

RUPTURED LIVER ABSCESS COMPLICATING PREGNANCY

(A Case Report)

by

NIRMAL SEN,* M.B.B.S., D.G.O., M.R.C.O.G.,

PRANATI SINHA,** M.B.B.S., D.G.O.

and

SREEMANTO BANERJEE,*** M.O., F.R.C.O.G., Ph.D. (Lond.)

The incidence of hepatitis with pregnancy is meagre, more so with amoebic hepatitis. The cases reviewed in the literature are mostly infective in origin. Zondek and Bromberg (1947) reported 29 cases, Dill (1950) gave the incidence as 1:2000 to 1:20,000 Mickal (1951) reported 15 cases of which two were fatal. Hepatitis, both infective and amoebic in origin is fairly common in India though less frequently reported with pregnancy. D'cruz *et al*, (1968) reported 3 cases of which one was fatal. The high mortality rate from hepatitis during pregnancy in India has been stressed by Malkani & Grewal (1957). Obstetricians have been slow to recognize that acute yellow atrophy of the liver is not a disease peculiar to pregnant women, but it is often the most severe form of hepatitis. Hence all cases of hepatitis, along with pregnancy should be viewed with concern.

A very unusual case of hepatitis ending in the rupture of liver abscess complicating pregnancy in the third trimester is being reported.

Case Report

Mrs. A.M., 32 years, para 3 + 2, an unbooked case, a Hindu housewife coming from a middle class family, was admitted in Eden hospital at 10 A.M. on 3-12-1969 with complaints of (1) Amenorrhoea 32 weeks. (2) Severe pain in the abdomen, initially in the epigastrium and later spreading all over the abdomen for 20 years. (3) Initially high and later low grade temperature for the past 6-7 days. (4) Breathlessness, 3 days. (5) Vomiting and constipation for 3 days.

Pain was dull aching in character, had no relation with food and not relieved by rest and antispasmodics. Symptoms in fact aggravated during the last 3 days and she sought admission in the Hospital.

Menstrual History: Menarche 13 years, past cycles 28 + 2 days, regular, duration 4-5 days. No pain. L.M.P. 17th April 1969. Period of pregnancy—33 weeks.

Obstetric History: Three term normal deliveries, last in 1965.

Past History: Chronic amoebic colitis.

Personal History: Diet average Bengali diet. No addictions.

Examination on Admission: The patient had a very low general condition, toxic and was moderately dyspnoeic with accessory muscles of respiration working. Respiration 32/min, thoracic in type. Neck veins engorged. Anaemia +, no jaundice. Pulse 120 per minute, low volume and tension, temperature 101.4°F. B.P. 100/60 mm of Hg. Tongue coated and dry.

Respiratory System: Vesicular breath sounds with basal crepitations.

*Ex-Registrar, Eden Hospital, Medical College, Calcutta.

**Ex-Senior House Surgeon, Eden Hospital.

***Associate Professor—Gynaec. & Obst., Eden Hospital, Medical College, Calcutta.

Received for publication on 10-3-1973.

Cardiovascular and Central Nervous Systems: Nothing abnormal detected.

Abdominal Examination

The abdomen was uniformly distended. Height of the fundus corresponded to 32 weeks of gestation, foetal parts palpated with difficulty, foetal heart could not be located. A generalised tenderness all over the abdomen, with slight guarding of muscle. Liver 4 fingers enlarged at right midclavicular line, tender, rounded margin, smooth surface and soft in consistency. Intestinal sounds, 1-2 per minute. Shifting dullness present?

Investigations

(a) Blood Hb, 9.5 G%. Total count 14,200/cmm, poly 76%, lympho 20%, eosino 3%, mono 1%, blood sugar 77 mg%, blood urea 25 mg%.

(b) Urine: nil abnormal.

(c) Urine: Nil abnormal.

(c) Stool: Nothing suggestive.

X-Ray: The intestines were distended—no evidence of fluid level.

Management

With the provisional diagnosis of gangrenous appendicitis with pregnancy leading to peritonitis and mild intestinal obstruction, the opinion of both senior physician and senior surgeon was sought for and laparotomy was decided after resuscitation of the patient.

Active resuscitation was started by propped up position, oxygen inhalation, injection morphine $\frac{1}{4}$ gr. given intramuscularly. Intravenous infusion of 5% glucose and saline started in the ratio of 2:1. Aminophylline, 250 mg. given intravenously along with 10 c.c. of 25% dextrose solution. Ryle's tube was put in and nasogastric suction revealed one litre of bilious fluid. Hourly suction was maintained. Tetracyclines started intravenously and blood sent for grouping and cross-matching.

Laparotomy was done under gas and oxygen anaesthesia.

The abdomen was opened by right infraumbilical incision. Uterus and its appendages revealed no abnormality. Pushing gently the uterus aside, intestines were inspected and found to have thin flimsy adhesions which were carefully separated. The

appendix appeared perfectly healthy. Incision was extended supraumbilically for 2", for inspection of other viscera. Stomach was normal. The peritoneal cavity was full of dirty brown pus. Hand was insinuated through the right paracolic gutter to the superior surface of the liver, which on careful palpation revealed a huge irregular ragged cavity. Diagnosis of liver abscess bursting into the peritoneal cavity was made. The "anchovy sauce pus" was sent for culture and sensitivity test. Peritoneal cavity was cleaned by repeated toiletting. Abdomen was closed in layers after leaving 2 drains—one in the hepatorenal pouch and the other in the abdominal wall.

The patient was put on nasogastric suction, fluid balance was maintained, tetracycline was continued and injection of emetine hydrochloride was given. 1500 c.c. whole blood Group B, Rh +ve was transfused. The condition of the patient deteriorated and she expired the next morning.

Postmortem: Postmortem caesarean section was done. Male premature stillborn baby was delivered. Liver was enlarged and congested. Its superior surface revealed a huge cavity, moth eaten in appearance with an irregular ragged margin. Contents of the cavity were brownish thick cheesy material. A few scattered small cavities were seen. Other viscera were healthy. The specimen of liver was sent for histopathological examination. It was found to have massive areas of necrosis, haemorrhage and fibrosis in the centre and more or less healthy tissue at the periphery. No entamoeba histolytica detected from the wall of the cavity.

Discussion

Abscesses of the liver vary depending upon the portals of entry of the organisms. Infection via portal vein initially starts as thrombophlebitis of small vein draining the infected lesion. Later thrombus spreads to a larger collecting vessel and pieces of infected thrombus break off to be swept into the liver forming an abscess. Suppurative appendicitis and diverticulitis produce multiple

small abscesses, forming canal and cavity system. Organism like *E. Coli*, staphylococci, streptococci are found in the abscess cavity. Amoebiasis, infected carcinoma of colon, ulcerative colitis, inflamed haemorrhoids, typhoid, paratyphoid, etc. produce liver abscess via portal vein. Ruptured amoebic abscess into the peritoneal cavity in advanced pregnancy is still a rare condition even in tropics, in contrast to the wide spread amoebiasis.

Cholangitic abscess of liver are secondary to cholangitis, either due to stone or stricture of the common bile duct. Abscesses are large containing bile stained pus and following the distribution of bile ducts in the liver. Patient is jaundiced with Charcot's intermittent hepatic fever.

Septicaemia and pyaemia are manifestations of infection conveyed by the hepatic artery. Numerous small microscopic abscesses are scattered throughout the liver substance.

Unlike infective hepatitis, amoebic hepatitis is rare during pregnancy. It is always secondary to amoebic colitis. Alcoholism, chronic diarrhoea and dysentery are said to be the predisposing factors. In experimental animals raised levels of corticosteroids and progesterone precipitate severe infection. The turn over of amoebic hepatitis to amoebic liver abscess is indicated by the spiky temperature. Pathologically it is not a true abscess but an area of liquifaction produced in the necrotic cells by the proteolytic enzymes of the amoebae. The initial necrosis however being due to ischaemia produced by plugging of the portal radicles by the amoebae. Amoebic liver abscess is variable in size, but usually single, occupying the entire right lobe of the liver. The content is a cho-

colate brown fluid—the anchovy sauce pus, due to old haemorrhage. *Entamoeba histolytica* can be isolated from the wall of the abscess cavity in only 15% of the cases.

Summary and conclusion

The symptoms of acute abdomen along with enlarged tender liver had initially lead to the diagnosis of hepatitis associated with pregnancy. But in spite of treatment pain was aggravated due to spreading peritonitis and since the patient became toxic, a diagnosis of gangrenous appendicitis with pregnancy leading to spreading peritonitis was made. The possibility of ruptured amoebic liver abscess especially with a past history of amoebiasis, should be borne in mind. The diagnosis was made at laparotomy by finding the typical anchovy sauce pus. The method of treatment in such a case is always surgical and by open method. Ordinarily a liver abscess is never drained. But since the pus was secondarily infected corrugated rubber drains were inserted. Caesarean section was not done due to low general condition of the patient. There were multiple cavities in the liver and patient died of incipient liver failure.

Acknowledgement

We are thankful to Prof. K. N. Mitra — Director-Professor Department of Obstetric & Gynaecology. Eden Hospital, Medical College Hospital, Calcutta for his constant encouragement and to Dr. D. Roy Mahasaya. Principal Superintendent Medical College Hospital, Calcutta for his kind permission to publish Hospital Records.

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