

Atypical Clinical - Radiological Presentation Leading to Surgical Intervention - Histopathology (Frozen Section) Key to Management

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Abstract: *Endometrial Tuberculosis may mimic endometrial malignancy in clinical presentation, radiological findings and laboratory tests. We report a case of genital tuberculosis in a postmenopausal woman where a provisional diagnosis of advanced endometrial carcinoma was made initially based on clinical - radiological findings. Patient was intra operatively diagnosed endometrial tuberculosis and confirmed post operatively, treated with anti - tubercular drugs and had clinical improvement. This case signifies mandatory need of a high index of suspicion in our country, towards pelvic tuberculosis preoperatively even in a postmenopausal woman with abnormal uterine bleeding.*

Keywords: Granulomatous inflammation, uterus infection, postmenopausal, necrotising granulomas, endometrial carcinoma

1. Introduction

Female genital tract tuberculosis (FGTB) is a chronic disease with varied presentation. The exact incidence of FGTB [1] is not known due to underreporting of cases, asymptomatic cases, vague symptoms and lack of reliable diagnostic tests. The most commonly involved organs are the fallopian tubes (95 - 100%), the endometrium (50 - 60%), and the ovaries (20 - 30%), respectively [2]

2. Case

A 51 year old Para 2 presented with complaints of postmenopausal bleeding & spotting on & off since 4 month. she had consulted local doctor and was advised MRI abdomen and pelvis. She attained menopause 3 years back. she is a known case of hypertension since 2 years and was recently diagnosed diabetes mellitus. She was average built with BMI

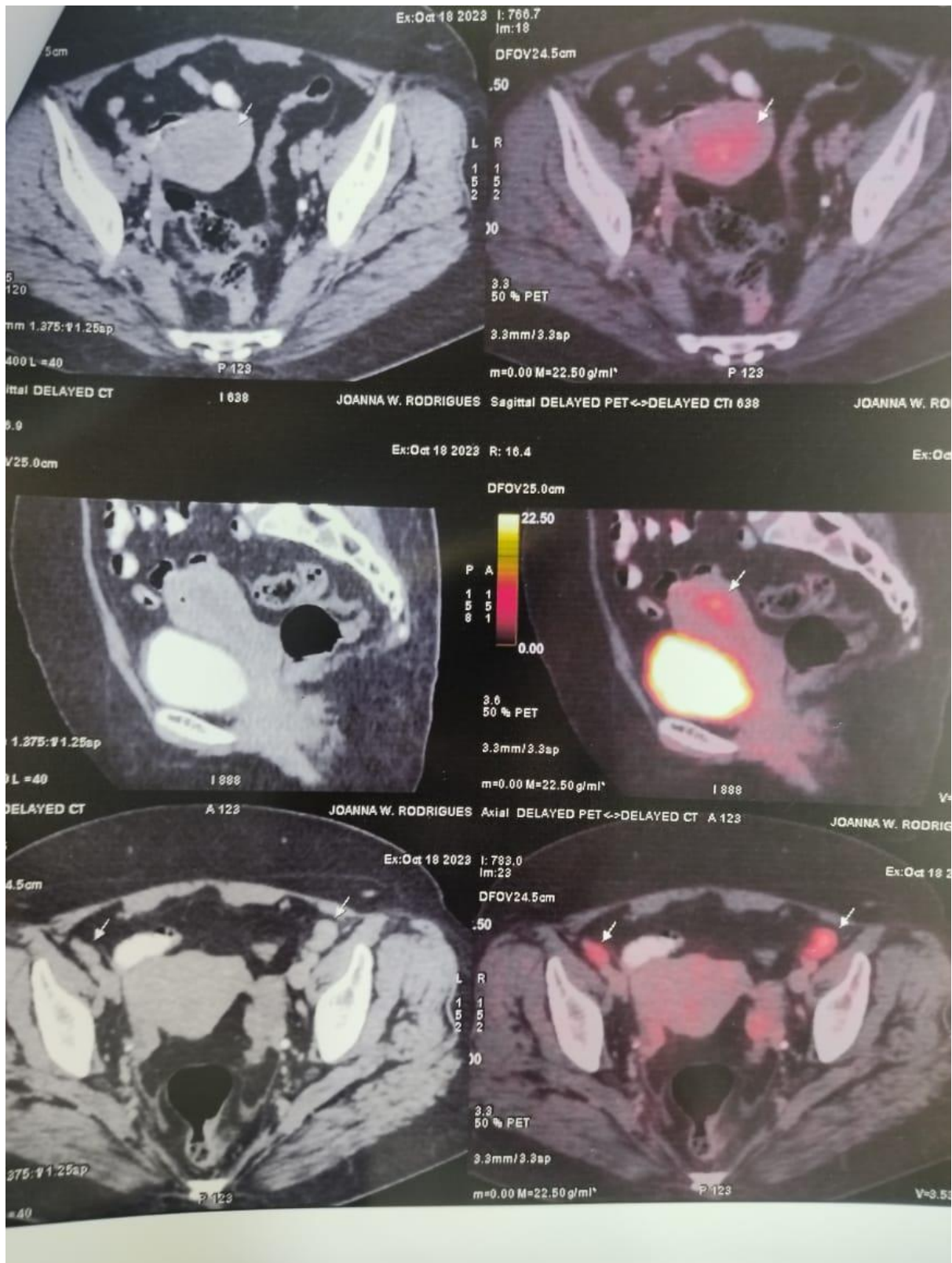
27.9. On pelvic examination cervix, vagina, vulva reveals normal, no growth or lesion seen and no bleeding, uterus size bulky. PAP smear was taken

MRI (A+P) – multiple subserosal and intramural fibroids with increased endometrial thickness with ill-defined endometrial lesion in fundal region possibility of a neoplastic etiology with adnexal deposits & lymph node metastases.

So, PET scan & all preoperative investigation advised.

Chest X –ray showed normal. All haematological and biochemical investigations were normal. PAP smear negative for intraepithelial lesion or malignancy.

PET SCAN report reveals metabolically active enhancing lesion in endometrial cavity, suggestive of neoplastic etiology with metabolically enhancing bilateral pelvic lymph node, suggestive of metastasis.



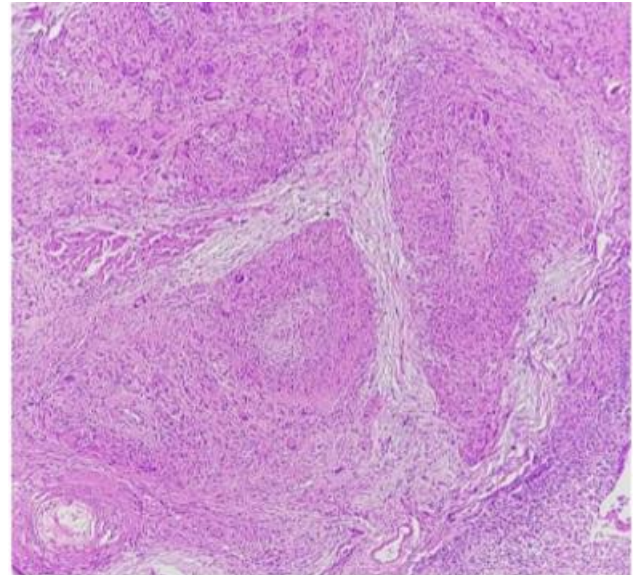
Laparotomy with Total abdominal hysterectomy & bilateral salphingoophorectomy with frozen section was planned with a diagnosis of endometrial carcinoma with pelvic lymph node metastasis. Oncosurgeon was involved in the surgery.

Intraoperatively - no adhesion, no ascitic fluid found, uterus bulky with multiple intramural fibroid, b/l tubes and ovaries appear normal, no omental nodules and liver surface appears normal.

Frozen Section

Grossly uterus with cervix & bilateral adnexae received, already cut open measuring 8.5x5.5x5.5 cm. Endometrial cavity shows a proliferative soft white growth extending to more than half of myometrium measuring 4.2x3.4x2.5 cm at the level of body & fundus. There is a presence of intramural fibroid measuring 2.8 cm in greatest dimension. Cervix is unremarkable. Left ovary measuring 3x2x1.5 cm, Left fallopian tube measuring 8.0 cm in length. Right ovary

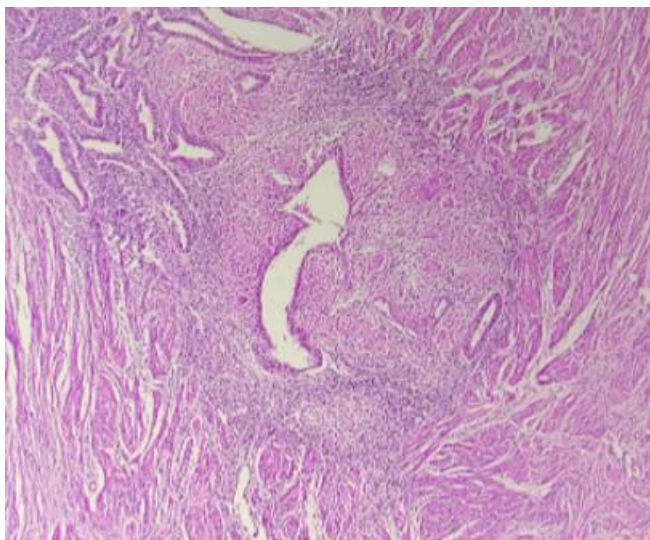
measuring 3x2.1x1.2 cm, Right fallopian tube measuring 7.8 cm in length. On cut opening bilateral adenexa unremarkable.



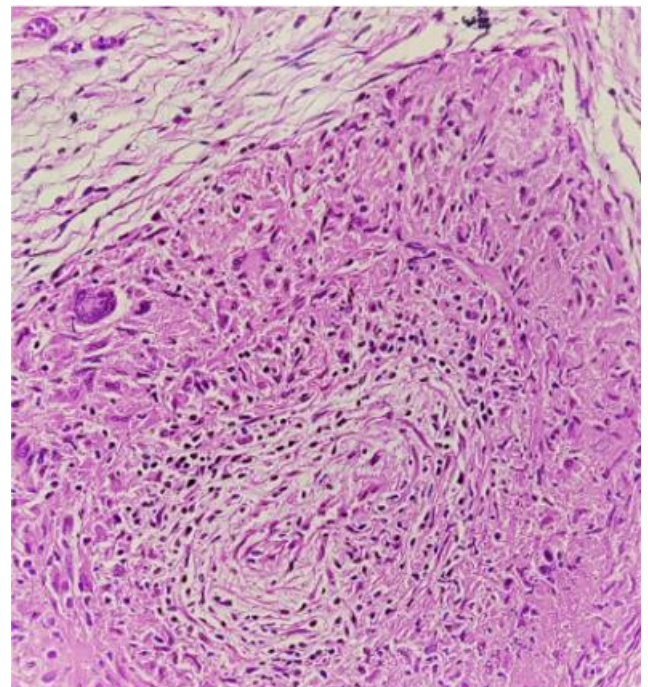
H&E 20X – shows confluent back to back granulomas in the myometrium

Frozen Diagnosis

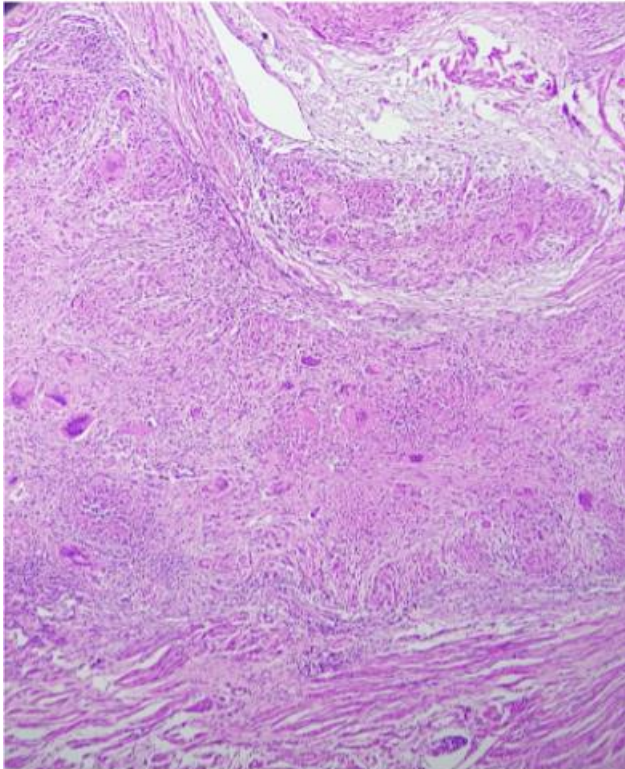
Granulomatous Inflammation. No unequivocal evidence of malignancy.



H&E 20X – Epithelioid granulomas seen at the site of adenomyosis



H&E 40X – well informed necrotizing epithelioid cell granulomas



H&E 20X - Confluent granulomas in the myometrium

So, no further radical dissection done. Abdominal wall closed in layers. Patient was discharged on 4th POD. She was started on antitubercular drug for 6 month and was under follow up in opd.

Gene Expert – No acid fast bacilli seen

Final histopathology report – Necrotising & non Necrotising granuloma involving endometrium, myometrium; cervix and left ovary at the subsequent sites of endometriosis.

Culture and sensitivity testing – Negative for Mycobacterium tuberculosis.

The patient responded to antitubercular therapy and follow up MRI report done after 4 month of Therapy which revealed significant resolution of the enlarged lymph nodes along bilateral iliac and aortocaval region.

3. Discussion

The incidence of extra pulmonary Tuberculosis is almost 14% in developing countries. Genital tuberculosis is rare in postmenopausal women and responsible for only approximately 1% of postmenopausal bleeding [4].

Female genital tuberculosis often mimics tumours in its clinical symptoms and radiological findings, leading to overdiagnosis and unnecessary psychological and financial burden.

Histopathology (frozen section) is proved to be important specially in this case for a correct diagnosis and to prevent from undergoing an extensive radical surgery.

The idea of presenting this case report is to consider a genital tuberculosis as a differential diagnosis in women with symptoms mimicking reproductive tumour is highly recommended as highlighted in this case report.

4. Conclusion

Postmenopausal endometrial tuberculosis is a rare, but it is imperative to consider as possibility in a patient of abnormal bleeding with thickened endometrium mimicking as endometrial malignancy, particularly in INDIA, to facilitate early diagnosis and treatment.

References

- [1] Grace GA, Devaleenal DB, Natrajan M. Genital tuberculosis in females. *Indian J Med Res.* 2017 Apr; 145 (4): 425 - 436. doi: 10.4103/ijmr. IJMR_1550_15. PMID: 28862174; PMCID: PMC5663156.
- [2] K. Nawaz. Frequency of endometrial tuberculosis: a histopathological study of endometrial specimens *J. Postgrad. Med. Inst.* 19 (2005), pp.97 - 100
- [3] Errarhay S, Hmidani N, Fatmi H, Saadi H, Bouchikhi C, Amarti A, Banani A. Post - menopausal endometrial tuberculosis mimicking carcinoma: An important differential diagnosis to consider. *Int J Mycobacteriol.* 2013 Jun; 2 (2): 118 - 20. doi: 10.1016/j.ijmyco.2013.04.004. Epub 2013 May 10. PMID: 26785900.
- [4] Chishti U, Elorbany S, Akhtar M, Williams J, Heenan S, Barton DPJ. Genital tuberculosis in a post - menopausal Caucasian woman: a case report. *J Obstet Gynaecol.* 2019 Feb; 39 (2): 284 - 285. doi: 10.1080/01443615.2018.1468741. Epub 2018 Sep 19. PMID: 30230398.