

# Spindle Cell Epithelioma: A Rare Vaginal Tumor –A Clinico Pathologic Report

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## ABSTRACT

Spindle cell epithelioma is a very rare benign tumour of the vagina, which contains epithelial and mesenchymal components and co-expresses the markers for both. It has its origin in the epithelial cells of the remnants of the vestibular gland. The presence of glandular structures and the pattern of immunostaining, help in the differentiation of these tumours from the other common vaginal tumours.

**Key words:** Spindle cell epithelioma, Vagina

## INTRODUCTION

Spindle cell epithelioma of the vagina is a benign, well circumscribed and a painless tumour, which most commonly occurs in the distal portion of the vagina, near the hymenal ring. The mean age of their occurrence is the fourth decade of life and they are usually discovered during routine examinations. We are reporting a case of Spindle cell epithelioma of the vagina in a 45 years old woman, with a pathological confirmation of its rarity.

## CASE REPORT

A 45 years old lady presented to our OPD with a painless mass which descended per vaginum for 6 months. The mass was initially small and it increased gradually in size. There were no associated menstrual, bowel or bladder disturbances.

On examination, a firm, non-tender mass of size 8x6 cm, was seen to arise from the posterior vaginal wall, just 2 cm above the hymenal ring and to protrude through the introitus [Table/Fig-1]. A provisional diagnosis of a vaginal wall leiomyoma was made and the lesion was excised under anaesthesia and was submitted for a pathological analysis. The patient is being followed up for recurrence.

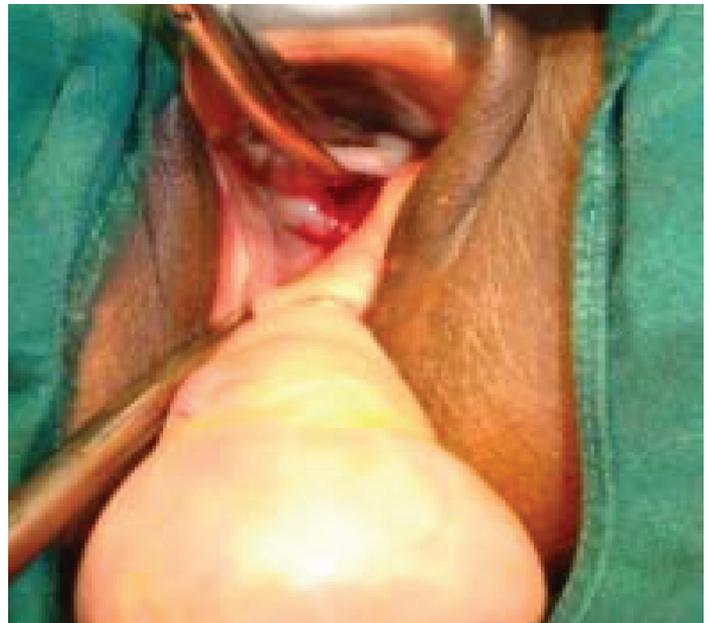
## GROSS AND HISTOPATHOLOGICAL EXAMINATION

On gross examination, the specimen was found to be a sessile polyp which was completely covered by mucosa, which measured 8x6x5 cm. The cut section appeared lobulated, grey white and fleshy, with focal oedema.

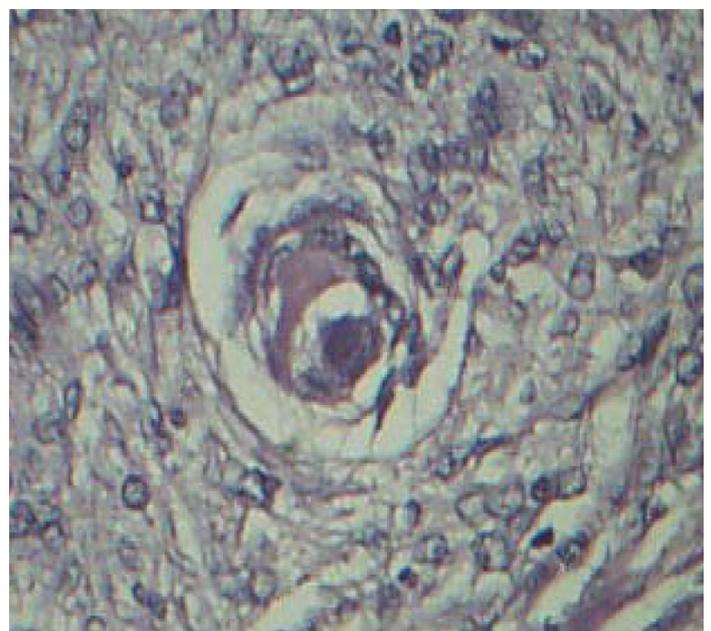
The microscopic appearance showed a well circumscribed, un-encapsulated tumour, which was composed of spindle cells which were in fascicles. Multiple small glandular structures with intraluminal mucin [Table/Fig-2], which were lined by cuboidal cells were seen, which were surrounded by whorls of spindle cells [Table/Fig-3], along with thick walled blood vessels and foci of oedema. The immunostaining for cytokeratin [Table/Fig-4], Smooth Muscle Actin (SMA) [Table/Fig-5] and the hormone receptors (oestrogen and progesterone) was positive [Table/Fig-6] and it was negative for S100, which confirmed the epithelial and the stromal components of the tumour. Hence, it was diagnosed as a spindle cell epithelioma.

## DISCUSSION

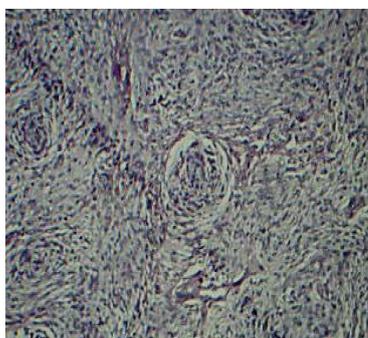
A spindle cell epithelioma of the vagina contains both epithelial and mesenchymal components and it coexpresses the markers for both [1]. Branton and Tavassoli have conclusively proved the epithelial origin of these tumours by ultrastructural and immunohistochemical



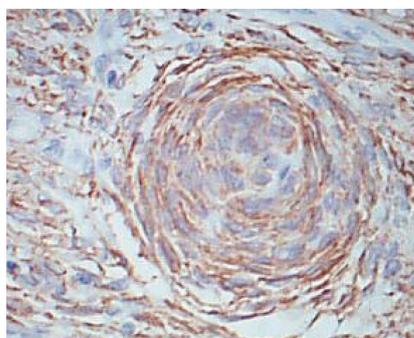
[Table/Fig-1]: Tumor arising from Posterior vaginal wall



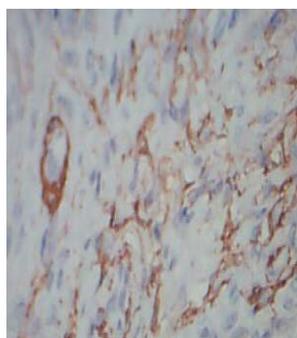
[Table/Fig-2]: Glandular structure with intraluminal mucin, H&E, 40x



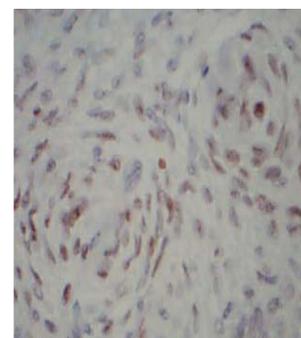
**[Table/Fig-3]:** Whorls of spindle Cells H&E ,10X



**[Table/Fig-4]:** Immunostain for cytokeratin positive [40x]



**[Table/Fig-5]:** SMA positive, 40x



**[Table/Fig-6]:** ER positive, 40X

studies, whereas the mixed tumours arise in other organs like the skin, salivary glands, breast and the mediastinum from the myoepithelial cells [2]. Immunohistochemically, spindle cell epitheliomas of the vagina are positive for keratin and Smooth Muscle Actin (SMA) and they may be positive for CD10 and the hormone receptors, but they are negative for the S-100 protein and the glial fibrillary acidic protein [3].

This entity has to be differentiated from other neoplasms like leiomyoma, myofibroblastoma, dermatofibroma, neurofibroma and a solitary fibrous tumour [4]. The presence of glandular structures and the pattern of immunostaining help in the differentiation.

'Spindle cell epithelioma of the vagina' is a better term than mixed tumours, since the myoepithelial cells do not exist either in the vagina or in the vaginal glandular inclusions, which are of either mullerian or mesonephric origin [5]. It is therefore a benign neoplasm which possibly originates from the epithelial cells of the remnants of the vestibular gland and it should not be confused with the mixed tumours of other locations [6].

Very few cases have been reported in the literature and they

have been treated by simple excision. A recurrence was reported following an incomplete excision [7]. Thus, a complete excision and a careful follow-up are recommended. Awareness on this entity will help in avoiding a misdiagnosis and it will help in the identification of more of such cases.

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