

Xanthogranulomatous Oophoritis: A Rare Case Report

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Abstract

Case Report

Xanthogranulomatous oophoritis is a very rare etiology of ovarian masses. Xanthogranulomatous inflammation commonly affects kidney, gallbladder, anorectal area, bone, stomach, ovary and testis. It is a rare condition with very few cases reported in literature. A 20 years old woman was referred for chronic pelvic pain; supra-pubic ultrasonography showed a well-defined image of a large right adnexal mass, abdomio-pelvic scan showed an ovarian mass in touch with the small bowel, salpingo-oophorectomy was performed. Histological examination of the surgical pieces was consistent with xanthogranulomatous oophoritis. The etiology of this entity is still unknown.

Keywords: Xanthogranulomatous oophoritis, ovarian masses, abdomio-pelvic scan, etiology.

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INTRODUCTION

Xanthogranulomatous inflammation is an uncommon form of chronic inflammatory process that leads to destroy tissues of affected organs [1]. The most commonly affected organs are the kidney, gallbladder, ano-rectal area, bone, stomach, and testis [2].

Xanthogranulomatous oophoritis is a rare diagnosis of ovarian masses, it is characterized by an infiltration of the tissues by lipid-laden histiocytes admixed with lymphocytes, plasma cells, and polymorphonuclear leukocytes. We report a case of Xanthogranulomatous oophoritis, since it's a very rare entity.

CASE REPORT

A 20 years old woman, unmarried, comes from a rural area, which has an appendectomy two years ago, was referred to our gynecology and obstetrics department in Fès, complaining of abdominal pain in the last 2 months, with no other associated gynecologic or extra-gynecologic sign.

Prior to coming to our hospital, she underwent a laparotomy in another hospital with no further action taken. Her menstrual cycle was normal with regular periods. No abnormality was detected on systemic examination.

Abdominal examination showed an increase of abdominal volume, and a pelvic mass was palpated at the right lateral uterine side. It has a solid consistency,

and it was movable relative to superficial and deep plane. Gynecological examination was not performed since the patient was still a virgin.

Supra-pubic ultrasonography showed a well-defined image of a large mass. It was localized in the right adnexal region and measured 60*70mm.

Abdomio-pelvic scan showed an ovarian mass in touch with small bowel, which measured 67mm*58mm. (Figure 1).

After concertation between gynecologic and general surgery doctors, we decided to perform a laparotomy in two steps:

- At first: dissection in view to liberate the small bowel from the mass.
- Secondly: salpingo-oophorectomy with multiple biopsies, and peritoneal fluid study.

The postoperative course was remarkable. Histological examination of the surgical pieces was consistent with xanthogranulomatous oophoritis. Peritoneal fluid cytology showed an inflammatory and hemorrhagic fluid, no suspicious cells were detected.

DISCUSSION

Xanthogranulomatous inflammation of the female genital tract is characterized by destruction of the tissues of affected organs, replaced by chronic inflammatory cells such as lymphocytes, plasma cells, occasional neutrophils with or without multinucleated giant cells [2].

The etiopathogenesis is not defined yet, but the proposed causes are chronic inflammation secondary to any pelvic inflammatory disease, pelvic endometriosis, primary infertility, long-standing intrauterine devices, chemotherapy for breast cancer and long antibiotic use [4].

Punia *et al.*, described xanthogranulomatous oophoritis and salpingitis as a late sequel of inadequately treated pelvic inflammatory disease caused by *Staphylococcus* [7]. The average age of patients with affected ovaries is 31 years, the youngest case reported was 2 years old [1, 5].

Yener *et al.* in their research suggested that patients who have xanthogranulomatous inflammation may have the predisposing chronic active follicular salpingitis [8].

Patients usually come with a long history of antibiotic intake. The clinical signs are not specific; it could include fever, abdominal pain, abdominal mass, menorrhagia, anemic syndrome, or anorexia.

Pelvic examination shows usually an adnexal mass with or without pelvic tenderness. The clinical and radiological findings along with macroscopic

examination can mimic xanthogranulomatous oophoritis as ovarian malignancy [6].

It's frequently misdiagnosed as ovarian malignancy due to its unusual appearances at computed tomography [9]. The management of xanthogranulomatous oophoritis is an oophorectomy.

Frozen section can be performed in order to rule out malignancy [10], but it was not performed in this case. Lipid laden macrophages, foamy histiocytes, and other chronic inflammatory cells like lymphocytes, plasma cells, occasional neutrophils with or without multinucleated cells or Touton giant cells with no granuloma formation could mark xanthogranulomatous inflammation [8].

CONCLUSION

Xanthogranulomatous oophoritis is a rare entity. It's a serious challenge to surgeons and pathologists. Gynecologists and general surgeons shouldn't ignore this entity while dealing with patients with such clinical signs. A preoperative diagnosis of this entity should be considered to avoid radical surgical treatment, especially in young patients.

Iconography

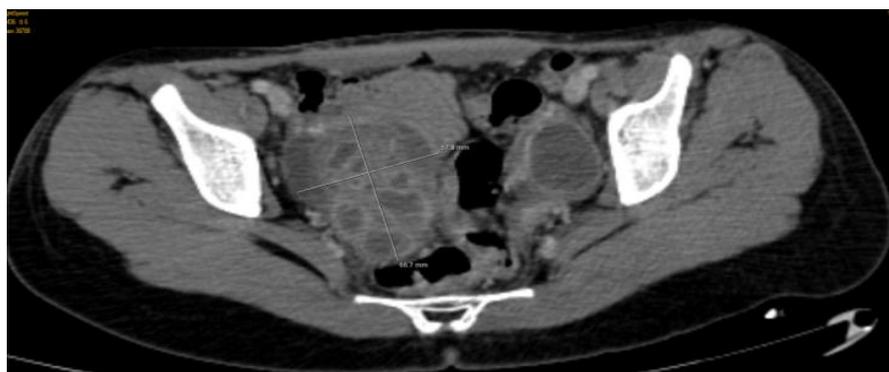


Fig-1: Abdomio-pelvic scan showed an ovarian mass



Fig-2: Salpingo-oophorectomy with adnexal mass

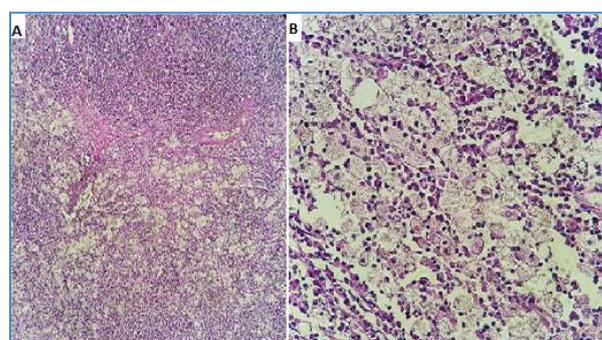


Fig-3: Photomicrograph showing infiltration and replacement of ovarian stroma by foamy histiocytes: A: low power view, B: high power view

REFERENCES

1. Jung SE, Lee JM, Lee KY, Han KT, Hahn ST. Xanthogranulomatous Oophoritis: MR Imaging

- findings with Pathologic Correlation. *AJR*. 2002; 178:749-51.
2. Bindu SM, Mahajan MS. Xanthogranulomatous oophoritis: A case report with review of literature. *Int J Health Allied Sci*. 2014; 3:187-9.
 3. Zhang XS, Dong HY, Zhang LL, Desouki MM, Zhao C. Xanthogranulomatous inflammation of the female genital tract: Report of three cases. *J Cancer*. 2012; 3:100- 6.
 4. Yener N, Ilter E, Midi A. Xanthogranulomatous salpingitis as a rare pathologic aspect of chronic active pelvic inflammatory disease. *Indian J Pathol Microbiol*. 2011; 54:141-3.
 5. Kaur S, Bodal VK, Bal MS, Bhagat R, Mohi MK, Kaur J. Oophoritis with xanthogranulomatous change - A case report. *Res Rev J Med Health Sci*. 2013;2:8- 9
 6. Gami N, Mundhra R, Guleria K, Arora VK, Garg S. Recurrent pyometra and xanthogranulomatous salpingitis: A rare pathologic association in a postmenopausal lady. *J Mid-life Health*. 2014; 5:156-8.
 7. Punia RS, Aggarwal R, Amanjit, Mohan H. Xanthogranulomatous oophoritis and salpingitis: late sequelae of inadequately treated staphylococcal PID. *Indian J Pathol Microbiol*. 2003; 46:80.
 8. Yener N, Ilter E, Midi A. Xanthogranulomatous salpingitis as a rare pathologic aspect of chronic active pelvic inflammatory disease. *Indian J Pathol Microbiol*. 2011; 54:141-3.
 9. Kim SH, Kim SH, Yang DM, Kim KA. Unusual causes of tuboovarian abscess: CT and MRI Imaging Findings. *Radiographics*. 2004; 24(6):1575-89. 10:
 10. Khan B, Aziz AB, Ahmed R. Case of Xanthogranulomatous Oophoritis. *J Ayub Med Coll Abbottabad*. 2017; 29:162-4.