CASE REPORT: ACTINOMYCOSIS OVARY; A DIAGNOSTIC DILEMMA

Dr. Rabia Butt

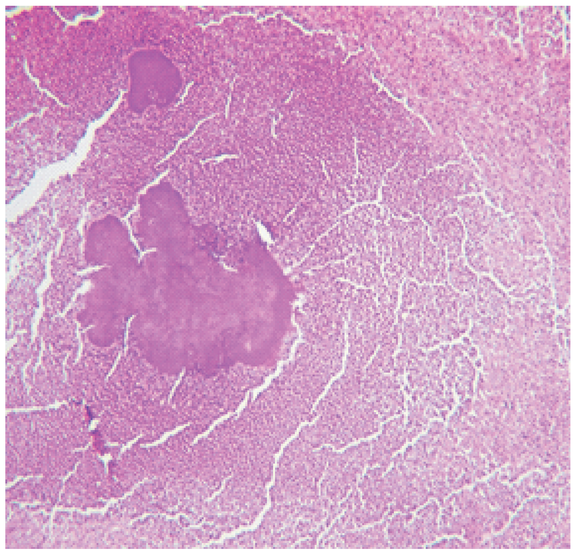
BACKGROUND

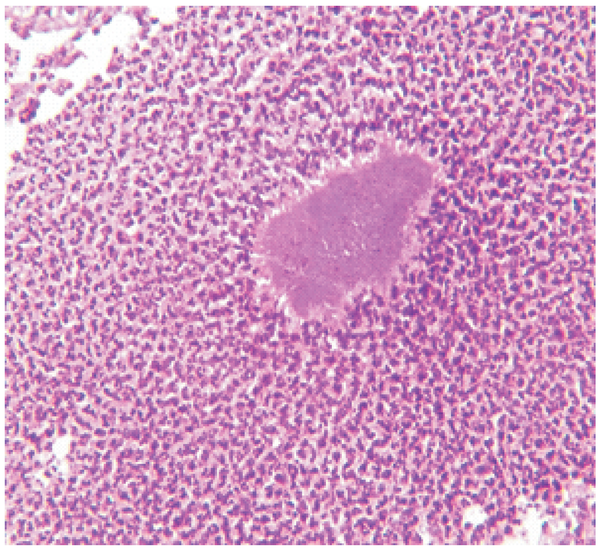
Pelvic actinomycosis is a rare disease with a low detection rate of 3% []. It is caused by anaerobic bacterium Actinomycesisraelii. Cervico-facial, thoracic and abdominal actinomycosis is the commonest. Use of intrauterine device for more than three years is an important risk factor for the occurrence in female genital tract []. Clinical presentation usually mimics that of malignancy, making diagnosis challenging and may lead to extensive surgery. Pre-operative diagnostic tools are non-specific but a diagnosis can be made retrospectively after extensive surgical procedure [].

We report a case of actinomycosis ovary, in 25 years old female, diagnosed after surgery and histopathological examination.

CASE PRESENTATION

25 years oldmarried female presented in outdoor clinic with complains of lower abdominal pain and fever for one week. She belonged to lower socio-economic status so previous workup for any other co-morbiditieswere unknown. History of intra uterine device was unknown. Physical examination revealed lower abdominal tenderness and fever .On palpation right sided lower abdominal mass was found for which abdominal ultrasonography was performed. Ultrasonography revealed a right adenexal mass. Other laboratory tests were un-remarkable. Provisional diagnosis of pelvic inflammatory disease was made. Standard operative procedure was performed. The right adnexal mass was identified, excised and sent for histological cexamination. Pus was drained from peritoneal cavity. The patient was stable and discharged after the procedure.Grossly, multiple fragments were received measuring 3.70x3.5x2.80 cm in aggregate. Microscopic examination revealed benign ovarian stroma showing dense pyogenic inflammation along with multiple PAS positiveactinomyces colonies.





DISCUSSION

Ovarian actinomycosis is a rare disease caused by filamentous, gram-positive, non–acid-fast, anaerobic-to-microaerophilic bacteria []. Most common sites of actinomycosis infection include cervico-facial followed by abdominal and then lungs []. Our case was an example of ovarian actinomycosis.

Pelvic actinomycosis is even rarer having frequency of only 3%, with 2% reported cases in ovary. Predisposing factors include intrauterine devices (IUDs), vaginal pessaries, uterine prolapse and septic abortion.Ovary, as site of infection is even rarer with most cases having history of intra uterine devices [,].

Clinical presentation varies according to the site of infection. Symptoms of patients with pelvic IUD-associated actinomycosis may mimic symptoms of gynecological malignant tumors, or uterine myoma or adenomyosis, by presenting as a genital mass without fever. Presence of adhesions due to chronic inflammation can be noted [].However patients can also present, as in our case, with lower abdominal pain, constipation, and/or vaginal discharge. The duration of symptoms is usually 2 months at the time of diagnosis. Fever can occur due to complication of peritonitis [].

CT-scan,MRI and histopathologyare considered as gold standard for diagnosis. CT-scan shows a solid mass with low attenuation area with less frequently, a cystic mass.Other methods of detection are anaerobic culture studies, immunofluorescence and presence of sulphar granules [].

Treatment options include medical and surgical modalities which largely depend on the system involved by the infection. In cases of IUCD related actinomycosis, removal of the foreign material is advised. Pencillin G is the first line of treatment for over 2-6 months duration. In extensive cases surgical debribment of sinuses, tract and abscess is recommended [,].

REFERENCES

1. Singh S, Batra A, Dua S, Duhan A. Ovarian actinomycosis: Presenting as ovarian mass without any history of intra-uterine copper device. Journal of global infectious diseases. 2012 Oct 1;4(4):222._Ref464556208
2. Srinivas GN, Chalageri AB, Gupta A, Vijayanand M. Bilateral ovarian actinomycosis masquerading as ovarian malignancy; without any history of intra-uterine contraceptive device. Medical Journal of Dr. DY Patil University. 2013 Oct 1;6(4):468._Ref464556219
3. Wan KM, Rhou YJ, Berges TT, Campbell N, Carter J, Anderson L, Pather S. Pelvic Actinomycosis Mimicking Ovarian Cancer: A Report of 3 Cases and Review of the Literature. Austin J Obstet Gynecol. 2014;1(3):3._Ref464556228
4. SmegoJr RA, Foglia G. Actinomycosis. Clinical infectious diseases. 1998 Jun 1:1255-61._Ref464556254
5. Valour F, Sénéchal A, Dupieux C, Karsenty J, Lustig S, Breton P, Gleizal A, Boussel L, Laurent F, Braun E, Chidiac C. Actinomycosis: etiology, clinical features, diagnosis, treatment, and management. Infect Drug Resist. 2014 Jul 5;7:183-97._Ref464556264
6. Marella VK, Hakimian O, Wise GJ, Silver DA. Pelvic actinomycosis: urologic perspective. International braz j urol. 2004 Oct;30(5):367-76._Ref464556284
7. TasaduqFazili MD, McNeil MM. Actinomyces species (Actinomycoses)._Ref464556277
8. Montori G, Allegri A, Merigo G, Fabrizio P, Poiasina E, Coccolini F, Manfredi R, Piazzalunga D, Tebaldi A, Filippin F, Gianatti A. Intra-abdominal actinomycosis, the great mime: case report and literature review. Emergency Medicine and Health Care. 2015 Apr 23;3(1):2._Ref464556299
9. Laios A, Terekh I, Majd HS, Pathiraja P, Manek S, Haldar K. Differentiating pelvic actinomycosis from advanced ovarian cancer: a report of two cases, management reflections and literature review. Gynecologic Oncology Research and Practice. 2014 Dec 10;1(1):1._Ref464556318
10. Valour F, Sénéchal A, Dupieux C, Karsenty J, Lustig S, Breton P, Gleizal A, Boussel L, Laurent F, Braun E, Chidiac C. Actinomycosis: etiology, clinical features, diagnosis, treatment, and management. Infect Drug Resist. 2014 Jul 5;7:183-97._Ref464556306