

Management of Liver Abscess: An Institutional Experience

KEYWORDS Liver		abscess, amoebic, pyogenic
Dr SS Prasad		Dr Padma Priya J
Department of Surgery, Kasturba Medical College, Manipal University Manipal, India		Department of Pathology, Kasturba Medical College, Manipal University Manipal, India

ABSTRACT Abscesses are amongst the common pathologies involving liver. In the era of antibiotic resistance, this seemingly benign condition can become life threatening. Early diagnosis with prompt initiation of treatment significantly reduces the morbidity and mortality associated with the condition. In this retrospective study we describe our 3 years' experience in management of liver abscesses

Introduction

The term liver abscess refers to localized collection of pus in the liver. This condition has been described since ages (1). However in the recent times emergence of antibiotic resistance and rise in the number of immunocompromised group of population has compounded the problem of liver abscess. In this retrospective study, we bring forth our experience in contemporary management of liver abscess

Materials & Methods

In this retrospective study, medical records of patients admitted for liver abscess during the period from October 2012 to September 2015 were retrieved. The data thus collected was analyzed and summarized.

Inclusion criteria: All adult patients (> 18 years of age), admitted during the study period with liver abscess

Exclusion criteria: patients under 18 years of age and patients with associated malignancy

Results

During the study period 53 patients were admitted with liver abscess. Age of our patients ranged from 23 to 71 years. Males outnumbered females in the ratio of 34:19. 35 patients were diagnosed to have amoebic liver abscess based on serological tests while 18 patients had pyogenic etiology for their liver abscess. 13 patients had complications attributable to liver abscess which included sub capsular rupture (7 cases), rupture into pleural space(3 cases) and rupture into general peritoneal cavity(3 cases).

Serological investigations were used to diagnose amoebic liver abscess. 35 patients were positive for amoebic serol-

ogy. 18 patients who were negative for amoebic serology, in whom the aspirate yielded bacteria on culture were presumed to be pyogenic liver abscess. The common organisms accounting for these pyogenic liver abscesses included, Escherichia coli and Klebsiella pneumonia. Most cases were detected by ultrasound scans. Contrast enhanced CT scan was done in situations where complications were suspected.

Liver abscesses which were small and multiple were treated by appropriate antibiotics as per pus culture reports. 17 cases were treated by sonography guided catheter drainage. 3 cases which had ruptured into pleural space required intercostal drainage and 3 cases which had ruptured into peritoneal cavity required laparoscopic washout and drainage.

Discussion

Although liver abscess is a benign entity, it can be life threatening if not promptly treated. Liver abscess can be mainly of amoebic or pyogenic etiology (2). Amoebic liver abscess is diagnosed by serological tests (3). The organisms causing pyogenic liver abscesses are usually isolated from the aspirated pus or blood. Ultrasound scan and contrast enhanced CT scan are commonly employed imaging modalities for liver abscess. Ct scan is particularly helpful in evaluating complications of liver abscess like rupture into pleural or peritoneal cavity. Treatment of liver abscess is multimodal. Medical management includes anti amoebic drugs and antibiotics. Sonographically guided catheter drainage is particularly effective in larger unilocular abscesses. Surgical intervention has limited role in contemporary management of liver abscess. Laparoscopic approach is a useful tool in cases of ruptured liver abscesses.

REFERENCE 1. Rahimian J, Wilson T, Oram V, Holzman RS: Pyogenic liver abscess: recent trends in etiology and mortality. Clin Infect Dis 2004; 39: 1654– 1659. 2. Christoph Lubhert, Johannes Wiegard, Thomas Karlas. Therapy for liver abscess. Viszeralmedizin 2014;30:334-341 3. Flores MS, Carrillo P, Tamez E et al. Diagnostic parameters of serological ELISA for invasive amoebiasis, using antigens preserved with enzymatic inhibitors. Exp Parasitol. 2015 Dec 9. pii: S0014-4894(15)30066-7. doi: 10.1016/j.exppara.2015.12.006. [Epub ahead of print] 4. Enver Zerem, Amir Hadzic. Sonographically guided percutaneous catheter drainage versus needle aspiration in the management of pyogenic liver abscess. AJR 2007;189:W138-W142.