

## A Prospective Study on Incidence, Etiopathogenesis, Clinical Presentation, Management And Prognosis of Liver Abscess in 100 Cases

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**Abstract:** Liver abscess can be a potentially life threatening condition requiring immediate intervention. It can be pyogenic or amoebic. The aim of this study is to know about the incidence, etiopathogenesis, clinical presentation and prognosis of 100 cases of liver abscess along with comparison of USG guided aspiration vs USG marked site aspiration of liver abscess at bedside. Amoebic liver abscess is the commonest extraintestinal manifestation of amoebiasis. This study was from June 2014 to November 2015. Incidence was higher in 4<sup>th</sup> decade and in men. Alcohol intake had a strong association with amoebic liver abscess. Abdomen pain was present in all. Right lobe was commonly involved. USG marked site aspiration needed multiple punctures with residual collection whereas USG guided aspiration was a single sitting single puncture procedure. On table USG may be needed in case of multiple abscess with one alone ruptured.

**Keywords :** Amoebiasis, Liver abscess, Pyogenic, USG guided.

### I. Introduction

Liver abscess continues to be a major diagnostic and therapeutic challenge to the medical fraternity. It is a life threatening and a potentially serious condition if left untreated. Two types of liver abscess are pyogenic and amoebic liver abscess. Amoebic liver abscess is the commonest extra intestinal manifestation of amoebiasis. It occurs in 3-9% of victims. It may present as acute abdomen or spontaneous rupture. Pyogenic liver abscess is a rare complication of intra abdominal infection or biliary tract infection. It is ascending type polymicrobial infection.

#### Aim Of The Study

1. To study the incidence and etiology of liver abscess
2. To evaluate its clinical features
3. To compare the results of USG guided aspiration vs USG marked site bedside aspiration.
4. To study the management and prognosis of liver abscess

### II. Materials And Methods

It is a prospective study in 100 cases of liver abscess presenting in Government Mohan Kumaramangalam Medical College Hospital from June 2014 to November 2015.

#### Exclusion Criteria

1. Hydatid liver cyst
2. Solid masses of the liver
3. Primary and secondary malignancies of the liver

#### Results

Table 1 Age Incidence

Age Group In Yrs	No.Of Patients	Percentage
30-40	16	16
41-50	49	49
51-60	20	20
>60	15	15

Table 2 Sex Distribution

Sex	No.of patients	Percentage
Male	97	97
Female	3	3

**Table 3** History Of Alcohol Intake In Liver Abscess

Alcohol Intake	No.Of Patients	Percentage
Amoebic	58	58
Pyogenic	3	3

**Table 4** Symptoms Among Cases Of Liver Abscess

Symptoms	No.Of Patients	Percentage
Abdomen Pain	99	99
Fever	57	57
Abdominal Distension	51	51
Dysentry	16	16

**Table 5** Signs Of Liver Abscess

Signs	No.Of Patients	Percentage
R Hypochondrial Tenderness	100	100
Intercostal Tenderness	100	100
Hepatomegaly	50	50
Jaundice	25	25
Epigastric Mass	12	12

**Table 6** lobe involvement and no. Of abscesses

Presentation	No.Of Patients	Percentage
Right Lobe Single	45	45
Right Lobe Multiple	25	25
Left Lobe Single	8	8
Left Lobe Multiple	2	2
Both Lobes	6	6

**Table 7** Etiology Of Liver Abscess

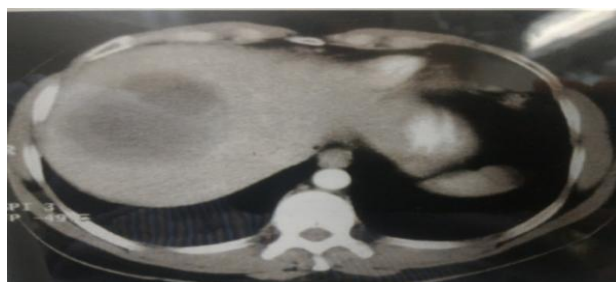
Presentation	No.Of Patients	Percentage
Amoebic	86	86
Pyogenic	14	14

**Table 8** Mode Of Treatment Of Liver Abscess

Treatment	No.Of Patients	Percentage
Single Aspiration	30	30
Percutaneous Catheter Drainage	25	25
Laprotomy And Drainage	22	22
Multiple Aspiration	19	19
Laposcopic Aspiration	1	1
Conservative Mangement	3	3

### III. Discussion

Liver abscess can be amoebic or pyogenic. First one is usually caused by entameba histolytica . asymptomatic carrier state occurs in E.dispar. pyogenic can be due to various microorganisms ranging from E.coli , klebsiella, proteus, enterobacter to staphylococcus, bacteriodes, fusobacterium. Pathogenesis is due to one of the following. Ascending cholangitis, pylephlebitis, hepatic artery septicaemia, traumatic, cryptogenic. Patients present with hypochondrial pain,, nausea vomiting, sweating ,rigors, diarrhoea. Diagnostic modalities include chest xray raised right hemidiaphragm, USG or CT showing space occupying lesion, liver aspirate, positive indirect hemagglutinin of serum antibodies .Complications include rupture, peritonitis, [paralytiv ileus, hemobilia, secondary bacterial infection, metastatic brain abscess. Treatment for amoebic abscess includes amoebicidal, luminicidal agents along with percutaneous drainage which can be USG guide or USG marked site drainage.



**Fig 1** ct scan showing liver abscess



**Fig2** percutaneous aspiration of liver abscess



**Fig 3** USG guided aspiration of liver abscess



**Fig 4** laprotomy showing ruptured liver abscess

#### **IV. Conclusion**

Liver abscess constitutes 0.29% of total surgical ward hospitalisation per year Common in 4<sup>th</sup> decade in men Associated with alcohol intake in 2/3<sup>rd</sup> cases Majority of cases are amoebic E.coli is the commonest organism causing pyogenic abscess Abdominal pain is the commonest symptom Right hypochondrial tenderness is the commonest sign Right lobe was predominantly involved Percutaneous aspiration under USG guide technique gave better results than USG marked site aspiration which resulted inresidual collectionand multiple aspirations. On table USG may be needed in multiple abscess with one alone gone for rupture.

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