

# AMOEBIC PERICARDIAL EFFUSION - DIAGNOSIS SUGGESTED BY ULTRASONOGRAPHY

Pages with reference to book, From 24 To 25

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Amoebic pericardial effusion is a very rare site of extra- intestinal amoebiasis. We present a case where sonographic features suggested the diagnosis.

## CASE REPORT

A 35 years old male presented with a two months history of progressively increasing dyspnoea. On examination he was in respiratory distress, afebrile, had prominent neck veins and an increased area of cardiac dullness. The heart sounds were muffled, and the abdomen was unremarkable except for an enlarged, tender liver. The blood count was normal, but the ESR was raised (60mm). X-ray chest showed an enlarged heart shadow.

A clinical diagnosis of a pericardial effusion was made and he was sent to this Centre for echocardiography which showed a large pericardial effusion with a swinging heart (Figure 1). A routine upper abdominal ultrasonography study revealed a 9cm hypoechoic, oval lesion with a strong posterior enhancement in the left lobe of the liver. There were dilated tubular structures nearby (Figure 2). The appearance was that of a left lobe liver abscess. The concurrence of these findings prompted us to suggest a diagnosis of an amoebic liver abscess leading to pericardial effusion. Aspiration of both the pericardial cavity and the liver lesion yielded identical pinkish fluid. The fluid was sent for pathological examination and though vegetative amoebae were not found, the pathologist agreed with our impression of an amoebic etiology on the basis of the gross appearance. Serological tests for amoebiasis were, however, strongly positive. The patient was put on antiamoebic drugs and had a rapid response. Subsequent examinations showed lessening of both the pericardial and hepatic lesions and by five months of follow-up, there was complete resolution.

## DISCUSSION

Pericardial effusion of amoebic origin is so rare that it merits no more than a passing reference in many textbooks of medicine<sup>1-6</sup>. From 1899 to 1978, only 137 cases have been described in the world literature<sup>7</sup>. When present, the symptoms of sub-sternal pain, discomfort and respiratory distress are super- imposed on those of the hepatic abscess<sup>8-10</sup>. Our patient was unusual in that he had no abdominal symptoms except for a vague upper abdominal pain and a slightly tender, enlarged liver. His primary complaint was of progressive dyspnoea.

The combination of an upper abdominal sonography study with echocardiography pointed to a plausible diagnosis which was confirmed by aspiration and therapeutic response. The characteristic appearance of the fluid aspirated would have led to the correct diagnosis eventually but our contribution probably expedited the process.

We cannot make any recommendations on the basis of a solitary case but would like to point out that an experienced sonologist needs no more than a few minutes to scan the upper abdomen if it is normal, and making it a habit can yield unexpected but valuable clinical information in cardiac cases.

## ACKNOWLEDGEMENT

The authors are grateful to the following individuals for their help in the preparation of this paper. Dr. A. Rauf Khan, Abha, Saudi Arabia and Hafiz Ghulam Abbas, Julich, W. Germany for literature survey. Mr. Akhtar Hussain for secretarial assistance and Mr. Masood Ahmed for illustrations.

## REFERENCES

1. Weatherall, DJ., Ledingham, J.G. and Warrell, D.A. ed. Oxford textbook of medicine. Oxford, Oxford University Press, 1984, P. 12,219.
2. Stein, J.H. ed. Internal medicine. Boston, Little Brown, 1983, p. 1450.
3. Wyngaarden, J.B. and Smith, L.H. Jr. ed. Cecil; textbook of medicine. 17th ed. Philadelphia, Saunders, 1985, p. 830.
4. Warren, KS. and Mahmoud, A. ed. Tropical and geographical medicine. New York, McGraw-Hill, 1984, p. 311.
5. Petersdorf, R.G., Adams, RD., Braunwald, E., Isselbacher, KJ., Martin, J.B. and Wilson, J.D. Harrison's principles of internal medicine. 10th ed. New York, McGraw-Hill, 1983, p. 864.
6. Braunwald, B. ed Heart disease. 2nd ed. Philadelphia, Saunders, 1984, p. 1474 (t).
7. Pericardial Amoebiasis, 1978. J. Assoc. Physicians India, 1978; 937 (Editorial).
8. Sabistan, D.C. Jr. ed. David-Christopher's textbook of surgery. 12th ed Philadelphia, Saunders, Philadelphia, 1981, p. 1209.
9. Watson, RB., Steel, R. K., Spiegel, T.M. Amoebic pericarditis consequent to amoebic abscess of right lobe of the liver. Am. J. Trop. Med. Hyg., 1972; 21: 889
10. Mahmood, S., Khan, M.A., Nishtar, T. Amoebic pericardial effusion. JPMA., 1988; 38: 86.