



Xanthogranulomatous oophoritis - masquerading as ovarian neoplasm

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ABSTRACT

Xanthogranulomatous inflammation is an uncommon form of chronic inflammation. The most commonly affected organs are the kidney and gallbladder. Other organs in which xanthogranulomatous inflammation has been reported are the stomach, anorectal area, bone, urinary bladder, testis, epididymis, vagina, endometrium and fallopian tube. Only a few cases involving the ovary have been reported. In the present patient it has been misdiagnosed as ovarian tumour clinically and radiologically, leading to psychological trauma to the patient.

INTRODUCTION

Xanthogranulomatous inflammation is an uncommon form of chronic inflammation in which the tissue of the affected organ is destroyed and is replaced by a large number of lipid-containing macrophages with an admixture of lymphocytes, plasma cells, multinucleated giant cells, and neutrophils. The most commonly affected organs are the kidney and gallbladder [1]. Other organs in which xanthogranulomatous inflammation has been reported are the stomach, anorectal area, bone, urinary bladder, testis, epididymis, vagina, endometrium and fallopian tube. Only a few cases involving the ovary have been reported [2].

CASE REPORT

A 28-year-old married female presented to the gynecology out patient department with amenorrhea and abdominal lump for 11 months with weight loss and mucoid discharge per rectum for 2 months. Per abdominal examination revealed a midline, non tender, cystic mass arising from pelvis going above the umbilicus. Haematological and urine examination were within normal limits. Urine pregnancy test was negative. Both LH and FSH levels were within normal limits.

On investigating, Ultrasonography revealed a cystic lesion measuring 5x5cms arising from the pelvis with homogenous low level interstitial echoes, surrounded by a thick wall, it was suggestive of ovarian neoplasm. Computerized tomography of pelvis showed aseptate, unilocular cystic mass seen in the right adnexal area with thick enhancing walls, homogenous low

density fluid contents, no calcification was noted and it was suggestive of ovarian neoplasm. There were multiple lymph nodes in retroperitoneum.

A provisional diagnosis of ovarian neoplasm was made and a differential diagnosis of genital tuberculosis was kept and a decision for explorative laparotomy was taken. Bilateral salpingo-oophorectomy was done. Intraoperatively, there was a cystic mass arising from the right side of fundus and was seen with adhesions to parietal wall and gut loops.

PATHOLOGY

Grossly the cystic mass was measuring 5x3cms. Cut surface of mass was cystic filled with foul smelling purulent material. Cyst was unilocular and thick walled measuring 0.7cms (Fig. 1). Cyst contents were sent for culture and grew *Escherichia coli*. Sections from the right ovarian cystic mass showed complete replacement of the mucosa by granulation tissue, with an abundance of foamy histiocytes and siderophages (Fig. 2, 3). ZN stain was negative for acid fast bacilli. Based on gross morphology, histopathological findings and positive culture a diagnosis of xanthogranulomatous oophoritis was made. Sections from uterus, cervix, bilateral tubes and left sided ovary and retroperitoneal group of lymph nodes were unremarkable.

Patient was given proper counselling after the histopathological diagnosis, explaining that it was an inflammatory lesion not a neoplasm. She is under follow up and is keeping fine.

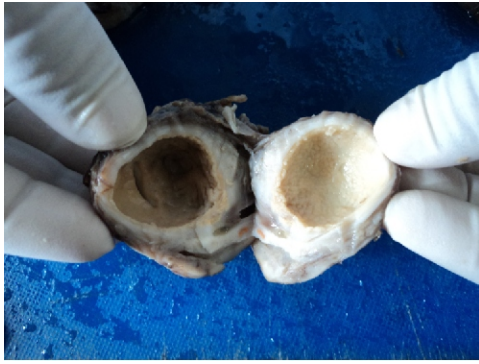


Figure 1: Gross appearance of xanthogranulomatous oophoritis. Cut surface of ovary showing unilocular cyst lined by thick wall.

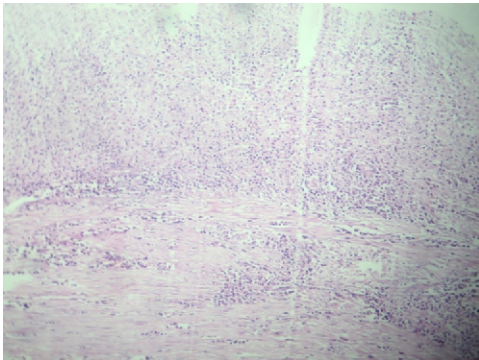


Figure 2: Low power showing complete replacement of the mucosa by granulation tissue, with an abundance of foamy histiocytes and siderophages. (H&E/10X)

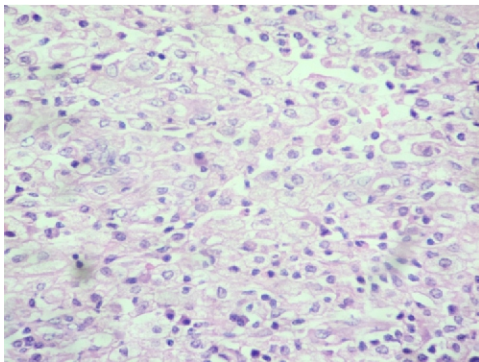


Figure 3: High power showing sheets of foamy histiocytes. (H&E/100X)

DISCUSSION:

Xanthogranulomatous inflammation of the female genital tract is very rare and only a few cases of xanthogranulomatous oophoritis have been reported from India. The involved ovary is usually replaced by a solid, yellow, lobulated mass that is well circumscribed, sometimes involving adjacent organs, thereby mimicking malignancy [3-4].

The pathogenesis of xanthogranulomatous inflammation remains unclear. Many unrelated disorders may have the same mechanism of foam cell production. Proposed causes are infection, ineffective antibiotic therapy, abnormality in lipid metabolism, endometriosis, and ineffective clearance of bacteria by phagocytes. An association does exist between the uses of intrauterine contraceptive devices, pelvic inflammatory disease,

and unilateral or bilateral tubo-ovarian abscess. A combination of factors may be responsible [2].

Because of the presence of foamy histiocytes, malakoplakia should be considered in the differential diagnosis of xanthogranulomatous inflammation. In our case no Michaelis-Gutmann bodies were identified, thus malakoplakia was excluded.

CONCLUSION:

To conclude, most of the patients using intra-uterine devices and with pelvic inflammatory disease, endometriosis should be followed up closely because they are prone for xanthogranulomatous oophoritis. So that it is diagnosed early and this could lead to less mental and physical trauma.

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