



Actinomycotic salpingitis - A complication of misplaced Cu-T

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Introduction

Actinomycosis is a very rare chronic granulomatous infection due to actinomyces israelii, a gram-positive anaerobic bacteria bearing superficial resemblance to fungi. The actinomyces are present in the mouth, intestine and vagina as commensals. Pelvic actinomycosis is mainly seen in women using intrauterine contraceptive device (IUCD)¹⁻⁴.

Case report

A 32 years old G4P3AO was admitted on 16th January, 2004 with complaint of lump in the lower abdomen associated with pain since last 8 days.

On abdominal examination a firm, tender, fixed mass with ill-defined margins was palpated in the right iliac fossa. On speculum examination the cervix was high up and the vagina was healthy. On vaginal examination the mass was palpable in the right fornix and was extending into the pouch of Douglas. It was difficult to palpate the uterus separately from the mass. Ultrasonography showed mixed echogenic mass of 8.2 x 6.2 cm size in the lower abdomen. The uterus and the cervix were normal. All other investigations were within normal limits. With the diagnosis of tubo-ovarian mass (TO mass) laparotomy was done on 19th January, 2004 after conservative treatment with tablet ciprofloxacin 500 mg twice a day and tablet nimesulide 100 mg twice a day along with vitamin B-complex and vitamin C. On opening the abdomen there was a TO mass on the right side extending on to the posterior surface of the uterus. The bowel and omentum were densely adherent to the mass. The uterus was normal in size.

The left ovary was normal. There was left sided moderate hydrosalpinx. The adhesions were released and TO mass was dissected. During dissection a Cu-T without thread was found embedded in between the TO mass and the posterior wall of the uterus. There was injury to ileum during surgery which was sutured. Total abdominal hysterectomy with excision of the right TO mass, adherent omentum and left hydrosalpinx was done. The left ovary was preserved.

Suspecting tuberculous infection besides higher antibiotics (injection cefotaxim sodium 1g intramuscularly 8 hourly, injection gentamycin 80 mg 12 hourly and injection metronidazole 500 mg intravenously 8 hourly), she was given streptomycin 0.75 g intramuscularly and isoniazid 300mg orally daily. On 7th day speculum examination showed inflammation and discharge at the vault of the vagina. On vaginal examination there was indurated mass in the right fornix. At this stage histopathology reported actinomycosis of the right fallopian tube (Figures 1 and 2) and the omentum without any evidence of actinomycosis in ovary, uterus and cervix. Thereafter she was given benzylpenicillin 5 million units intravenously 6 hourly for 3 weeks. Vaginal and speculum examination and sonography showed that the indurated mass in the right fornix was regressing. She was discharged on 2nd March, 2004 with advice to take doxycycline 200mg orally daily for three weeks. At follow-up after 3 weeks there was complete regression of the mass.

On interrogation after the operation she gave history of Cu-T insertion after her last delivery, 16 years back. One day she noticed a thread passing through vagina and thought that Cu-T was expelled. Two years later she conceived and underwent hysterotomy with tubectomy at a private hospital where she had not disclosed anything about Cu-T. Possibly the Cu-T colonized by actinomyces perforated the uterus and migrated to the pouch of douglas before her last pregnancy and took about 14 years to become clinically evident.

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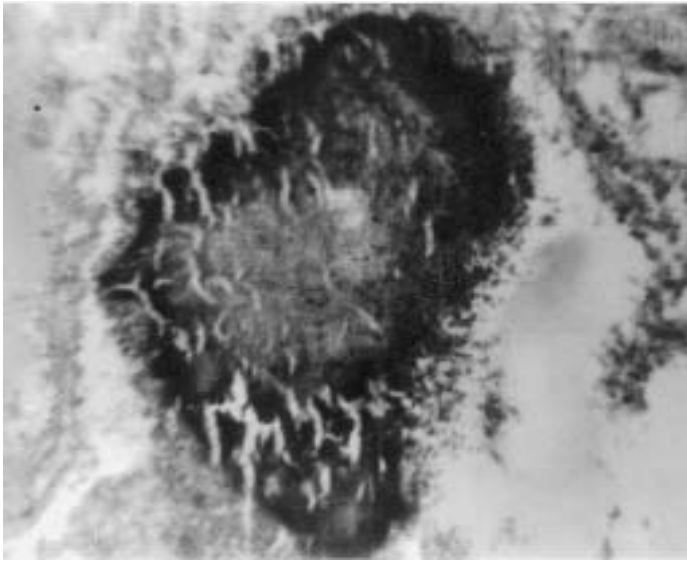


Figure 1. Microphotograph showing actinomycotic colony in tubal wall with mixed inflammatory infiltrate (H&F, 100x)

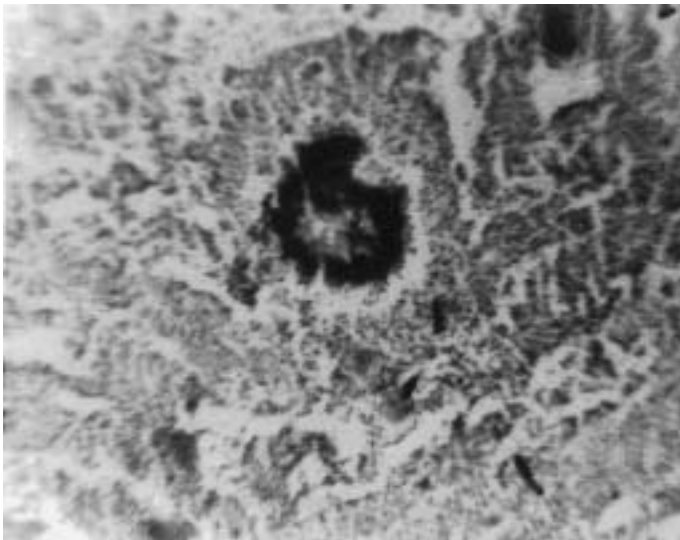


Figure 2. Microphotograph showing actinomycotic colony at higher magnification with sunray appearance (H&F, 450 X).

Discussion

The presence of actinomyces in reproductive tract of women who do not use IUCD has not been firmly established ¹. The IUCD may become colonized by actinomyces with or without clinical signs. The pelvic actinomycosis can occur in any part of the genital tract, but the most common sites are the tube, ovary and pelvic cellular tissue. It is a chronic disease characterized by multiple abscesses and granulomata, tissue destruction, extensive fibrosis and formation of sinuses. It is difficult to diagnose the condition clinically. The diagnosis is done on pathological, serological and bacteriological examinations. Timely detection and treatment prevents complication like pelvic actinomycotic masses leading to frozen pelvis. A delay in diagnosis can even be fatal.

The actinomyces are sensitive to many antibiotics, but penetration of the drug into densely fibrotic diseased tissue is poor. Thus large doses are required for prolonged periods of 2 to 3 months besides surgery. Benzylpenicillin is the drug of choice for all forms of actinomycosis. The next in order of choices are ampicillin, doxycycline and erythromycin ⁵.

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