

## A retrospective study of Amoebic liver abscess in North and East Bihar



### Surgery

**KEYWORDS:** Amoebic liver abscess, alcohol, E. Histolytica infection, Toddy

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### ABSTRACT

Amoebic liver abscess is a very common disease in our part of country. Low socioeconomic conditions, poor hygiene, toddy taking, all play a very vital role for its cause. The aim of the present study is to study the complete profile of the disease in terms of clinical presentations, its management and its prognostic outcome in two major regions of Bihar, which comprise nearly 50% of the state of Bihar.

### Introduction-

Amoebic liver abscess (ALA) is major problem in developing country like India. It is the most frequent extra-intestinal complication of E. Histolytica infection. Most common causes are low economic status, poor hygiene, contaminated drinking water, malnutrition, low host resistance, alcohol intake particularly Tadi in our region. ALA accounts for 3-9% of all cases Amoebiasis. It is ten times more common in men than women. Patients with ALA manifest early with pain in right hypochondrium, fever is almost invariable but may be intermittent and sometimes presents as fever of unknown origin. Malaise, myalgia and arthralgia are common. Jaundice is uncommon and signifies a poor prognosis.

The diagnosis of ALA is based on clinical findings, lab features, serologic testing and hepatic imaging. ALA is commonly localised to the right lobe, usually single and close to diaphragm. Available serological tests are ELISA, Indirect haemagglutination test, Immunoelectrophoresis and Immunofluorescent antibody test. Aspiration of an ALA should be performed if the diagnosis remain uncertain or whether the response to treatment is slow. The presence of Anchovy paste or chocolate sauce is typical. Aspiration also may be considered in cases where an abscess in left lobe close to the pericardium.

### Materials and Methods-

This retrospective study was carried out on 95 patients admitted at JLNMC, Bhagalpur and Darbhanga Medical College and Hospital from March 2013 to October 2016. All patients were subjected to thorough clinical examination after obtaining a detail history. The diagnosis was based on standard accepted criteria. All the patients had positive serological results from E. Histolytica and one or more lesions in the liver with characteristic features of ALA on USG.

### Observations and Results-

The age of patients varied from 18-74 years. The peak incidence was in the third and fourth decades of life. 66 (69.47%) patients of ALA were in age group 21-40 years.

ALA occurred predominantly in males 89(93.68%).

Out of 95, 76(80%) consumed alcohol particularly toddy. All toddy drinkers were male only.

Most common symptom of presentation were pain abdomen (93.68%), fever (92.63%), Anorexia (49.47%), nausea (40%), Jaundice (11.57%).

Most common signs of presentation were tender hepatomegaly (94.73%), intercoastal tenderness (90.52%).

Lab findings showed a neutrophilic leucocytosis and elevated ESR in 62 (65.26%) and 58 (61.05%) patients respectively. A normocytic normochromic or microcytic anaemia was seen in 48(50.52%) patients. Though the transaminase levels were elevated in only 34 patients, ALP was elevated in 57 patients.

On ultrasound examination, right lobe abscess was found in 83(87.36%) patients, whereas in 9 (9.47%) patients both lobes were involved. The abscess varied in size from 2cm to 15cm in diameter.

All ALA patients with sizes less than 6cm were given metronidazole alone 100ml iv 8hourly for 15 days. In 41 patients with ALA size of more than 6cm, percutaneous ultrasound guided needle aspiration was done along with intravenous metronidazole. Patients required surgical drainage. 2 patients expired in my study.

Follow up of all patients were done clinically or by ultrasound on 15<sup>th</sup> day and subsequently at one, three and six months. USG done after 15 days of initiation of treatment showed significant improvement in the group treated with aspiration but the resolution of the abscess was similar after six months. USG done after six months showed that 43 patients still had a residual cavity, although all of the patients were asymptomatic.

### Discussion

In this study 66 (69.47%) patients of ALA were in age group 21-40 years and the male to female ratio was 14.8:1 which is similar to the results obtained by other workers. There was a strong association of alcohol particularly toddy intake in 76 patients. Hai et al found a history of alcohol consumption in 85% patients with ALA. Joshi et al found a higher mortality rate in those consuming large quantity of alcohol. We found that alcohol particularly toddy drinkers have larger abscesses, greater complications and delayed resolution of abscess.

Abdominal pain was the most common symptom and most common sign was hepatomegaly which were similar to reported by other workers. Intercoastal tenderness found in 86(90.52%) patients which is a reliable sign.

Abdominal ultrasound is the gold standard for diagnosis ALA. Ultrasound was used as diagnostic as well as therapeutic aspiration. We found usg guided percutaneous aspiration along with anti-amoebic chemotherapy represents a successful therapeutic approach in the management of ALA of size more than 6cm. For ALA less than 6cm, treatment with metronidazole was sufficient.

Ultrasound done after 6 months showed that 43 patients still had a residual cavity. It has been shown by other workers that complete resolution of ALA may take years.

### Conclusion

Early diagnosis and conservative management with metronidazole alone for less than 6cm ALA or in combination with USG guided aspiration for more than 6cm ALA improved survival and lowered morbidity. By avoiding alcohol intake particularly toddy, many patients may be prevented from having ALA.

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