

Untangling the Mystery: Navigating a Rare Case of Vaginal Leiomyoma

Introduction

Vaginal leiomyoma, a rare benign smooth muscle tumor, poses diagnostic challenges due to its uncommon occurrence and varied presentations, warranting a comprehensive understanding for accurate diagnosis and management.

The coexistence of breast cancer further complicated the diagnostic process in current case.

Objective

To highlight the diagnostic challenges and management strategies in a rare case of vaginal leiomyoma in a 40-year-old woman with a recent breast cancer diagnosis.

Case Report

40-year-old premenopausal woman diagnosed with breast cancer underwent a PET scan, revealing incidental 18mm rectovaginal nodule. She has been referred to the gynecology clinic for further evaluation and management.

Diagnostic challenges encountered in the case:

Ct (Abdomen+ Pelvis)- Subtle contour irregularity of the posterior right aspect of the lower uterus correlates with the PET avid lesion. Exact aetiology of this is uncertain, however given FDG avidity a metastasis or primary uterine lesion are within the differential.

Transvaginal Pelvic Ultrasound- No sonographic correlation for the FDG avid focus in the right adnexal region within the limits of a transabdominal study.
Declined transvaginal scan.

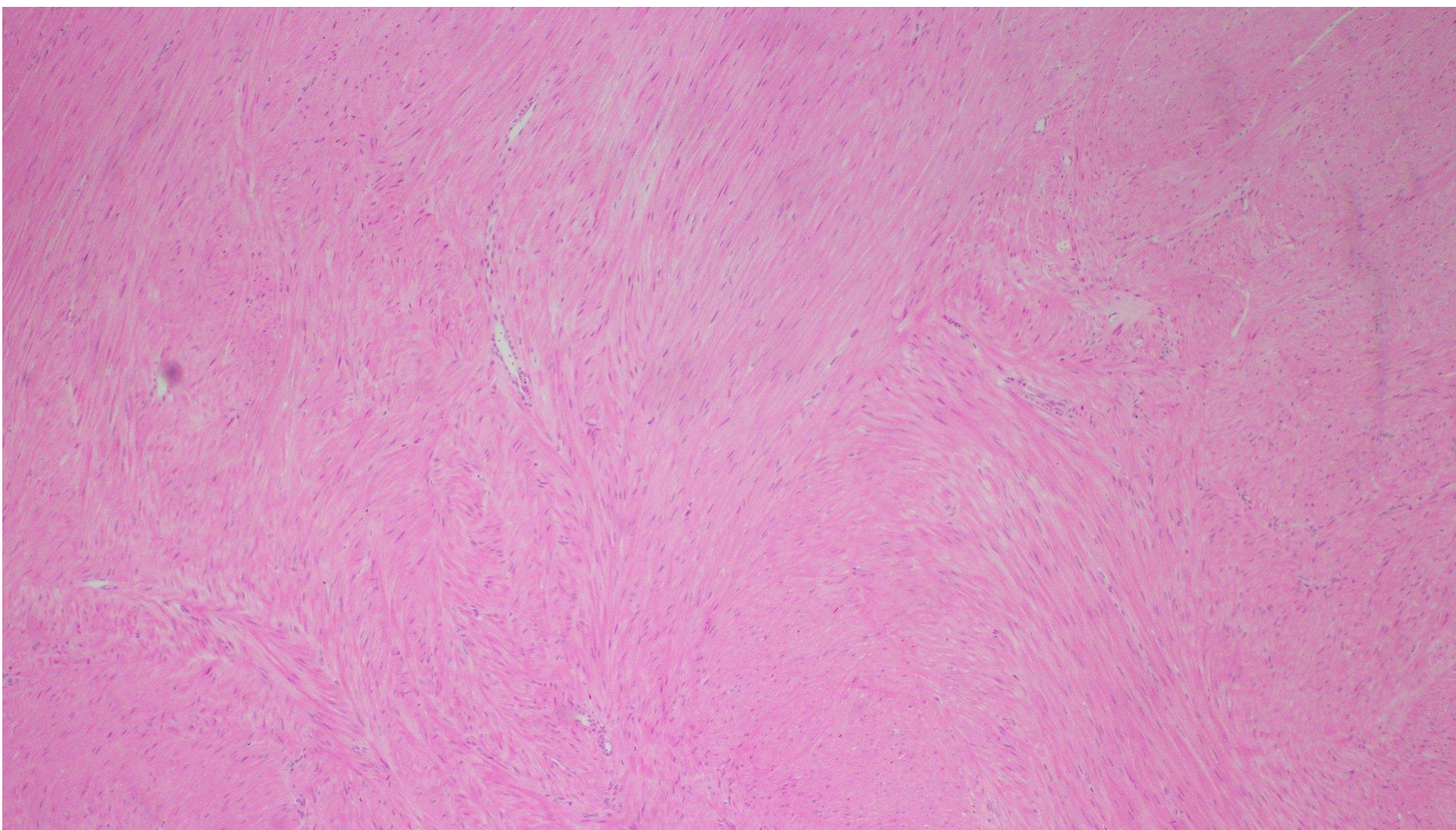
Flexible sigmoidoscopy –normal .

MRI pelvis :Overall, imaging findings are not diagnostic of a specific aetiology. Whilst imaging characteristics most favour that of a fibroid, and some fibroids can demonstrate FDG avidity, this is not a common finding. In the presence of a known breast malignancy, the possibility of metastatic disease warrants exclusion. A primary vaginal malignancy is also possible but this is rare when compared to secondary malignancies of the vagina.

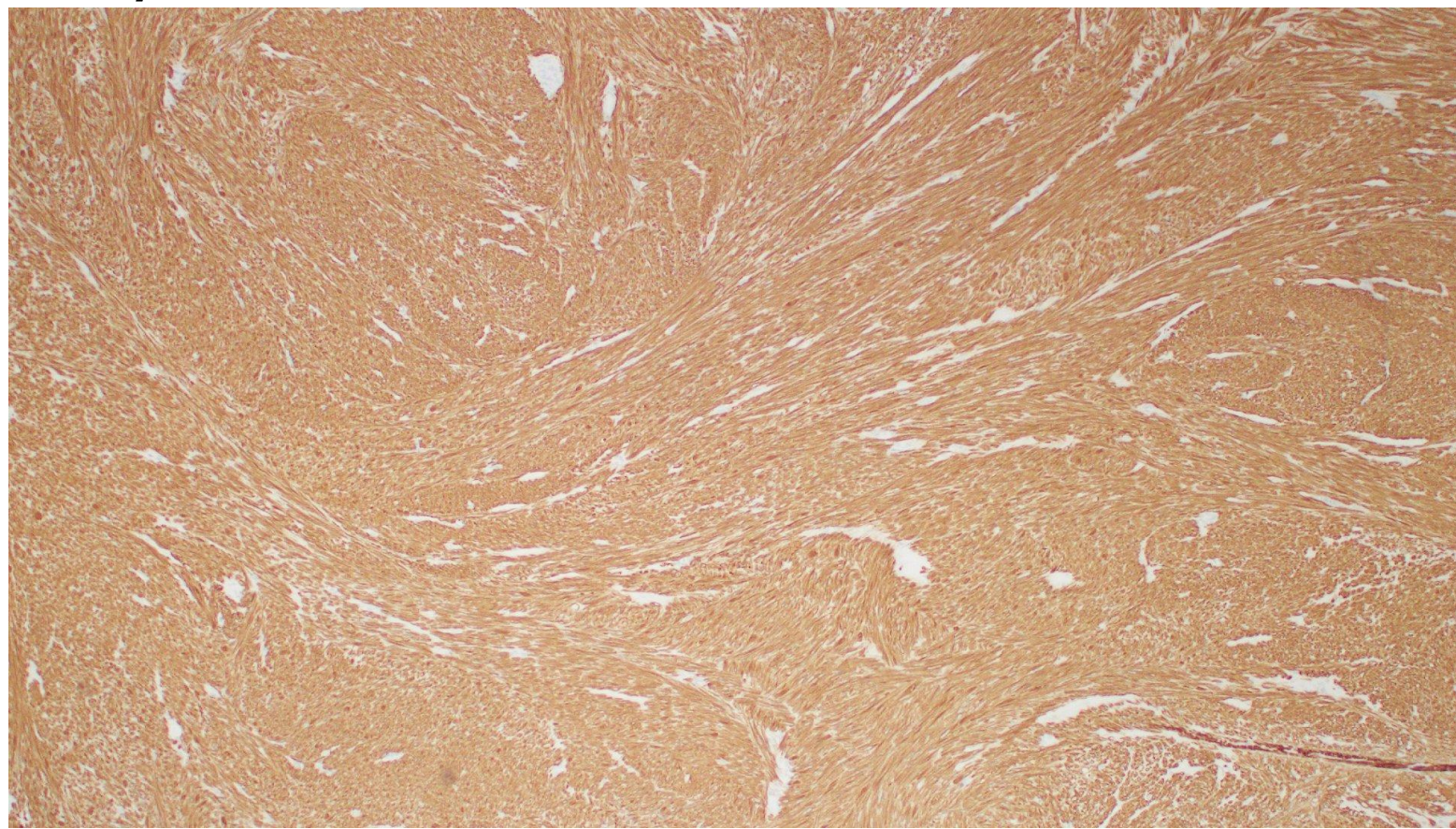
Further examination was conducted through a diagnostic hysteroscopy and biopsy, which revealed a normal endometrial cavity, a 2cm mobile mass located on the left posterolateral vaginal wall, and no groin lymphadenopathy.
The mass was excised from the vaginal wall and histopathology confirmed a vaginal leiomyoma. The patient had an uneventful postoperative period.

Histopathology :confirming 22*17*12mm vaginal leiomyoma.

Interweaving fascicles of bland smooth muscle noted



"Confirmatory immunostaining with desmin is positive,



Discussion:

This case report sheds light on the challenges associated with diagnosing vaginal leiomyomas. The presence of the fibroid in a posterolateral location, coupled with the patient's history of breast cancer, added complexity to the diagnostic process. As a result, there was an initial misdiagnosis and suspicion of potential metastasis, which understandably caused anxiety in the patient. The uncertainty surrounding the diagnosis also posed a challenge for the clinician, who had to navigate through various possibilities and carefully evaluate the available information to provide accurate and appropriate care.

Conclusion:

In conclusion, this case highlights the importance of considering vaginal leiomyomas in the differential diagnosis of vaginal masses, despite their rarity. Clinicians should maintain a high level of suspicion and include vaginal leiomyomas in future differential diagnoses to prevent misdiagnosis and ensure timely and appropriate management.