

Vaginal Angiomyofibroblastoma

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Abstract

Superficial vaginal angiomyofibroblastoma is a distinct tumour arising in the lamina propria of the vagina. These tumours have a characteristic histology comprising bland spindly to stellate shaped cells embedded in a finely collagenous stroma. This tumour usually does not recur after local excision. The process probably arises as a neoplastic proliferation of hormonally responsive mesenchymal cells native to the unique subepithelial stromal layer of the cervix and vagina of adult women.

Introduction

Superficial vaginal angiomyofibroblastoma is distinct, benign, site specific mesenchymal tumour. It has to be differentiated from other mesenchymal tumours at this site. We report one such case in a 48 year old woman.

Case Report

Our patient was a 48 year old woman who presented with history of vaginal discharge. Clinical examination revealed a nodular lesion in the anterior vaginal wall which was surgically excised. The gross specimen received (Fig. 1) consisted of the surface vaginal lining and an underlying well circumscribed firm homogenous, fleshy white tumour mass, measuring 3.5 cms. Few scattered mucoid areas were also noted.

Microscopic Findings

The lesion was seen to be a nodular mass lying in the lamina propria and elevating the overlying vaginal epithelium (Fig. 2). The tumour was composed of a relatively uniform population of spindled and stellate shaped mesenchymal cells set in a compact finely collagenous stromal matrix. The stroma at places was loose and oedematous and there were some foci showing myxoid change. There were small to medium

size blood vessels scattered throughout (Fig. 3). Immunohistochemistry performed in this case was vimentin which showed strong positivity in the tumour cells (Fig. 4).

Discussion

Superficial vaginal angiomyofibroblastoma can be mistaken for an aggressive angiomyxoma, cellular angiofibroma and endometrial stromal sarcoma.^{1,2} However this tumour has distinguishing histological features which helps to differentials. The histomorphological features unique to this tumour are its superficial subepithelial location, good margination, and multipatterned growth of uniform, spindled and stellate shaped cells, varying sized blood vessels and highly collagenous and focally myxoid stroma. As in our case the lesion usually presents as a polypoidal or nodular mass in the cervix or the vagina usually in the 5th-8th decade. The immunohistochemical profile of the tumour is characterized by a strong reactivity for vimentin, desmin, oestrogen and progesterone receptor proteins.³ Our case was strongly positive for vimentin.

In contrast to the vaginal angiomyofibroblastoma aggressive angiomyxoma is seen in younger women as

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Fig. 1 : Tumour mass covered by vaginal lining. Cut surface of the same showing firm homogenous appearance.

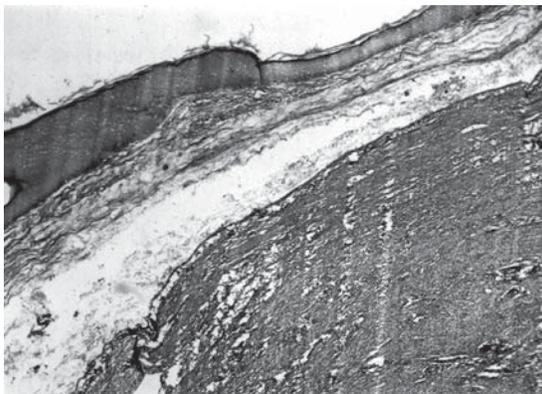


Fig. 2 : Nodular mass lying in the lamina propria and elevating the overlying vaginal epithelium 50 X.

a large bulky mass which is more deeply situated. Microscopically aggressive angiomyxoma is less cellular and more infiltrative than angiomyofibroblastoma. The vessels are also more variable in their distribution, size, and wall thickness in an aggressive angiomyxoma.

The cellular angiofibroma is a small and relatively well circumscribed mass and differs from angiomyofibroblastoma by a greater tendency of its cytologically bland spindle cells to form fascicles and by the presence of

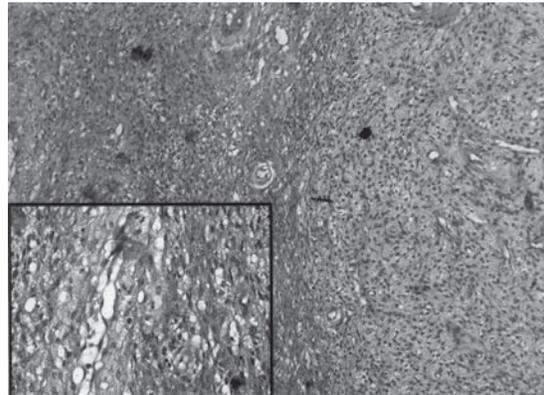


Fig. 3 : Uniform population of spindled and stellate shaped mesenchymal cells set in a compact finely collagenous stromal matrix and small to medium size blood vessels scattered throughout 100 X. Inset higher magnification 400 X.

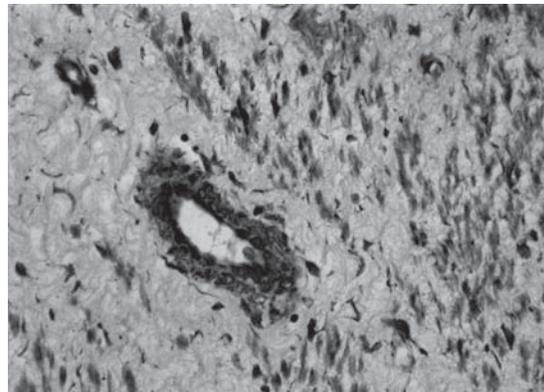


Fig. 4 : Vimentin positivity in tumour cells. Right half of the field. 100X.

adipocytes within the lesion.

Endometrial stromal sarcoma arising from a focus of endometriosis is another differential diagnosis. But features in favour of endometrial stromal sarcoma are its higher cellularity, arteriolar-like vessels uniformly distributed throughout the process.

Thus angiomyofibroblastoma of the vagina although rare is a relatively site specific mesenchymal tumour arising as a result of neoplastic proliferation of hormonally

responsive mesenchymal cells native to the unique subepithelial stromal layer. The tumour has an extremely low risk of recurrence if completely excised.

References

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SAFETY OF MALARIA VACCINE IN AFRICAN INFANTS

'These results further strengthen the vision that a vaccine that can partly protect young African children and infants might contribute to the reduction of the intolerable burden of disease and death caused by malaria'

The control of malaria remains a leading global health priority. The endemic countries of sub-Saharan Africa often have weak health systems, and children younger than 2 years have a large and disproportionate incidence of severe disease and death. John Aponte and colleagues did a randomised trial to test the safety, immunogenicity, and efficacy of the potential malaria vaccine RTS,S/AS02D in 214 infants in Mozambique. Children were assigned to receive three doses of either the malaria vaccine or the control hepatitis B vaccine Engerix-B at 10 weeks, 14 weeks, and 18 weeks of age, as well as routine immunisation vaccines given at 8,12 and 16 weeks of age. The investigators report that the RTS,S/AS02D vaccine was safe and they conclude that a phase III study is now needed to confirm vaccine efficacy against clinical malaria disease. In a Comment, Judith Epstein discusses what a partly protective malaria vaccine will mean for disease control in Africa.

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