

Hepatic Amoebiasis

A STUDY OF 32 CASES IN THE WESTERN CAPE

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SUMMARY

Thirty-two cases of hepatic amoebiasis with some unusual features are presented. The clinical spectrum and the value of investigations such as liver scanning, angiography and slide agglutination test are presented. Therapy is outlined.

S. Afr. Med. J., 48, 1159 (1974).

Hepatic amoebiasis with its protean clinical manifestations presents a diagnostic problem in endemic and non-endemic areas. The main differential diagnoses are hepatoma, secondary metastases and hydatid disease. Of these conditions, only amoebiasis responds to specific therapy. In our series 26 patients came from a particular geographical locality in the Cape Peninsula, being farm labourers drawn from a poor socio-economic group with poor dietary intake and a suspicious water supply. These are important aspects in eradicating and preventing this disease.

PATIENTS

The present study is based on 32 cases seen at Somerset Hospital from 1969 to 1972. The following diagnostic criteria were adopted: tender hepatomegaly; positive X-ray films; pus demonstrated by aspiration; positive liver scan; positive blood findings; response to specific therapy; and positive hepatic angiogram.

The main clinical features are set out in Table I.

DISCUSSION

Differential Diagnosis

The main differential diagnosis in our series was from primary hepatoma. Loss of weight was a prominent symptom. One patient with extreme cachexia and massive hepatomegaly was referred as a primary hepatoma, but aspiration produced 2 litres of anchovy pus. Another patient with malaise, loss of weight, hepatomegaly and a

TABLE I. MAIN CLINICAL FEATURES IN 32 CASES OF AMOEBIC LIVER ABSCESS

	Cases	%
Pain	31	97
Hepatomegaly	29	96
Fever	28	87
Loss of weight	26	81
Diarrhoea	21	66
Anaemia	22	67
Raised ESR	31	97
Leucocytosis	21	66
Hypo-albuminaemia	10	31
Raised alk. phos.	13	41
Raised SGOT	17	53
Elevation of diaphragm	26	81
Positive liver scan	22	91

Anaemia Hb <11g; ESR average 85 mm Westergren.
Alkaline phosphatase >KA units; SGOT >30 IU.

normal chest X-ray film, was initially diagnosed as hepatoma. Liver scan showed multiple cold areas, and repeated aspiration and biopsy procedures were negative. He deteriorated despite specific therapy and developed a massive right pleural effusion with a 'white out' on chest X-ray film. At autopsy a liver studded with amoebic abscesses was found, but the cause of the effusion was undetermined. These patients illustrate the problem of differentiating hepatoma from liver abscess. In a situation like this any suspicion that amoebiasis may be the cause should call for aspiration of the liver.

Liver Function and Jaundice

Wilmot¹ describes jaundice as a rare complication of amoebiasis, but in this series 6 patients were jaundiced with an average bilirubin of 3.9 mg/100 ml. The high incidence of abnormal liver function is also unusual. The following cases illustrate this problem.

A 33-year-old sheep farmer presented with a history suggestive of an amoebic abscess, and aspiration produced 100 ml of anchovy pus. He became deeply jaundiced with a bilirubin of 12.1 mg/100 ml, of which 11 mg/100 ml was conjugated. The alkaline phosphatase was 9.0 KA units and the SGOT 98 IU. A further 500 ml pus was aspirated and the jaundice subsided.

A 45-year-old male presented with a typical history, and hepatomegaly with the bilirubin 1.9 mg/100 ml, alkaline phosphatase 46 KA units and SGOT 38 IU. Repeated aspiration was negative. Liver scan showed 2 cold areas.

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Hepatic angiography revealed 3 large well-circumscribed avascular areas. He improved with specific therapy and a repeat scan 6 months later proved a cure.

Pregnancy

Five patients presented with amoebic liver abscess during pregnancy and one was aspirated while in labour. This may be a chance association.

Slide Agglutination Test

The slide agglutination test was positive in the 4 cases in which it was done. Its main value is the ease and rapidity of doing the test and a negative result in excluding the diagnosis. The only disadvantage is the cost involved.

Radiological Aspects

The right hemidiaphragm was elevated in 26 patients and the lateral film showed an anterior 'hump'.

The liver scan showed 'cold areas' in 22 cases and pus was aspirated in 2 patients with normal scans.

Hepatic angiography showed multiple abscesses in 2 cases. This investigation is useful in differentiating hepatoma and abscess.

Prevention

In the vast majority of our patients the clue to the diagnosis was their place of abode. If a patient with a suggestive history came from the area within the radius of Vredenburg, Calvinia, Montagu and Cape Town, amoebiasis was usually diagnosed. Many factors could be analysed to explain this 'amoebic pocket', but these patients often drank water from rivers or water used for irrigation purposes.

Treatment

Drugs: Metronidazole (Flagyl) 800 mg *t.d.s.* for 5 days cured 16 patients. Emetine and chloroquine were administered with Flagyl in 16 cases. No difference in response to treatment with the two regimens was noted.

Aspiration: This was successful in 22 cases and the average yield of pus was 300 ml.

The indications for aspiration were: (i) localised tenderness intercostally or over a palpable hepar, swelling or bulging of ribs; (ii) radiological elevation of the right hemidiaphragm; (iii) lack of response to specific treatment and (iv) a left lobe abscess.

REFERENCE

1. Wilmot, A. J. (1962): *Clinical Amoebiasis*. Oxford: Blackwell Scientific Publications.