LEFT TUBO-OVARIAN ACTINOMYOCOSIS

by

JAYASHREE THOMAS,* M.D., (Late)
R. NARAYANAN,** M.D.
and
JOHN A. THOMAS,*** M.D., D.H.E.

Introduction

A case of left tubo-ovarian actinomycosis associated with long term usage of an intrauterine contraceptive device is reported. The literature is briefly reviewed and the importance of suspecting this infection in women developing pelvic abscesses, while using an intrauterine device, is emphasised.

Actinomycosis of the female genital tract, though a well known entity, is rare. Approximately 300 cases of this condition have been recorded in world literature till 1972 (Schiffer, 1975). In most such reported cases, the source of infection has been attributable to the intestinal tract, particularly the appendix (McCarthy, 1955). The possibility of an ascending mode of infection has, however, been suggested by various authors (Brenner, 1967, Hager and Majumdar, 1979), most commonly associated with intrauterine contraceptive devices.

The following is the report of a case of actinomycotic abscess involving the left tube and ovary. The contributory factor could possibly have been the prolonged use of an intrauterine contraceptive device.

*Assistant Professor, Department of Pathology.

**Associate Professor, Department of Obstetrics and Gynaecology.

***Professor and Head, Department of Pathology.

St. John's Medical College, Bangalore.

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CASE REPORT

A 40 year old fourth gravida presented with continuous high fever of 45 days' duration; the fever was not responding to chloramphenicol, trimethoprim or gentamycin. Following the third delivery 12 years earlier, a Lippes' loop had been inserted.

Pelvic examination showed an intrauterine contraceptive device to be present in the cervical canal. The device was removed. There was continued tenderness in all the fornices with an irregular, fixed, firm mass in the left fornix.

An intravenous pyelogram showed severe left hydronephrosis with hydroureter. Cystoscopy showed the presence of an extrinsic mass pressing on the left wall of the bladder.

Trimethoprim therapy was continued, and, when she became afebrile, a laparotomy was done. A left tubo-ovarian abscess was removed completely, along with the right adnexa and uterus. Pus from the abscess was sterile on routine microbiological culture. Anaerobic culture was not done.

The post-operative period was uneventful. The laparotomy wound healed well and the patient was discharged on the ninth post-operative day.

Histopathologic Examination

The specimen consisted of a uterus without cervix, but with bilateral adnexae. The left adnexa was replaced by a large, irregular, circumscribed mass, which measured 7 x 5 x 2.5

cms. On sectioning through this mass, a multiloculated abscess cavity was seen, with thick yellow fibrotic walls. The cavity was filled with thick creamy pus. The uterus and right adnexa showed no lesion.

Histologic sections from the tubo-ovarian mass showed multiple abscesses surrounded by chronic inflammatory cells and dense aggregates of fibroblasts. Lipid macrophages were prominent in the inflammatory exudate. In the centre of two such abscesses, there were pseudofungal colonies, with radiating eosinophilic peripheral clubs. Adherent to these clubs were many polymorpho-nuclear leukocytes. With the Gram stain, Gram-positive branching filaments characteristic of Actinomyces were demonstrable. Sections from the uterine endometrium and right adnexa showed no significant lesion.

Discussion

McCarthy (1955), collected 157 cases of female genital tract actinomycosis from world literature, and observed that in 144 of these, the infection was attributed to spread from an infected appendix. Uterine involvement was present in only 14 of the cases reviewed. Actinomycotic infection of the female genital tract by an ascending route is also a distinct possibility. Twenty-six cases of pelvic actinomycosis associated with various intrauterine devices have been reported (Hager and Majumdar, 1979), where, the device probably causes a break in the mucous membrane and promotes an ascending infection.

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References

1. Hager, W. D. and Majumdar, B.: Am. J. Clin. Pathol. 133: 60, 1979.
2. Mc Carthy, J.: J. Path. Bac. 69: 175, 1955.

See Fig. on Art Paper III