchymal tumor [2].

It is accompanied by neovascularization, and is characterized by local invasion and recurrence. Unlike AMFB, AAM usually grows invasively and a wide excision including the surrounding tissue is necessary. Therefore, it is important to distinguish between these two entities. These tumors were most frequently misdiagnosed as Bartholin gland cysts [3].

Case Report

26 years old, African American, G6P2031 at 33 2/7 weeks of pregnancy present to the L&D triage complaining of a painful mass protruding from the vagina for the past 24 hours. Patient Stated that during the night became extremely painful, preventing her from walking.

Prenatal care by a midwife, uncomplicated, was seen 2 weeks before and her examination was unremarkable.

She has history of two full time uncomplicated vaginal deliveries and 3 spontaneous abortions, denies any history of STDs and/or recent trauma.

Examination revealed a 4 by 3 cm tender pedunculated mass, protruding from 5 o clock position distal to the hymenal ring of the vagina, with a stalk. Cervix was closed. No other lesions were seen (Figure 1).

A simple excision of the mass was done, with adequate hemostasis.

Pathology (Figure 2) revealed a well demarcated tumor containing many small and capillary blood vessels with endothelial hypertrophy, and spindle or plump polygonal tumor cells with specific and immunohistological stainings, the myxoid interstitial background was alcian blue-positive, and vimentin was detected in all types of tumor cells. Cells were negative for á-smooth muscle actin, CD34, CD31, desmin, and S-100 protein findings consistent with Angiomyofibroblastoma of the Vagina.

Patient followed up in clinic and was found to have an adequate progress of her pregnancy, no signs of recurrence. She delivered at full term without any complications.

Discussion

This case is remarkable for the acute evolution in this patient, she had a previous exam were it was not found. The simple excision procedure was sufficient to treat this patient and the pathology confirmed the benign nature of the disease. This patient had an uncomplicated evolution that result in a spontaneous vaginal delivery. There are a few cases reported in the literature and we did not find any previous case during pregnancy.

References
