

## CASE SERIES : LIVER ABSCESSSES MIMICKING NEOPLASMS AND RUPTURED INTO ANTERIOR ABDOMINAL WALL AND PLEURAL CAVITY

DR. M.A.TAHER

### ABSTRACT

We like to report two cases of liver abscesses in two men of 27 and 38 years of age, the younger one presented as a cauliflower-like fungating ulcer extending from the right hypochondrium to the right iliac fossa, the later one presented with brown cough and fever. Both the patients were followed up to clinical cure. One of them had serial ultrasonography and radionuclide scans also.

### CASE 1

A man of 27 years came to the surgery department of Dhaka Medical College Hospital with a provisional diagnosis of neoplasm involving anterior abdominal wall. He had a big cauliflower-like fungating ulcer from right hypochondrium to right iliac fossa. Prof. Mirza Mazharul Islam FRCS diagnosed it as a liver abscess and prescribed iodoquin and metronidazole tablets and daily dressing. The patient improved gradually over the next five weeks and was discharged in good condition.

### CASE 2

A man of 38 years came with complaints of right upper abdominal pain, fever and 'brown' cough. Ultrasonography (USG) showed a semicyclic area of 11x7 cm in upper right hepatic lobe adjacent to right dome of diaphragm and 2.5 cm high right pleural effusion. We made a diagnosis of liver abscess ruptured into pleural cavity. But the patient showed another sonographic report from a private clinic of Dinajpur which diagnosed it as a case of hepatoma. To avoid confusion, we performed a radio-colloid liver

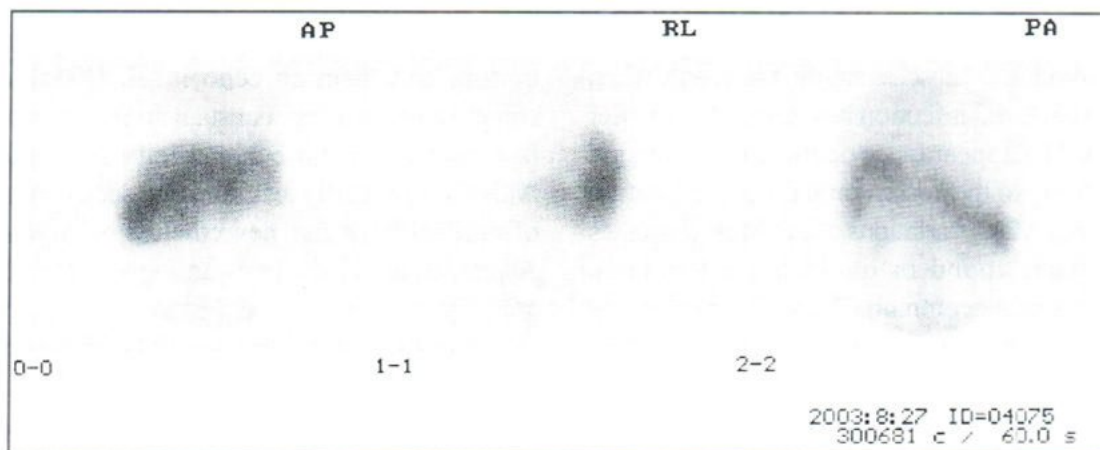
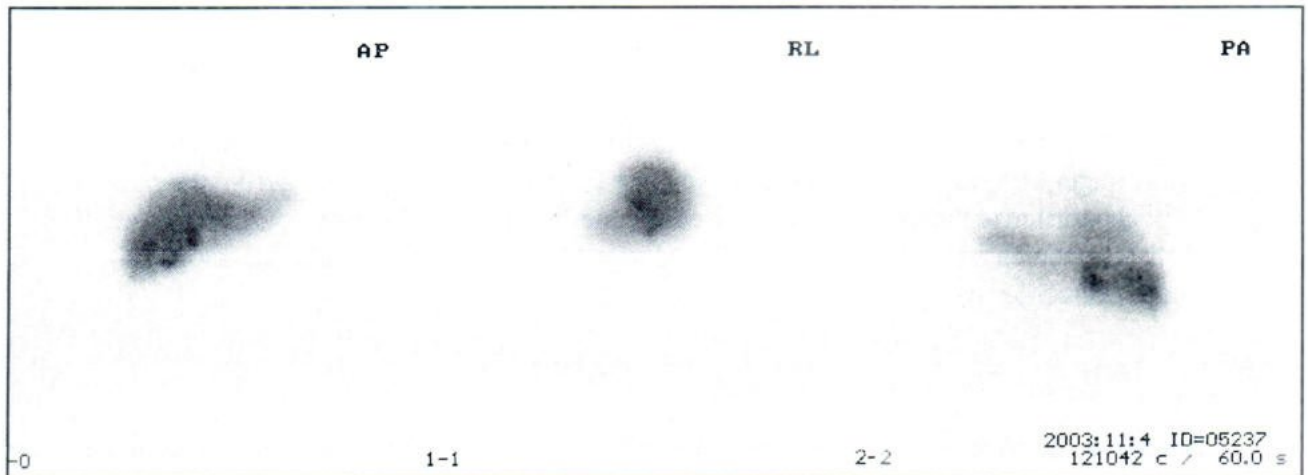


Fig.1 Liver abscess in right lobe.

scintigraphy (99m Tc stannous fluoride 5 mCi i.v.) with gamma camera and a well-defined photon-deficient area was seen in upper right hepatic lobe, and all other areas of liver have taken up radiocolloid uniformly (Fig.1). The patient was improved

after percutaneous drainage of pus, medications with cephalexin and metronidazole injections followed by tablets, as confirmed by clinical follow-up, USG and hepatobiliary scan (Bridatec). (Fig. 2)



**Fig 2** Normal hepatobiliary scan after nine weeks

## DISCUSSION

Isotope liver scan show, over 80% of amoebic abscess as a filling defect in the liver.<sup>1</sup> Abnormal findings on a chest X-ray are common but non-specific. Elevation of the right dome of diaphragm, atelectasis and a modest pleural effusion are common. The right hemithorax may become totally opaque following rupture of an abscess into the pleural cavity. Gas within the abscess cavity is seen only when secondary bacterial infection has developed or after aspiration. The appearances on ultrasound depend on the maturity of the abscess and the precise nature of its contents. Many variations occur. Most abscesses are irregularly round or ovoid but a lobulated appearance is not uncommon. The wall is moderately well-defined and irregular but it becomes smoother as the abscess is mature. No wall may be seen at all or there may be an echo-poor rim, or halo, possibly due to surrounding edema. Most amoebic liver abscesses are echolucent though in some the contents are isoechoic because the infected liver has not yet

undergone autolysis. A hyperechoic abscess is the least common and could be mistaken for a primary or secondary tumour. Both isoechoic and hyperechoic abscesses progress to a hypoechoic mass within 1-2 weeks and all abscesses eventually become anechoic as their contents become thinner in consistency.<sup>2</sup> In mature abscesses, necrotic material may sink to the bottom and form an echo level. Distal acoustic enhancement is a very constant and important feature irrespective of the echogenicity of the abscess. Although generally less than that seen behind a cyst of similar size, it can, nevertheless, be quite striking. Aspiration is usually unrewarding as the trophozoites are only present in the wall of the abscess and not in its contents even when typical 'anchovy paste' is recovered. No definite ultrasound feature exist to distinguish pyogenic from amoebic abscesses, although certain findings have been described that may help to predict this etiology.<sup>3</sup> Common causes of liver abscess are amoebiasis, portal bacteremia due to

appendicitis or diverticulitis, biliary tract diseases, trauma and generalized septicemia.<sup>4</sup> Sometimes gas is also detected in a liver abscess.<sup>5</sup>

## REFERENCES

1. Berger LA. Cystic and infective disease of the liver. In Wilkins RA & Nunnerley HB. (editors) : Imaging of the liver, pancreas and spleen. Blackwell, Oxford, 1990 : 147-171.
2. Boulton JE, Simjee AE, Rooknoodeen F, Engelbrecht HE. Experiences with grey-scale ultrasonography in hepatic amebiasis. Clin Radiol 1979 ; 30 : 683-689.
3. Oleszczuk - Raszke K, Cremin BJ, Fisher RM, Moore SW, Millar AJ. ultrasonic features of pyogenic and amebic hepatic abscesses. Pediatric Radiol 1989 ; 19 : 230-233.
4. Rambo WM, Black HC. Intrahepatic abscess. Am Surg 1969 ; 35 : 144-148.
5. Halvorsen RA, Foster WL, Wilkinson RH, Silverman PM, Thompson WM. Hepatic abscess: sensitivity of imaging tests and clinical findings. Gastrointestinal Radiol 1988; 13 : 135-141.