

## Masson's Tumour of the Vagina

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### Abstract

Masson's tumour, also known as intravascular papillary hyperplasia is a rare gynaecological tumour, more commonly seen in head and neck and subcutis of digits. We are presenting an unusual case of Masson's tumour of the vagina reported in a 90-year-old postmenopausal lady. Diagnosis was confirmed on histopathological examination after having an excisional biopsy during colposcopy which was the appropriate approach for its benign nature. Later, discussion at multidisciplinary team meeting and follow up after 3 months with colposcopy was normal with no suspicious or abnormal cells of note. The woman's symptoms had then resolved and discharged to primary care.

**Keywords:** Masson's Tumour; Vaginal Tumour; Intravascular Papillary Epithelial Hyperplasia; IPEH; Benign Gynaecology Tumour; Local Excision

### Introduction

Masson's tumour is described as a peculiar benign intravascular papillary endothelial hyperplasia (IPEH). Most common areas seen are the head and neck and the subcutis of the digits. Though very rare, it is reported in sites like the vulva and the cervix.

We are presenting an unusual case of a 90-year-old woman who was diagnosed with Masson's tumour of the vagina when she presented with postmenopausal bleeding.

### Case Report

A 90-year-old postmenopausal woman presented with recurrent postmenopausal bleeding. There was no associated pain or abnormal vaginal discharge.

She had total abdominal hysterectomy and bilateral salpingo-oophorectomy for endometrial cancer 23 years ago. She also had papillary intraductal breast cancer and had right mastectomy about 33 years ago. She was recently diagnosed with bladder cancer and is undergoing radiotherapy and is on apixaban for atrial fibrillation.

On examination, there was a 4 cm dark, well-defined lesion on right vulva, longstanding, with no increase in size recently. At colposcopy: a small area of granulation tissue noted on the vagina proximal to urethra, which was biopsied. The 4 x 4 cm lesion from the vulva was also biopsied and sent for histopathological evaluation.

Her vulval biopsy showed non-specific mild basal keratinocyte pigmentation, with no acute or chronic inflammation. No evidence of VIN. Vaginal biopsy did not show any evidence of malignancy but confirmed Masson's tumor which was described as stromal surface by flattened squamous epithelium with prominent haemorrhage and hyalinisation. Also, dilated vascular channel with intra-luminal papillary endothelial proliferation with mild cytological atypia which are reactive, resembling Masson's tumour.

It was further discussed in colposcopy multidisciplinary team meeting. Team suggested follow up in three months for assessment. Her repeat colposcopic examination in three months did not show any abnormality. Her symptoms of vaginal bleeding resolved. Patient was discharged to GP.

### Discussion

Masson's tumour or Masson's haemangioma was first described in 1923 by French physician Pierre Masson. It contributes to 2% of soft-tissue vascular tumours with a female predomination, commonly seen in 3<sup>rd</sup> and 4<sup>th</sup> decades of life. With its benign nature, the tumour is understood as a reactive process to vascular injury. They mostly arise from skin and subcutaneous tissues, presenting as red or purple nodules, usually painless in nature. Imaging techniques could help differentiate it from other soft tissue lesions, however histology is diagnostic. Microscopically characterised as the presence of an organizing thrombus in the vascular lumen with associated hyperplastic proliferation of endothelial cells.

Its pathogenesis is quite unclear, but believed as a thrombus from venous stasis triggering endothelial cells growth, partial disruption of thrombus by collagenases and formation of papillary structures. Vascular endothelial growth factor (VEG-F) and hypoxia inducible factor 1 alpha (HIF1 $\alpha$ ) which are related with angiogenesis and thrombus remodelling are expressed in these lesions

Histologically classified into three types: A- Primary type-found in the soft tissues of head, neck, hand and digits. B- Mixed type-arising from a background vascular abnormality. C- Extravascular type-least common, arising from haematomas.

Treatment is usually complete surgical excision with a very less recurrence risk which is noted in the event of incomplete removal. It is important to have a detailed histological examination and confirmation due to its close resemblance and presentation with angiosarcomas which are malignant in nature. Differentiating factors from a malignant lesion is the absence of necrosis, marked cytologic atypical or infiltrative growth pattern [1-3].

### Conclusion

As genital involvement of Masson's tumour is very rare, like in our case, with age of presentation and the site involved, it can commonly be mistaken with other conditions. Hence, a meticulous approach and a broader view to keep this condition in the differential diagnosis is very crucial in aiding with the appropriate treatment which is complete excision of the mass. It also helps to avoid burdening the patient and healthcare system with additional investigations and over-treatment.

## Bibliography

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