ACTINOMYCOSIS OF OVARY

(A Case Report)

by

T. S. CHEEMA,* M.D.,
B. D. SABHARWAL,**M.D.
and
V. KUMAR,*** M.D.

Actinomycosis, caused by Actinomyces bovis is a chronic granulomatous and suppurative disease. Series of 1330 cases collected from the literature by Cope (1939) revealed vast majority from Cervicofacial (56.8%), abdominal (23.2%), and thoracic (15%) regions. In rare instances, isolated lesions were described in the skin, kidney, genital tract, liver, ovary, bones, joints and central nervous system.

In view of the rarity of lesion, a case of actinomycosis of the ovary with apparently complete remission is reported.

CASE REPORT

Mrs. R.K., aged 25 years was admitted to Kapoor hospital on 12-7-1974. She had two living children of 7 years and 4 years of age and had loop inserted in a Govt. Primary Centre. She was alright for one and half years after the loop insertion and then developed menorrhagia. She reported to the Centre for her menorrhagia and was advised loop removal. The doctor concerned tried but was unable to remove the loop and the patient was referred to this hospital. The removal of the loop was attempted again per vaginam but failed.

The patient was moderately built with no anaemia. Positive physical findings were limited to the pelvis only. On vaginal examination, an irregular mass was felt in the left fornix. The mass was firm, separate from the uterus and just fell short of lateral pelvic wall. The uterus appeared to be of normal size and was pushed to the right.

Laboratory Data

Studies which included routine blood, stool and urine examinations were normal. The skiagram of the chest was normal. Plain X-Ray of the abdomen showed an I.U.C.D. No other abnormality was seen.

Because of the mass in the left fornix and as the loop could not be removed vaginally it was decided to operate.

Operation

The abdomen was opened under spinal anaesthesia and an ovarian mass of the size of a ping-pong ball was found in the left fornix. The mass had a prominent cyst on the surface and was found extending to the left pelvic wall. The mass was adherent to the adjacent structures, intestines were free. Fallopian tube was distinctly separate. After separating the adhesions, the entire mass could be removed. The loop was then removed through a vertical incision made in the anterior uterine wall. The

From the Department of Pathology, Dayanand Medical College and Gynaecology, Dr. B. L. Kapoor, Memorial Hospital, Ludhiana.
**Medical Superintendent, Kapoor Hospital.*
***Prof. of Pathology and Head of the Dept.*
****Senior Lecturer in Pathology.*
Accepted for publication on 14-1-76.

whole abdominal cavity was thoroughly explored but showed no other pathological lesion.

Pathological Examination
Gross

Specimen received consisted of a large nodular soft tissue mass measuring 4.5 x 4 x 3.5 cm. It was partly solid and partly cystic. On cutting the solid portion was homogenous, grey white, containing areas of necrosis in the centre. The cystic portion was 2 cm.; the cyst containing haemorrhagic fluid.

Microscopic

Section from the cyst wall showed a lining of lutein cells consistent with lutein cyst.

Multiple sections cut from the solid area showed classical ovarian stroma at places with marked infiltration by acute and chronic inflammatory cells, plasma cells and neutrophils predominantly. Small microabscesses containing fungal granules of the morphology of actinomycosis were also seen. (Figs. 1 & 2) Gram staining of the granules showed branching mycelium to be gram positive.

Unfortunately cultures could not be done as the diagnosis was not suspected preoperatively.

Postoperative Period

Postoperatively patient was given four million units of penicilline daily for a period of 7 days. When the diagnosis was established, no additional therapy was given to the patient. At the time of discharge, the wound had completely healed and the patient felt markedly improved.

The patient was called again after one month and a complete medical check up together with barium meal revealed no abnormality. Pelvic examination was normal.

Discussion

Actinomycotic involvement of female pelvic organs is relatively uncommon and has rarely been reported in the recent literature. Ingall and Merendino in 1952 and Stevenson in 1957 were able to collect 90 and 150 cases of pelvic actinomycosis respectively in the world literature. Solitary case reports have been published off and on (Farrior and Rathbun 1969; Sweeny and Black-Weldon 1965).

Several theories as to the possibility of the pathogenesis have been proposed but none has been substantiated. It is generally agreed by most that the pelvic involvement originates from an endogenous source, most likely from the bowel.

No source of infection was obvious in our patient from the history or at the time of operation.

Summary

A rare case of actinomycosis of ovary is reported.

References

1. Cope, Z.: Actinomycosis. Oxford Medical Publication Oxford, New York, 1939.
2. Farrior, H. L. and Rathbun, L. S.: Am. J. Obst. & Gynec. 103: 908, 1969.
3. Harvey, J. C., Cantrell, J. R. and Fisher, A. M.: Ann. Int. Med. 46: 868, 1957.
4. Ingall, E. G. and Merendino, K. A.: West. J. Surg. 60: 476, 1952.
5. Loth, M. F.: Actinomycosis of the fallopian tube. Am. J. Obst. & Gynec. 79: 919, 1956.
6. Peabody, J. W. and Seabury, J. H.: Actinomycosis and Nocardiosis. J. Chron. Dis. 5: 374, 1957.
7. Stevenson, A. E. M.: J. Obst. & Gynec. Brit. Emp. 44: 365, 1957.
8. Sweeny, F. B. and Black-weldon, T. F.: Pelvic Actinomycosis, Report of a Case. Obst. & Gynec. 25: 690, 1965.

See Figs. on Art Paper VI