LIVER ABSCESS COMPLICATING PREGNANCY

by

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In view of the prevalence of amoebic infection in tropical countries, it is perhaps surprising that extremely few accounts have appeared of its occurrence during pregnancy. We report 3 cases of liver abscess complicating pregnancy, one of which was fatal. All were seen over a period of one year.

Case 1

H. S. G., a 33 year old woman, para 8, in the seventh month of pregnancy, was admitted on 21-10-1965 for pain in the right hypochondrium, vomiting and constipation since the previous day. The right hypochondrium was very tender, but the liver was not then palpable. The heart rate was 96 per minute and temperature 99°F. She was anaemic (haemoglobin 7.4 gm.%), and not jaundiced (serum bilirubin 0.6 mg.%). A mistaken diagnosis of acute cholecystitis was made and the patient treated with intramuscular penicillin and streptomycin, replaced after 2 days by intramuscular tetracycline. On 26-10-1965 the patient was dyspnoeic, and the liver edge was palpable 3 cm. below the right costal margin. Elevation of the right dome of the diaphragm was observed fluoroscopically. An E.C.G. showed non-specific flattening of the T Wave in leads I, AVL, V5 and V6. Chloroquine (600 mg. orally daily) was started the same day and on 31-10-1965 emetine (30 mg. intramuscularly daily) was added to the regimen. On 1-11-1965 at 4.10 a.m. the patient delivered a premature infant, weighing 1,800 gms, which expired 6 hours later. Postpartum, the uterus contracted well and there was not excessive bleeding per vaginam. At 9.00 p.m. on 1-11-1965 the patient suddenly collapsed and got into a shock like state, and in spite of resuscitative measures death occurred at 2.35 p.m. on 2-11-1965. Fluoroscopy shortly before death revealed a right-sided pleural effusion. At autopsy, 200 ml. of chocolate coloured fluid was found in the peritoneal cavity. The right pleural cavity contained a small amount of blood-stained fluid, and the right lung was adherent at places to the parietal pleura. The pericardial cavity was normal. The liver weighed 1500 gm. A large abscess, 10 cm. in diameter, occupied most of its right lobe. The interior of the abscess was lined by ragged necrotic tissue and contained very thick brownish 'pus'. The abscess had not penetrated through the diaphragm into the thorax. The uterus was enlarged and contained blood clots. All other viscera, including the intestines, were normal. Vegetative forms of Entamoeba histolytica were demonstrated in the 'anchovy sauce pus' of the liver abscess.

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Case 2

A. H., a 19 year old primiparous woman, in the 9th month of pregnancy was admitted on 25-4-1966 for epigastric pain, dyspnoea, fever and diarrhoea of 3 days' duration. Her heart rate was 130 per minute and temperature 100°F. A tender fluctuant mass was palpable in the epigastrium and the liver edge was palpable 2 cm. below the right costal margin. She was slightly anaemic (haemoglobin 9 gm.%) and not jaundiced (serum bilirubin 0.5 mg.%). On fluoroscopy the right dome of the diaphragm was raised and its movement very restricted. Aspiration of the liver abscess on 30-4-1966 yielded 40 ml. of brown 'anchovy sauce pus'. No organisms could be culturd from this pus. The abscess was re-aspirated 6 times over the next few days; on three of these occasions emetine 30 mg. was instilled into the abscess cavity. Chloroquine (800 mg. daily the first two days, subsequently 400 mg. daily) and oxytetracycline 1 gm. daily were given orally from 30-4-1966 to 10-5-1966. However, irregular fever continued and the clinical response to these drugs was inadequate. Dehydroemetine, 60 mg. intramuscularly daily, was administered from 11-5-1966 to 21-5-1966. During this period, a satisfactory clinical improvement was observed, and the patient was discharged on 25 5-1966. On 4-5-1966 the patient delivered a premature infant weighing 2000 gms. which died 5 days later.

Case 3

K. N., a 38 year old woman, para 4, in the seventh month of pregnancy was admitted on 20-8-1966 for fever, cough and dyspnoea of 1 day's duration. Her temperature was 102°F. and pulse rate 130 per minute. Bronchial breathing and crepitations were heard at the base of her right lung. She was anaemic (hemoglobin 6 gms.%). No icterus was present. On 21-8-1966 she delivered a stillbirth weighing 900 gms. Radiological examination (fig. 1) showed that the right dome of the diaphragm was raised and immobile. Liver aspiration was done on 26-8-1966 and 300 ml. of yellowish pus was obtained. Further aspirations performed on 4-9-1966, 7-9-1966 and 10-9-1966 yielded 200, 400 and 500 ml. respectively of the same type of pus. Escherichia coli (? contaminant) was grown from one specimen of the pus. Emetine 60 mg. intramuscularly daily, amodiaquine 600 mg. orally daily, and tetracycline 1 gm. orally daily were administered from 24-8-1966 to 30-8-1966. During the subsequent week erythromycin 1.5 gm. orally daily and four further injections of emetine (60 mg.) were given. From 7-9-1966 onwards for a period of 3 weeks, chemotherapy consisted of crystalline penicillin, 2 million units and streptomycin, 1 gm. daily. Irregular fever continued for 4 weeks after admission and then subsided to normal. This was accompanied by a gradual clinical improvement and an attempted liver aspiration on 20-9-1966 yielded no pus. The patient was discharged on 7-10-1966 in a satisfactory condition.

Comment

The liver abscess in our first case was proven to be amoebic by the characteristic appearance of the abscess at autopsy and the demonstration of amoebae in the 'pus'. In all probability our second case was also an amoebic liver abscess in view of the typical 'anchovy sauce pus' and response to emetine. The aetiology of the liver abscess in our third case remains uncertain.

References in the literature to amoebiasis during pregnancy are meagre in the extreme. Moghraby described an instance of amoebic vaginitis in a woman in her tenth week of pregnancy. A cure was effected by intramuscular emetine and streptomycin, and the patient was delivered of a live premature baby at the twenty-eighth week (Moghraby 1609).

Maegraith states that pregnancy may stimulate the development of acute dysentery in infected women with quiescent amoebiasis. He also

mentions the occurrence of ulcerating amoebic granulomas of the cervix and vagina, which are occassionally exacerbated during pregnancy (Maegraith 1963).

Experimental evidence suggests that corticosteroids and progesterone, which are present in increased amounts during pregnancy, enhance the severity of amoebic infection in animals (Teodorovic *et al;* 1963, Biagi *et al;* 1963). It is perhaps relevant to note that viral hepatitis occurring during pregnancy results in a relatively high mortality, at least in India (Malkani and Grewal, 1957; D'Cruz *et al,* 1967). However, even in India, hepatic amoebiasis is certainly a very rare cause of maternal death, since it did not account for a single death in maternal mortality data from certain other centres in India (Shastrakar and Devi, 1962, Kirlosker, 1962, Motashaw and Jadhav 1960). It caused only one maternal death in our series of 285 maternal deaths over a 5 year period (1961-65) (D'Cruz *et al,* 1967).

Summary

We report 3 cases of liver abscess complicating pregnancy. The aetiology of the hepatic abscess appeared to be amoebic in two, and uncertain in the third. One woman died due to rupture of the abscess into the peritoneum, the other two made a gradual recovery. The foetus was stillborn in one case and premature in the other two, both the latter babies expired soon after birth.

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Figs. on Art Paper VIII