

A CASE OF PYOSALPINX CAUSED BY OXYURIS VERMICULARIS COMPLICATED BY TORSION OF THE OVIDUCT*

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THIS case is presented on account of the rarity of the condition, the unusual clinical manifestations, and the distinctive lesions found.

A twenty-three-year old, white, single, nullipara, a stenographer by occupation, was admitted to Brooklyn Hospital on November 29, 1927. She had been well and had worked regularly until October 1, 1927. Her menses had always been regular and painless. On October 1 she first noticed pain in the right lower abdomen. This was worse when standing and became so much worse in a few days that she was unable to work.

She consulted her family physician who ordered her to bed and applied an ice bag to the abdomen. The temperature at this time was only slightly elevated. The physician made a pelvic examination and felt a mass in the right broad ligament and a smaller one on the left side. Rest in bed relieved the pain considerably. The menses occurred at the proper time, October 18, but lasted two weeks.

The patient first came under observation on November 27, 1927, six weeks after her first attack of pain. She was pale and thin, but not acutely ill or confined to bed. No abnormal physical signs were elicited in her chest, no masses were palpable on abdominal examination, but the lower part of the abdomen on the right was tender. Vaginal examination showed a tight two-finger introitus. The cervix was slightly eroded. The uterus was in an anterior position and pushed over to the left side of the pelvis. The right side of the pelvis contained a large cystic mass which was acutely tender and not readily movable. The left adnexum did not appear enlarged (an error in palpation). There was no gross evidence of gonorrheal infection. Smears from the cervix and urethra did not contain gonococci. The patient was intelligent and cooperative and denied ever having had gonorrhea but admitted having had sexual intercourse. Operation was recommended but, as the pain was subsiding, it was thought best to defer the operation until after the next menses. The provisional diagnosis made at the time was ovarian cyst, with a twisted pedicle. The next menses were on November 5, they lasted five days and were normal in character. Three days after this ended, the patient came to the hospital for operation.

On admission, the pulse, temperature, and respirations were normal. Blood pressure, 130/80. The urine was normal. Hemoglobin 85 per cent. Red cells 4,400,000, white cells 9,700, polymorphonuclears 60 per cent. The Wassermann reaction was negative. Physical examination of the chest and abdomen showed nothing additional. The vaginal examination yielded the findings previously stated.

Operation.—The abdomen was opened in the median line below the umbilicus. The right tube in its outer two thirds was greatly distended, cystic, and adherent

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to the uterus and intestines. The inner third of the tube was small, flat, and completely twisted on itself from right to left. The left tube and ovary were much enlarged and adherent to the left side of the uterus and to the intestines. The uterus was small and in an anterior position. The peritoneum and external surfaces of the tubes were examined for tubercles but none were found. The process was looked upon as gonorrheal in origin. The uterus was removed supra-

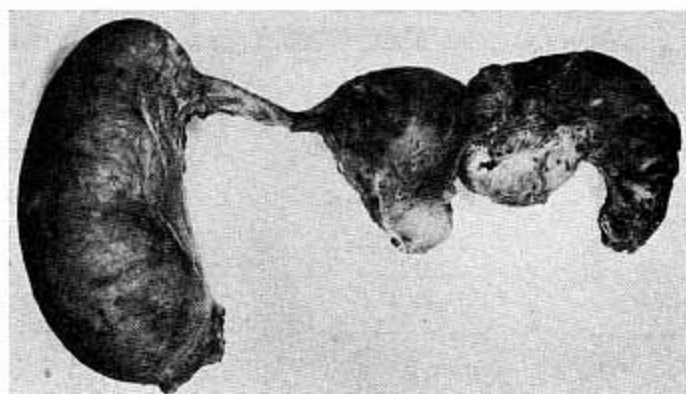


Fig. 1.—Right oviduct dilated and filled with puriform material. The left oviduct and ovary fused in a mass of inflammatory tissue.

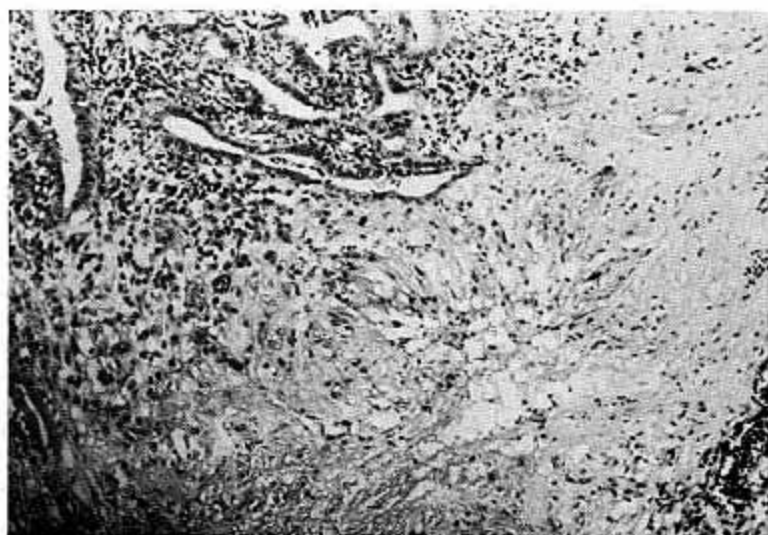


Fig. 2.—Margin of an area of anemic necrosis in the wall of the oviduct.

vaginally with the left tube and ovary and the right tube and the appendix. The right ovary was left in its dense bed of adhesions. All the adhesions were very dense and old. The left tube was ruptured in removal. The pus from the tube yielded no growth on culture media. The cervix stump was split and vaginal drainage instituted. The abdominal wound was closed without drainage except for a small bit of rubber tissue in the fat layer. Convalescence was uneventful and the patient left the hospital on the twenty-first day after the operation. On

discharge, the abdominal wound had healed by primary union. The pelvis was free from exudate, but there was still some discharge from the split cervix.

The patient regained her strength rapidly after leaving the hospital and returned to her regular work in one month.

Examination by Dr. Denton of the left oviduct showed that its increase in size was due to an extensive inflammatory process in the wall of the tube. The major share of the thickening of the wall was due to infiltration of the mucous membrane and submucosa by cells of the lymphocyte order, to large mononuclear cells and to fibroblastic reaction. Foreign body giant cells were very numerous. The puriform material observed grossly was not pus but a product of anemic necrosis which contained no polymuclear leucocytes. In all the microscopic preparations the thin shells of small, round worms were found. In places the sections passed through the central parts of the bodies of the worms and in others through the thinner ends of the parasites. From the size, shape, and thickness of the

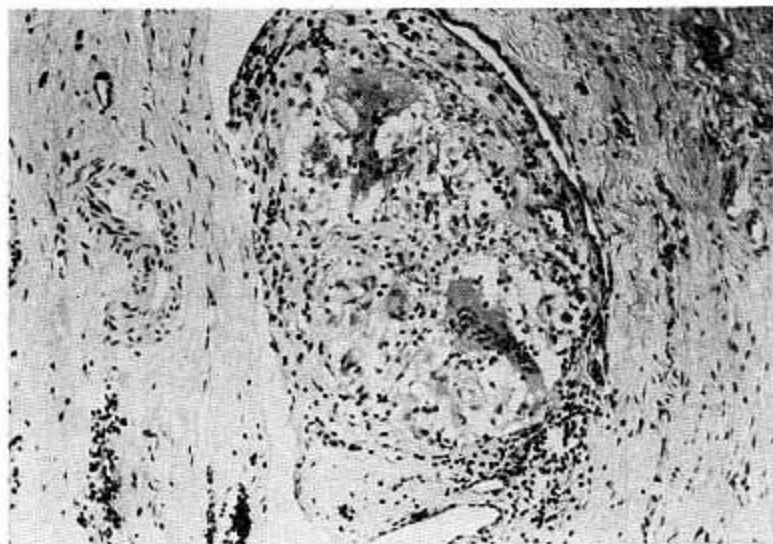


Fig. 3.—Foreign body tubercle at one end of an *Oxyuris vermicularis*.

body walls of the worms they were considered to be *Oxyuris vermicularis*. About all the worms there was a very marked foreign body reaction with large multinucleated giant cells about the parasites. The body shells gave a microchemical reaction similar to that given by chitin. A careful search of the sections revealed no identifiable ova.

The central softening of the tube appeared clearly to be due to anemic necrosis caused by gradual devascularization of the inflammatory products in the wall of the tube.

The histologic details were not dissimilar to those produced by tuberculosis in the oviduct except that no small, typical tubercles were found. The anemic necrosis gave an appearance very similar to caseation and numerous focal areas were found which resembled reticulated tubercles.

After finding these unusual parasites in the mucous membrane of the tube, the stools were carefully examined for parasites and ova, but none were found.

The blood showed no increase in eosinophile cells. A small amount of pus from the vaginal discharge was injected into a guinea pig and the pig was killed later, but no lesions were found.

Comment.—The case is of unusual interest on account of the unusual etiology, the complicating torsion of the oviduct and on account of the

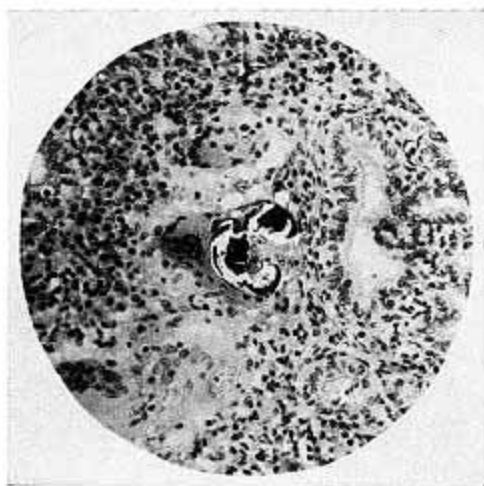


Fig. 4.—Foreign body giant cell forming about *Oxyuris vermicularis* in the submucosa of the oviduct.

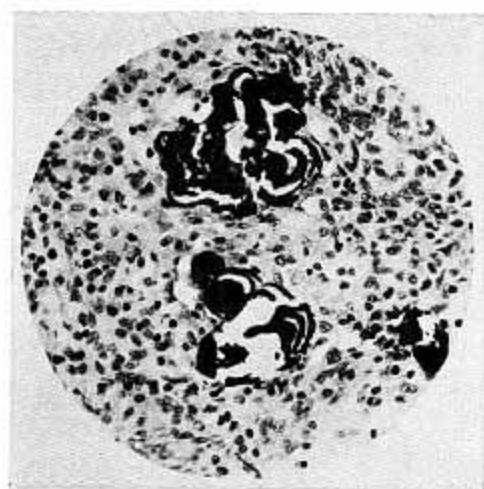


Fig. 5.—Section passing through the body and extremity of *Oxyuris vermicularis* in the submucous stroma of oviduct.

brief duration of the subjective symptoms. It is unusual that such pronounced pathologic changes should occur in an apparently healthy young woman without earlier and more pronounced subjective symptoms and with such insignificant menstrual disturbance. The conditions in the adnexa were unquestionably of long duration as the

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