PREGNANCY COMPLICATED BY TUBOOVALIAN ABSCESS

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The early diagnosis of pregnancy has been greatly facilitated by the Zondek-Aschheim test. A negative following a positive test would indicate death of the fetus. The following case report demonstrates such findings complicated by the development of a large abdominal tumor.

Mrs. N.T. married, aged 24 years, primipara, came in my office on Sept. 24, 1956. Her last regular menstrual period began July 7, 1956. On August 3 she had had a light menstrual flow lasting two days. Starting again August 26 she continued to flow for sixteen days, using 5 pads daily. A Zondek-Aschhein test examined on Sept. 11 was positive.

Family history showed two diabetes, no tuberculosis or cancer. Menses began at 14 years of age, regular, twenty-one-day cycle, lasting six days, moderate flow, no clots or leucorrhea, slight pain. An appendectomy was done in 1937.

General health had been poor for about six years. As an adolescent she had had various attachs of cystitis at one time nephritis with albumin. At that time examination had showed a pelvic tumor but she refused an operation.

During the past three years she had been treated for achlorhydria, retroverted uterus by pessaries, and had been given thyroid for weakness and fatigue. She had been troubled with headaches and vertigo. At times she would be quite nauseated and complained of soreness in ovaries, indigestion, and constipation.

Examination on Sept. 24, 1956, revealed a tall asthenic individual, appearing to be about 30 years of age, temperature 36.7 C., pulse 80, respiration 22. Other findings were irrelevant except for pelvic and abdominal findings. The *Mantoux* test gave a positive reaction but the chest x-ray was negative. Pelvic examination showed an anteverted uterus, globular in shape and enlarged to approximately a three month' pregnancy. The isthmus and cervix were soft. The uterus was fixed and pressure caused considerable pain. On October 5 she had a menstrual period at the regular time and passed some blood clots but no tissue that looked like placenta. Because of bleeding and lower abdominal pain, it appeared that an abortion was imminent. Blood Wassermann was negative. Blood count was as follows: Hb 70 per cent; red blood count, 3,450,000; white blood count, 31,600; polymorphnuclear neutrophiles, 80 per cent; basophiles, 1 per cent; small leucocytes, 16 per cent; staff cells, 2 per cent; Urine was negative. Vaginal slide was negative for gonorrhea. Twenty days later her pain become more severe and

rectal palpation showed cervical dilatation of about 1½ cm. and 40 per cent effacement. Because of the pain she was admitted to hospital.

Two weeks after admission there was less pain and the smooth outline of the fundus was less tense. It was decided to let her abort naturally. For the purpose of building up her general condition she was given a transfusion of 500 c.c. of citrated blood. Her temperature and pulse remained normal and she was improved and discharged from hospital.

On November 20 she had noted no movement. The fundus was palpable above the umbilicus. An x-ray showed no fetal structures. In addition to the abdominal cramps, she had developed severe cramps in both legs and severe pain in the right groin. Rectal examination gave the impression of a 3 cm. dilated cervix inside of which was a bulgig fluid-like mass, smooth in outline. The fundus was very tense and felt like a tonic uterus. Five days later she felt that the fundus was getting smaller and on examination it proved to be 4 cm. below the umbilicus and the mass soft except for a nodule at the right of the linea alba just above the symphysis about 6 to 8 cm. in diameter. After decreasing in size the fundus again enlarged. Leg cramps, numbness, and lower abdominal pain increased in severity so that codein was necessary to relieve pain. On December 10 she had a slight bloody show and severe pain which did not simulate uterine contraction. The feet were swollen and abdominal examination revealed the presence of a hard tumor as before described, and a laparotomy was decided upon. The tumor was considered to be a fibroid of the uterus with a cystic mass related to a pelvic organ but extrauterine.

Operation.- Bilateral salpingectomy and oophorectomy were performed on the next day. There was a large firm tumor extending in the middle line above the umbilicus containing a yellowish gelatinous material in the upper portion. The uterus was pushed far down in the right side of the pelvis. The tumor was found to have its origin in the left tube and ovary. The right tube and ovary were bound up in a tight mass abut 5 by 7 cm. in diameter. The abdomen was opened through a suprapubic middle incision. The mass was freed in all portions except deep posteriorly. When tracting the cyst, it ruptured and was found to contain about 1,300 c.c. of greenish meterial. After removing the cyst the uterus was identified; the rigt tube and ovary were removed except for a portion of the overy which was left attached to the tuboovarian ligament. A portion of the cyst cavity was obliterated with sutures and the abdominal wall was closed in layers.

Pathologic report.- Specimen consisted of the wall of a cyst which had measured about 11 to 14 cm. in diameter. The lining was plastered by masses of coagulated purulentappearing exudate, and beneath the exsudate the lining membrane of the cyst presented a papillomatous appearance; the surface had a velvety appearance and was covered with many small papilloma 1 mm. in diameter. The outer wall was thickened and fibrous and showed many adhesions. A second

mass 5cm. in diameter showed a further cystic growth, probably a Fallopian tube. The lumen was distended and the mucosa revealed a yellowish pigmentation. Microscopic sections through the wall of the cyst showed inflammatory infiltration throughout all areas. There was a papillary proliferation of the lining membrane characterized by a rather dense fibrous stroma and continuation of dense inflammatory changes in several areas. Sections through the wall of the cyst showed infiltration of large deeply-straining cells probably originating from the lining epithelium of the cyst cells extending outward into the wall of the cyst and scattered in small masses and clumps through the tissue interstics. There was no evidence of any malignancy.

Diagnosis.- Papillary cystadenoma of the ovary with marked inflammatory changes; salpingitis.

Laboratory report.- Culture of light green pus obtained from right pallopian tube and amber colored fluid from left tube: Gram's stain: Slide was loaded with pus cells. There were gram-positive diplococci, sometimes almost bacillary in form, often seen in chains. Acid fasr smear for tuberculosis, none found. Direct smear from right tube showed many leucocytes and a few gram-negative bacilli.

Course.- There was a profuse drainage for five days. The postoperative condition was good until the second day after operation when she became quite toxic, she was given 500c.c. of citrated blood and from then on the blood count and temperature dropped. She was afebrile after the fourth postoperative day and discharged from the hospital on the twelfth postoperative day. The wound drained a bloody fluid for ten days and then gradually the drainage became serous and the wound was entirely healed about one month later. Six weeks after operation pelvic examination showed an anteverted, moderately fixed uterus with no parametrial tenderness. After two months she had ovarian deficiency symptoms.

SUMMARY

This case has been reported because of the unusual size of the left tube and ovary. One might be criticized for the time element in waiting for surgical intervention, but again the time element may have saved her life be allowing nature to wall off securely and immunize the peritoneal cavity against the invading organism. The cul-de-sac could have been needled and the pus evacuated through the vagina; however, the afebrille course gave no indecation of a purulent process.

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