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Fatal case of amoebic liver abscess in a child

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ABSTRACT

We reported a case of amoebic liver abscess (ALA) in a 6-year-old Malaysian boy who presented with fever, lethargy, diarrhoea and right hypochondriac pain. On admission he was diagnosed with perforated acute appendicitis and a laparotomy was done. After surgery he developed acute respiratory distress. Ultrasonography, chest X-Ray and CT scan revealed two ALAs in the posterior segment of right lobe of liver, pleural effusion and collapsed consolidation of lungs bilaterally. Percutaneous liver abscesses drainage was done and intravenous Metronidazole was started. PCR carried out on the pus from the abscess was positive for *Entamoeba histolytica*. Patient however succumbed to the infection one week after admission.

1. Introduction

Amoebiasis is endemic in the tropical and subtropical regions of the world especially in developing countries. It is the third most common parasitic cause of mortality after malaria and schistosomiasis [1]. Amoebic liver abscess (ALA) is the most common extraintestinal manifestation of invasive amoebiasis and occurs in 3–9% of patients with intestinal amoebiasis [1]. There are few reports of ALA in children and the disease is life-threatening. It presents with high grade fever, right upper quadrant pain, leukocytosis and raised erythrocyte sedimentation rate. Jaundice and derangement of liver enzymes were unusual [2–4]. It can rupture into the pleura to cause acute respiratory distress [3]. Increase in morbidity and mortality is attributed to low index of suspicion of ALA causing a delay in diagnosis. The prognosis of ALA in children improves with early diagnosis and prompt treatment.

2. Case report

A previously healthy 6-year-old Malay boy from Seremban, Malaysia presented with fever for 4 days duration associated with right hypochondriac pain, non-bloody diarrhoea and vomiting for 3 days. He was also lethargic with reduced oral intake and urine output. There was a history of swimming in a water park 1 month prior to presentation. On physical examination, the child was dehydrated but fully conscious, tachypnoeic (respiratory rate 40 breaths/minute), febrile (temperature 38.5 °C), tachycardic (heart rate 134 beats/minute) but blood pressure was normal (104/62 mmHg) and oxygen saturation was 98%. The abdomen was distended, tensed and guarded. There was a palpable vague mass and tenderness in the right upper quadrant. Respiratory examination was normal.

On admission, total white cell count was $27.3 \times 10^9/L$ (neutrophils 84.3%, $23 \times 10^9/L$), haemoglobin 11.0 g/L, platelet $617 \times 10^9/L$, urea 1.1 mmol/L, sodium 126 mmol/L, potassium 2.8 mmol/L, chloride 92 mmol/L, creatinine 33 mmol/L, albumin 20 g/L and C-reactive protein 291.5 mg/L. Alkaline phosphatase, hepatic transaminases, bilirubin level and blood gas were normal.

The patient was given intravenous boluses of resuscitation fluid to correct dehydration. He was subsequently referred to the surgeon with the suspicion of acute appendicitis. Pre-operative

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