

TO STUDY THE MANAGEMENT OF LIVER ABSCESS

Dr. Kalpana Agarwal¹, Dr. Shiv Kumar Bunkar², Dr. Dony Devasia³, Dr. Kush Verma⁴

¹ Assistant Professor, ² Professor, ^{3,4} Resident

^{1,2,3,4} Department Of General Surgery, J L N Medical College, Ajmer (Rajasthan)

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Corresponding Author: Dr. Kalpana Agarwal

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Abstract

Background: Liver is an important and vital organ of the body. This organ is subjected to numerous systemic infections viral, bacterial and parasitic and lies at the distal end of the portal circulation; it is therefore bathed with portal blood containing viruses, bacteria parasites, ova, products of digestion and other antigens.

Methods: This study was a cross sectional study of patients attending surgery department in J L N Medical College, Ajmer Rajasthan. The study was conducted over a period of 1 year on 100 patients of liver abscess.

Results: 3 mortalities were found in amoebic liver abscess patients who had ruptured liver abscess and was undertaken for surgical intervention

Conclusion: We suggest early recognition of clinical features and prompt abdominal USG as cost-effective means for treatment initiation and reducing complications.

Keywords: Amoebic liver abscess, Pyogenic liver abscess, Treatment.

INTRODUCTION

Liver is an important and vital organ of the body. This organ is subjected to numerous systemic infections viral, bacterial and parasitic and lies at the distal end of the portal circulation; it is therefore bathed with portal blood containing viruses, bacteria parasites, ova, products of digestion and other antigens.¹

Hepatic or liver abscesses are infectious, space-occupying lesions in the liver; the two most common abscesses being pyogenic and amoebic. Pyogenic liver abscess (PLA) is a rare but potentially lethal condition, with a reported incidence of 20 per 1,00,000 hospital admissions in a western population.² Its severity depends on the source of the infection and the underlying condition of the patient. Amoebic liver abscesses (ALA) are common in tropical regions mainly where 'Entamoeba histolytica' is endemic and is more prevalent in individuals (mostly young males) with suppressed cell mediated immunity.³

In both the types of hepatic abscesses, right lobe of the liver is the most likely site of infection. The clinical presentation of both the types may be elusive with

combination of fever, right upper quadrant pain and hepatomegaly with or without jaundice.

MATERIAL & METHODS

This study was a cross sectional study of patients attending surgery department in J L N Medical College, Ajmer Rajasthan.

Inclusion criteria

- All consenting individuals with the age above 18 years.
- Patients presenting with consistent symptoms of liver abscess.
- Patients diagnosed with liver abscess radiologically (Ultrasonography and CT Scan, if required).

Exclusion criteria Patients not giving consent for the study.

The study was conducted over a period of 1 year on 100 patients of liver abscess. A detailed history was taken; a thorough physical examination was done. All patients were subjected to complete hemogram, liver function test, kidney function test, coagulation profile (PT/INR) and USG abdomen. Reference ranges of

these investigations were defined by the reference ranges of hospital laboratory. Blood and urine cultures were sent. Serologies for Entamoeba histolytica, HIV, hepatitis B and hepatitis C viruses were also done. Pus cultures were done whenever the pus was aspirated. Pus was aspirated only when

the abscess was liquefied, by then the patients were started on empirical treatment with antibiotics.

RESULTS

Table 1: Shows no. of abscesses in hepatic lobe

Abscess	Single lobe	Multiple lobe
Pyogenic (n=36)	28(77.78%)	8(22.22%)
Amoebic (n=74)	52(81.25%)	12(18.75%)

In both type of liver abscess right lobe was most commonly affected lobe was right lobe and single abscess was seen.

Table 2: Shows complication in hepatic abscesses

Abscess	No of patients	Complications
Pyogenic (n=36)	2	2 Septicemia
Amoebic (n=74)	8	6 Rupture 2 Septicemia shock

The complication of pyogenic liver abscess was present in 2 patients who presented with septicemia. In amoebic liver abscess group 6 patients had rupture of abscess and 2 patients had septicemia.

Table 3: Shows treatment and mortality

Abscess	Antibiotic alone	Mortality	Needle aspiration + antibiotic	Mortality	Surgical intervention	Mortality
Pyogenic (n=36)	20	0	16	0	0	0
Amoebic (n=74)	26	0	32	0	6	3

3 mortalities were found in amoebic liver abscess patients who had ruptured liver abscess and was undertaken for surgical intervention.

DISCUSSION

Amoebic liver abscess patients with abscess size 300cc were treated with needle aspiration with a success rate of 100%. This result was similar in our hands compared to other studies⁴ reporting 96.5% success rate. However, most practitioners do not recommend surgical drainage of Amoebic liver abscess.⁵⁻⁷ In our study, 6 patients presented with features of peritonitis and were treated by surgical exploration and drainage. The success rate in this group was 50.00%. Unfortunately, there were three deaths due to late presentation with features of generalized peritonitis and shock. The overall mortality in Amoebic liver abscess patients was similar to other reports.⁸ Other authors have reported a mortality rate of 12.3%⁹ and 17-20%.¹⁰

Pyogenic liver abscess should be managed by interventions like needle aspiration and patient with small abscess was treated with intravenous antibiotics. 16 patients were treated with needle aspiration. There was no failure in this group who was managed by drainage. Thus, success rate of needle aspiration was 100%, and is consistent with previous report¹¹⁻¹²

CONCLUSION

We suggest early recognition of clinical features and prompt abdominal USG as cost-effective means for treatment initiation and reducing complications.

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