Isolated hepatic tuberculosis with scrofuloderma

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Summary: A case of isolated hepatic tuberculosis with tubercular involvement of the overlying skin is described. The combination does not appear to have been previously described.

Introduction

Involvement of the liver by tuberculosis is almost always secondary to tuberculous infection elsewhere in the body. A possible route for the primary infection of the liver has been described where the tubercle bacillus is carried from a diseased placenta to the fetus along the umbilical lymphatics and blood vessels.¹ The liver is frequently involved in patients with massive haematogenous dissemination of the tubercle bacilli,^{2,3} but most of these lesions are microscopic in size and tend to heal spontaneously. Clinical presentation of isolated hepatic tuberculosis of the liver is rare.^{4,5} We describe here a case of isolated tuberculosis of the liver with tuberculous involvement of the overlying skin. Such a combination does not appear to have been described previously.

Case report

A 13 year old male was admitted in October 1984 with the complaints of fever for one month, yellowness of sclera, loss of appetite and dull aching pain in the right upper abdomen. On examination he was emaciated, pale and jaundiced. His temperature was 39°C, the lower border of the liver was palpable 5 cm below the costal margin and was tender.

Laboratory investigations showed haemoglobin 6.0 g/dl, white cell count $13.0 \times 10^9/l$ (polymorphs 88%), serum bilirubin total 127.5 $\mu\text{mol/l}$, and raised transaminases. The X-ray of the chest was normal. A provisional diagnosis of amoebic liver abscess was made and the patient treated with parenteral metronidazole and tetracycline. Over the ensuing 2 weeks

the high grade fever subsided and jaundice gradually decreased in intensity but the boy failed to thrive and remained irritable. Three weeks after admission a cystic swelling 5 cm in diameter was observed overlying the right sixth to eighth ribs in the mid axillary line. Aspiration resulted in 25 ml of thin yellow pus which was sterile after aerobic culture for 24 hours. An ulcer formed over the site of needle puncture and gradually increased in size. It was covered with a shaggy necrotic slough. Repeated wound swabs from the ulcer were sterile. The ulcer was curetted and the tissue was reported to show only acute inflammatory cells on histological examination. An ultrasound examination was reported to reveal a large abscess in the right lobe of liver extending up to the diaphragm and the lateral abdominal wall. Needle aspiration was attempted but no pus was removed.

At this stage the patient was referred to the surgical unit.

A laparotomy was performed in January 1985 through a right paramedian incision. Necrotic tissue was found between the right lobe of liver and the lateral abdominal wall, extending through it to the base of the skin ulcer. After scooping out this material the liver showed a solid white mass about 15 cm in diameter. A biopsy from this mass as well as the edge of the skin ulcer was taken. A feeding jejunostomy was established.

The histopathological examination showed tuberculous involvement of the liver and the biopsied overlying skin. A course of streptomycin, isoniazid, ethambutol and rifampicin was started. The patient also received enteral hyperalimentation through the feeding jejunostomy. There was rapid clinical improvement and the patient registered a 10 kg increase in weight over a period of 3 weeks. The skin ulcer was soon covered with healthy granulation tissue and healed completely in 6 weeks. The boy has now

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Figure 1 Showing the tubercular skin ulcer and the laparotomy scar.

been followed up as an outpatient for a year and continues to do well.

Discussion

Martin and Farkouh⁶ have described the development of an external biliary fistula following drainage of a liver abscess which was subsequently diagnosed to be tubercular. Cleve *et al.*⁷ also described one case of biliary fistula following laparotomy on a case later proved to be of hepatic tuberculosis. In our case, following aspiration of a subcutaneous collection of pus, there was a large tubercular ulcer of the skin. Although scrofuloderma is the commonest form of

skin tuberculosis, its association with hepatic tuberculosis has not been described previously.

Because of the rarity of isolated involvement of the liver by tuberculosis many cases are treated initially as amoebic liver abscess, especially in the tropics where it is fairly common.^{8,9} It has been our policy that all suspected or proved cases of liver abscesses not responding or partially responding to conservative treatment initially and then becoming static are explored surgically after building up the patient.

We would like also to emphasize firmly the key role of nutrition along with specific antitubercular treatment. A feeding jejunostomy for enteral hyperalimentation in our hands has given very pleasing results.

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