

AMOEBIC PERICARDIAL EFFUSION

Pages with reference to book, From 86 To 88

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Extension of amoebic liver abscess into the pleural cavity, lungs and pericardium is well documented. Involvement of the pericardium can result in difficulties in diagnosis as illustrated by the case being reported.

CASE REPORT

On 02 March 1987, a 22 years old male, from Bajaur area, presented with fever and epigastric pain of 10 days duration and palpitations, breathlessness and precordial pain of 5 days duration. The fever was high, continuous and associated with shivering and sweating. The epigastric pain was dull, continuous and not related to food. It was accompanied by vomiting. After being initially confined to the epigastrium, it extended into the precordium, where it was increased by movement, deep breathing and coughing. He also had palpitations and breathlessness on exertion. No previous history of cough, fever, diarrhoea, dysentery or abdominal pain was present. His only addiction was Naswar, which he took 2—3 times daily. By profession he was a farmer. No medicines other than analgesics and sedatives had been taken before admission to hospital. On examination the patient looked ill and dehydrated. His temperature was 101°F, pulse 120/mm regular, and B.P. was 100/70mm of Hg. There was no cyanosis, jaundice, edema feet or lymphadenopathy. JVP was not raised. Heart sounds were muffled and a pericardial rub could be heard all over the precordium. Liver was palpable 3 fingers breadth below the right costal margin. It was smooth, firm and tender. There was no ascites. No abnormality was detected in other systems. Routine investigations showed a haemoglobin of 8.6 Gm%. TLC of 13000 per cumm with 72% polymorphs, 26% lymphocytes, 2% eosinophils. ESR was 120 mm in the first hour, blood urea was 27mg% and blood sugar 20mg%. Urine was normal. ECG showed sinus rhythm, rate of 120/mm, inverted T waves in all leads and normal amplitude. On x-ray chest the cardiac shadow was enlarged and lung fields were clear with clear costophrenic angles (Figure 1).

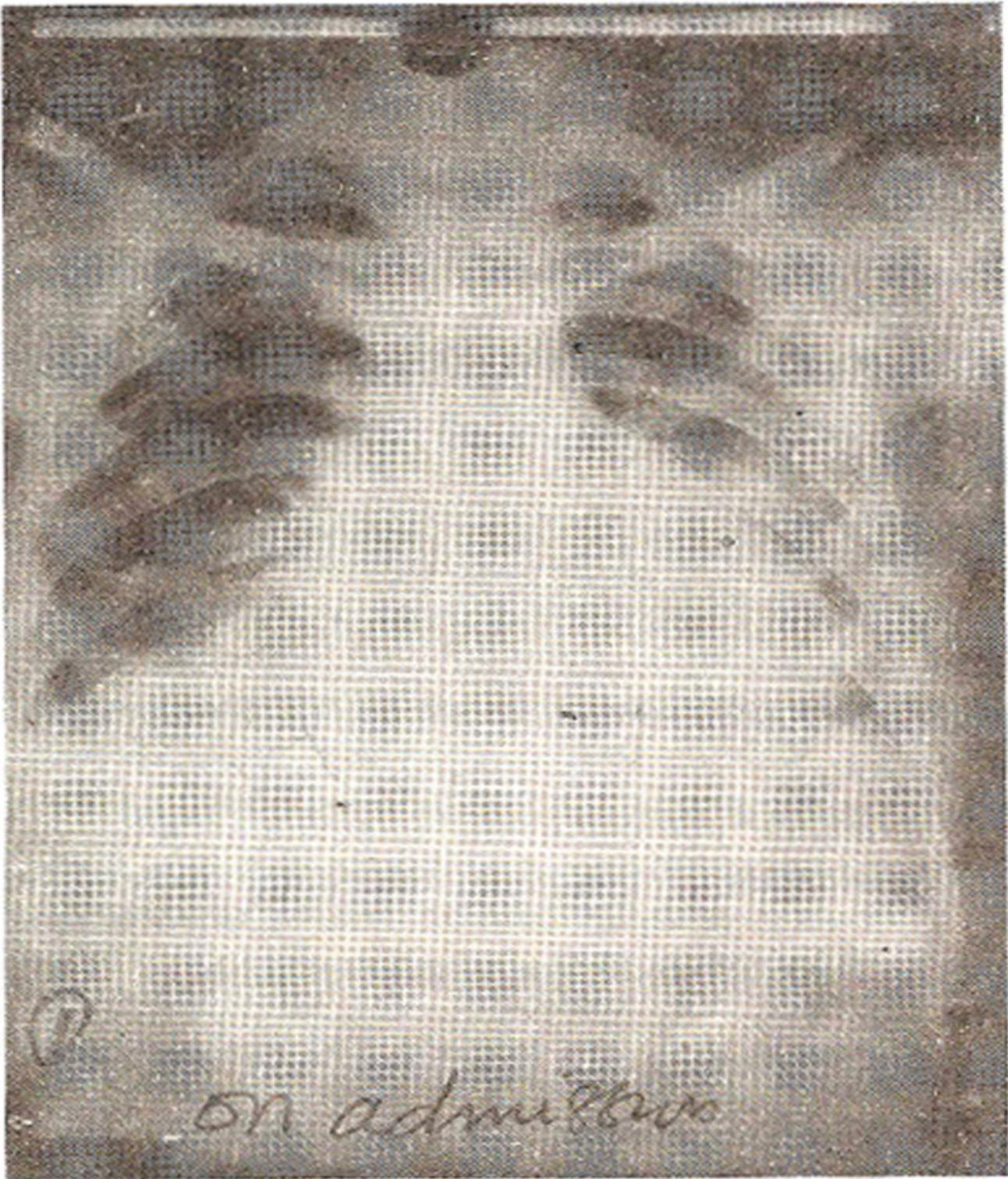


Figure 1. X-ray chest on admission showing enlarged cardiac shadow.

A provisional diagnosis of pericardial effusion was made. Mantoux test, liver ultrasound and echocardiogram were ordered. However, before these could be undertaken, the patient became acutely breathless with severe precordial pain and sweating. On examination the pulse rate was 140/mm, it was low volume and pulsus paradoxus was present, B.P. was 90 mm of Hg systolic and JVP was raised.

Cardiac tamponade was diagnosed and emergency pericardial aspiration was done. About 300 mLs of brownish coloured pus was aspirated. The laboratory report showed the aspirated fluid to be exudate and leishman and haematoxylin eosin stained smear from the centrifuged deposits revealed trophozoites of *Entamoeba histolytica* and pus cells. Culture of the fluid did not yield any growth. Liver ultrasound (Figure 2)

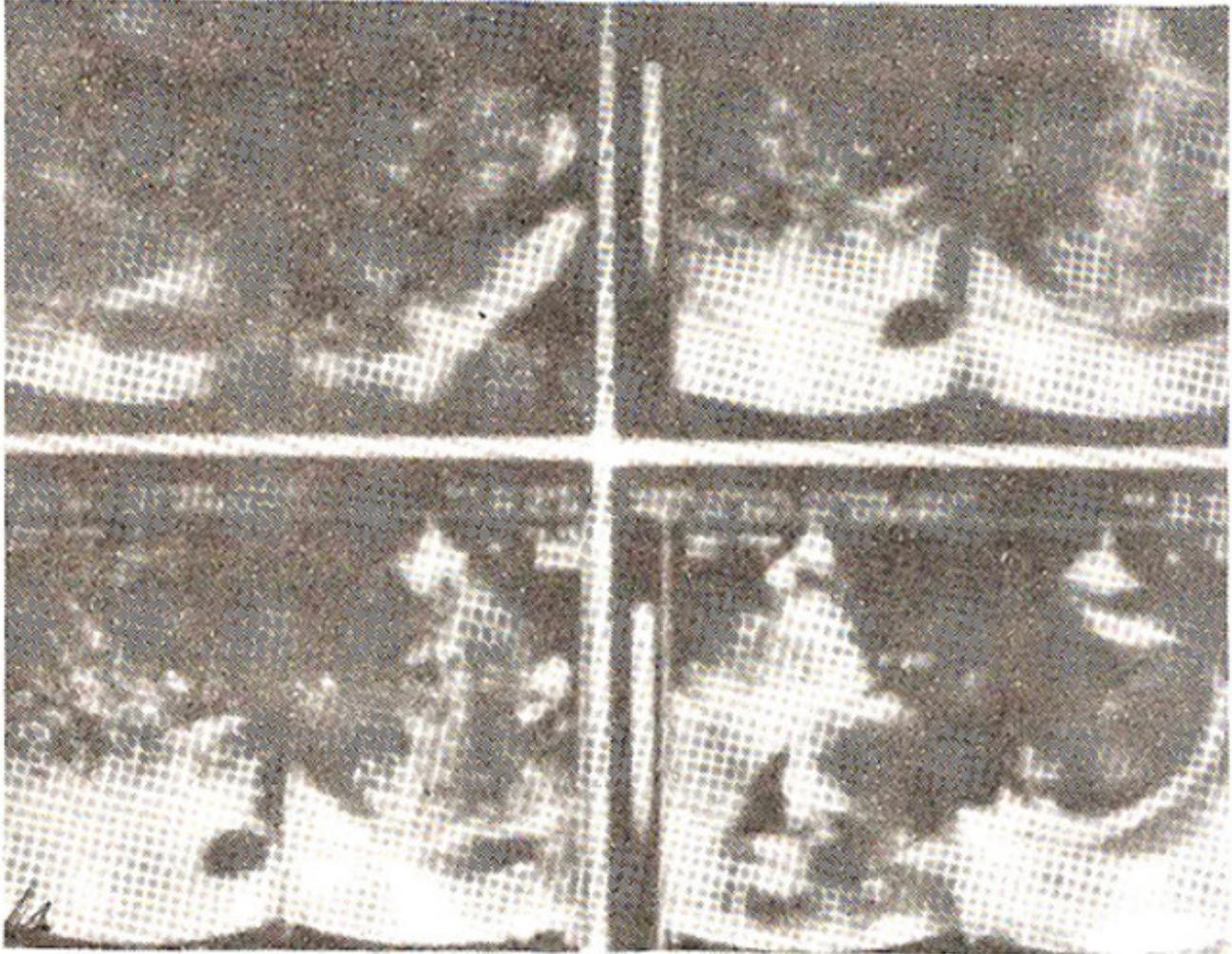


Figure 2. Ultrasound of liver and pericardium.

was done the next day and showed a 104 mm diameter abscess in the postero-superior part of the left lobe. Echocardiogram showed moderate sized pericardial effusion. Mantoux test was negative. Stool contained cysts of *Entamoeba histolytica*. Treatment was started with metronidazole infusion 200 mg i/v, 6 hourly, inj. chloroquine i/rn twice daily and i/v amoxicilline alongwith i/v fluids. A blood transfusion was also given. Pericardocentesis was done on three consecutive days and from then on, a plastic canula was left in place for regular twice daily aspiration for another 5 days. Surgical opinion was sought for drainage of the liver abscess. Owing to the poor general condition of the patient he was not considered fit for immediate drainage of the abscess. The condition of the patient improved with the above management by the beginning of the 3rd week of therapy (Figure 3).

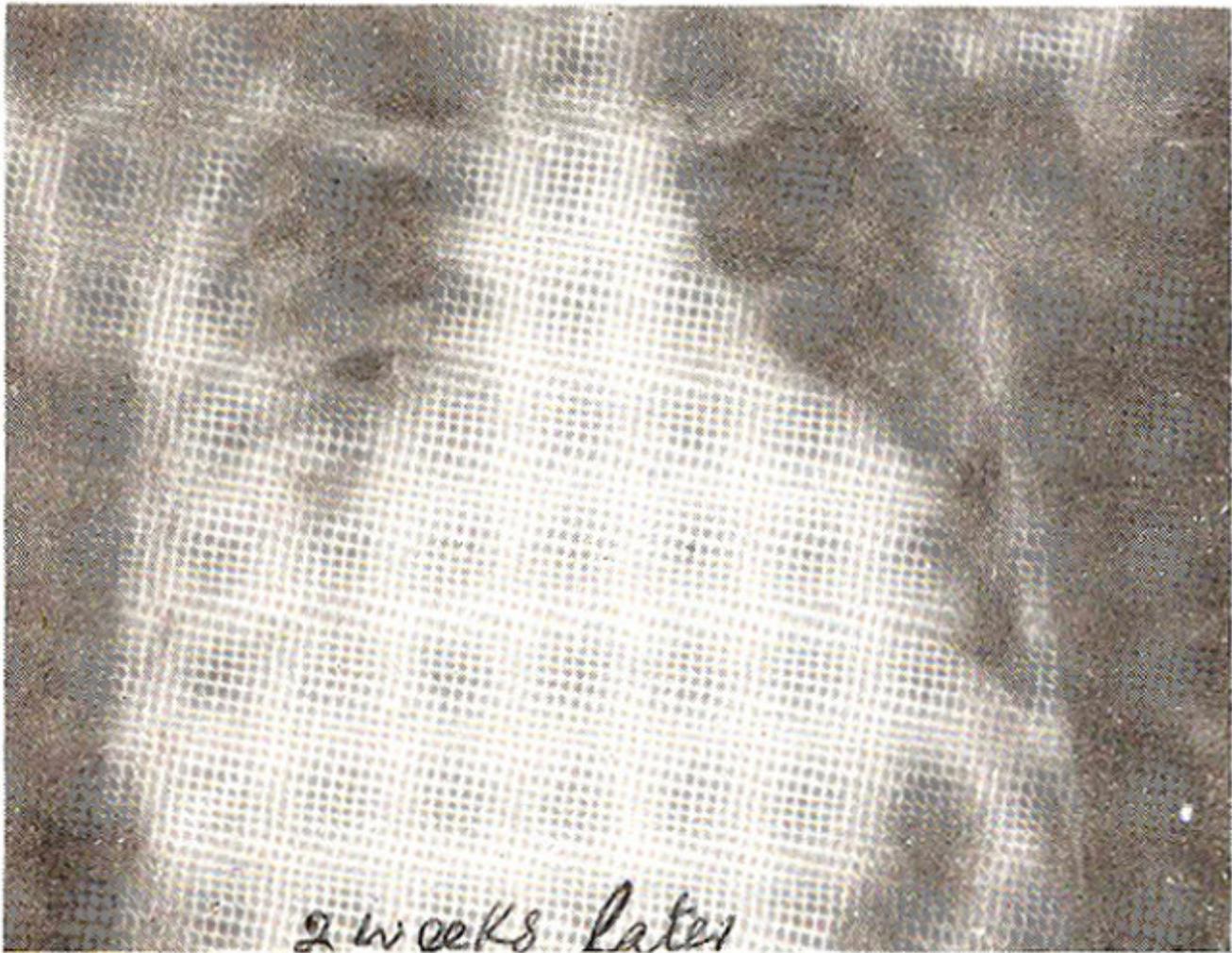


Figure 3. X-ray chest two weeks later, showing reduction in cardiac shadow.

However pericardial rub and hepatomegaly continued. Oral antiamoebic therapy was started. On the 27th day the patient underwent laparotomy and 150 ml of thick brown pus drained from the left liver lobe. A fistula between liver and diaphragm was present. After drainage of the liver abscess the patient remained well except for a persistent pericardial rub. Antiamoebic therapy was given for 5 weeks.

DISCUSSION

The difficulty in the diagnosis of an amoebic liver abscess with involvement of the pericardium is reported in the literature.¹⁻⁴ Now that ultrasound facility is available, diagnosis has become easier. However this simple diagnostic aid is not available everywhere and, where available, not so on an urgent basis. In the case of the patient being reported the serious complication of cardiac tamponade occurred before a firm diagnosis could be made. Pericardial effusion is not an unusual complication of amoebic liver abscess. However it is not common. Almost 70% of amoebic liver abscesses are solitary¹ and in the right lobe of the liver and the usual complication is extension into the right side of chest. Rupture or leakage into the peritoneal cavity with resultant peritonitis is also documented.¹⁻⁴ Rarely the abscess may rupture into a bronchus resulting in a hepatobronchial fistula and expectoration of brownish sputum.¹ Intra abdominal organs like the gut, spleen and kidneys are occasionally involved

through direct spread.⁴ Blood borne involvement of distant organs can occur and over a hundred cases of brain abscess have been documented. All¹ were fatal. In the management of this case chloroquine was used with metronidazole because of the local non availability of emetine hydrochloride. Needle aspiration of the liver abscess could not be done owing to the posterior location of the abscess. In order to detect liver abscess as a cause of pericarditis, liver ultrasound should be performed in all cases of pericardial effusions.

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