

MEDICAL MEMORANDA

Tuberculous Peritonitis in Pregnancy

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Case Report

The patient, a 26-year-old Sikh, had had two previous pregnancies. She was first seen in May 1969 at 21 weeks' gestation with hyperpyrexia and abdominal pain. For the previous six months she had been complaining of a dull pain under her left costal margin and fullness of her abdomen. Two weeks before her admission she developed intermittent severe abdominal pain with anorexia, vomiting, and sweating. She was unable to retain food or oral fluids but was said to be passing formed green stools.

On examination she appeared pale and lethargic; no jaundice was seen. Her temperature was 104°F (40°C) and her pulse rate 150/min. The abdomen was distended, deep tenderness was elicited in both iliac fossae, and a fluid thrill with shifting dullness confirmed the presence of intraperitoneal free fluid. A vague mass was felt at the umbilicus and was thought to be the pregnant uterus. Ultrasonic detection of a fetal heart confirmed the pregnancy.

Investigations showed no abnormality apart from an erythrocyte sedimentation rate (Westergren) of 70 mm in one hour, a weak positive direct van den Bergh reaction, and a serum bilirubin of 2.0 mg/100 ml. The chest x-ray picture was normal. During the first week in hospital her temperature varied between 99° and 104° F (37.2° and 40°C) and the pulse rate remained at 150/min. Two abdominal paracenteses produced a total of 5 l. of bile-stained fluid on which full microbiological and cytological tests were made. Feeding was maintained intravenously. After abdominal paracentesis a smooth, firm, enlarged liver and spleen and a uterus enlarged to the size of a 22-week pregnancy were palpable. The ascites slowly recurred.

Three differential diagnoses were considered—(1) hepatic or portal vein thrombosis, which would account for the mild extrahepatic obstructive picture of the liver function tests, negative blood cultures making portal pyaemia unlikely; (2) a generalized collagen disease, which was unlikely as the L.E. test was negative, the sedimentation rate was only moderately raised, and no skin or joint manifestations were present; and (3) tuberculous peritonitis, a possibility as the clinical picture, country of origin, and failure to find a bacterial cause did not exclude it. It was decided to embark on a diagnostic trial of antituberculosis chemotherapy. Streptomycin sulphate 0.75 g was given intramuscularly each day with 300 mg of isoniazid in divided doses. Sodium aminosalicylate was avoided in view of the abnormal liver function.

By the fourth day of treatment a remarkable improvement had resulted. The temperature had dropped to 98°F (36.7°C), the pulse rate had dropped to 100/min, and the ascites had disappeared rapidly. After one week of treatment the streptomycin was decreased to a similar dose for five days each week. The ascitic fluid cultures were reported as positive for *Mycobacterium tuberculosis*

100 colonies per culture, definitely of the human type. Her general condition remained satisfactory throughout the remainder of pregnancy. At term a spontaneous vaginal delivery occurred of a live male infant weighing 7 lb 4 oz (3,290 g). The placenta was found to be histologically normal. The antituberculosis therapy was changed after three months of streptomycin to isoniazid 150 mg twice daily and ethambutol 600 mg twice daily on which she remained for a further 21 months. The baby was given a B.C.G. inoculation after a negative Mantoux test in the puerperium. After discharge the patient was followed up in the chest clinic without further problems.

Comment

Few cases of tuberculous peritonitis in pregnancy have been recorded, suggesting that it is rare. Mangiagalli (1912) and Benestad (1914) each reported cases first diagnosed in pregnancy or in labour. Levy (1928) reported the ascitic form secondary to active pulmonary tuberculosis resulting in a live birth by accouchement forcé; Tisne (1945) recorded a similar case without obstetric difficulties. Before chemotherapy treatment appears to have consisted in injections of autoserum combined with abdominal paracentesis and intraperitoneal insufflations of oxygen (Castagna, 1930).

The disease may occur in either the ascitic, loculated, or obliterative form. Before chemotherapy recovery often took place with the ascitic form, but when localized abscesses or fistulae occurred death almost always followed. In this case the patient might have had a small pulmonary lesion with secondary spread to the intestines as the organism was of human type and genital infection would appear to be totally incompatible with her fertility, absence of radiological signs of pulmonary involvement not necessarily ruling out this hypothesis. Infection may have been conveyed by the intestines, which do not themselves become involved, or from breakdown of an infected mesenteric node. It can occasionally occur in the absence of any other tuberculous focus. The mild disorder of liver function was probably due to enlargement of tuberculous lymph node in the porta hepatis. Response to chemotherapy was dramatic and a successful outcome to the pregnancy occurred.

It appears from the few reported cases that provided the mother survives the disease and that no obstetric complications occur the fetal prognosis is satisfactory.

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