

Comparative Study of Catheter Drainage versus Needle Aspiration in Management of Liver Abscess

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ABSTRACT

Background: Liver abscess is a common condition in India and it has the 2nd highest incidence of liver abscess in the world. Pyogenic abscess accounts for three quarters of hepatic abscess in developed countries while amoebic liver abscess causes two third of liver abscess in developing countries. Amoebiasis is presently the third most common cause of death from parasitic disease. The world health organisation reported that Entamoeba histolytica causes approximately 50 million cases and 1,00,000 deaths annually. Liver abscess continues to be a disease with considerable mortality in India. Liver abscess has an increasing incidence rate in United States and Europe. Modern treatment has shifted towards IV broad spectrum antibiotics and image guided percutaneous needle aspiration or percutaneous catheter drainage and surgical drainage. Treatment of liver abscess has improved significantly with the introduction of ultrasound and computed tomography.

Methodology: This was a retrospective observational study conducted in Department of Surgery, GMC Bhopal, from March 2012 to march 2018. 651 patients were included in this study with the diagnosis of liver abscess.

Results: Out of 651 patients, 297 ultrasound guided needle aspirations were done and 246 (83%) responded to it; 354 ultrasound guided pigtail catheter placements were done and 334 (94.3%) responded to it. Most common symptoms were pain in abdomen (n=559), fever (n= 558), nausea and vomiting (n = 455) and weight loss (n= 286). Among the successfully treated patients, early alleviation of symptoms, early resolution of abscess cavity, mean hospital stay and average time for clinical improvement were better among catheter drainage group.

Conclusion: Majority of patients with un-ruptured liver abscess can be managed without conventional surgical drainage with Percutaneous catheter drainage is a better modality as compared to percutaneous needle aspiration

Key words: liver abscess, percutaneous needle aspiration (PNA), percutaneous catheter drainage (PCD), surgical drainage, amoebic liver abscess, pyogenic liver abscess