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A CLINICOPATHOLOGIC STUDY AND MANAGEMENT STRATEGIES OF LIVER ABSCESS

KEYWORDS: Liver abscess,common problem,pigtail aspiration

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ABSTRACT Liver abscess is a common surgical case faced by the general surgeon. It has to be managed timely otherwise it is associated with high mortality rates. A prospective study of 50 patients attending Government Mohan Kumaramangalam Medical College Hospital ,Salem in the year of 2013 between june and december . Liver abscess is the common cause among all causes of abdominal pain. It mostly affects males and between the age group of 40-60yrs. Most common presentation is pain abdomen and fever. Ultrasonogram is the most cost effective investigation. Total count is elevated in most of the cases. Pigtail aspiration drainage is effective and safe, less invasive procedure. Overall mortality is nil in this study.

INTRODUCTION

Though liver abscess was described as early as 460377 BC,it still remains a challenging situation due to its highly variable presentation,causing diagnostic difficulties. The rising incidence in alcoholics,diabetics and immunocompromised individual has become a matter of grave concern as complication rate are high especially in this subgroup leading to increased morbidity and mortality. Liver abscess even today is considered as desperate disease and it is no wonder that many measures have been tried to cure this condition.

AIMS AND OBJECTIVES:

The objective is to study 50 cases of liver abscess and to determine

- Demographic profile(age,sex,ethnicity,,residence)
- Spectrum of clinical presentation
- Etiology
- Lab investigations
- USG in determining size and treatment
- Bacteriological profile
- Incidence of liver abscess in alcoholism,diabetes and immunocompromised
- To evaluate efficacy,recurrence rate,complication,morbidity, mortality.

Strategies followed:

- Antibiotics alone (in uncomplicated abscess measuring <5cms)
- USG guided percutaneous drainage+antibiotics (in unruptured abscess >5cms)
- Open surgical drainage

MATERIALS AND METHODS:

50 Patients diagnosed as a case of liver abscess admitted in GMKMCH , Salem

INCLUSION CRITERIA:

- All cases of liver abscess diagnosed clinically and /or ultrasono graphically
- All cases of bacterial and parasitic liver abscess
- All cases in evolving, liquefied & ruptured stage with or without peritonitis
- All cases of diagnosed liver abscess being referred to GMKMCH, Salem

EXCLUSION CRITERIA:

- Past h/o liver abscess
- Bleeding tendencies
- Traumatic liver abscess

AGE DISTRIBUTION WITH SEX:

TABLE 1:

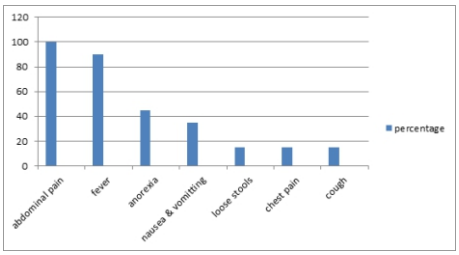
AGE IN YEARS	MALE	FEMALE	TOTAL	PERCENTAGE
20-30	7	-	7	14%
31-40	7	-	7	14%
41-50	10	-	10	20%
51-60	17	-	17	34%
61-70	9	-	9	18%

The most common age group affected in this study is 40-60years.

CLINICAL PRESENTATION:

TABLE 2:

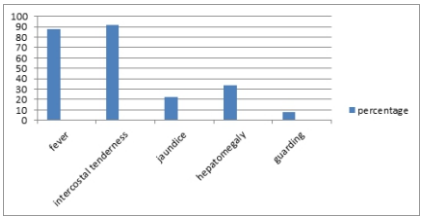
SYMPTOMS	NO OF PERSONS PRESENT	PERCENTAGE
ABDOMINAL PAIN	50	100%
FEVER	44	88%
ANOREXIA	22	44%
NAUSEA AND VOMITING	18	36%
LOOSE STOOLS	6	12%
CHEST PAIN	5	10%
COUGH	5	10%



CLINICAL SIGNS:

TABLE 3:

FEVER	44	88%
INTERCOSTAL TENDERNESS	48	92%
JAUNDICE	11	22%
HEPATOMEGALY	17	34%
GUARDING	4	8%



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LAB INVESTIGATIONS:

TABLE 4:

INVESTIGATIONS	NO OF PATIENTS	%
ELEVATED TOTAL COUNT	38	76%
Hb <10g	14	28%
RBS>200mgs	11	22%
B.UREA>42mgs	8	16%
S.CREAT>1.2	8	16%
STOOL OVA/CYST	11	22%

LIVER FUNCTION TESTS:

TABLE 5:

LFT	NO.OF PTS	PERCENTAGE
S.ALBUMIN(<3mg%)	4	8%
SGPT(>45IU)	11	22%
SGOT(>45IU)	11	22%
SAP(>115IU)	18	36%
S.BILIRUBIN(>1.2mg/dl)	12	24%
PROLONGED PT(>16SECS)	2	4%

HIV SEROLOGY:

TABLE 6:

HIV	NO.OF PTS	PERCENTAGE
POSITIVE	1	2
NEGATIVE	49	98

USG ABDOMEN

TABLE 7:

USG FINDINGS	NO OF PTS	%
RIGHT LOBE ABCESS(SINGLE)	44	88
LEFT LOBE ABCESS(SINGLE)	4	8
MULTIPLE ABCESSES	2	4

TABLE 8:

SIZE OF ABSCESS	NO OF PTS	%
<5CM	5	10%
>5CM	45	90%

TREATMENT:

TABLE 9:

TREATMENT	NO OF PTS	%
CONSERVATIVE	5	10%
USG GUIDED ASPIRATION	4	8%
PIGTAIL ASPIRATION	41	82%

DISCUSSION:

The development of modern imaging , advancement of drainage techniques, improved microbiological identification and the nutritional care, decreased the mortality to 5-30%. Yet , the prevalence of infection remains unchanged.

Untreated, the infection remains unevenly fatal.

India being the tropical country, 400 million harbouring E.histolytica, the causative organism of liver abscess , it is of immense importance for understanding the same

AGE AND SEX DISTRIBUTION:

Most patients in the study belongs to 40-60 yrs and the mean age is 48.8yrs which is comparable to other studies

TABLE 10:

STUDIES	MEAN AGE IN YEARS
SHYAM MADHUR	20-45
PRESENT STUDY	48.8

TABLE 10a:

STUDIES	MALES
SHYAM MADHUR ET ALL	90%
PRESENT STUDY	100%

SYMPTOMS AND SIGNS:

Most patients are presented with pain in right hypochondrium (100%) and fever (88%) of patients which are more significant.

ANALYSIS OF LAB INVESTIGATIONS:

TABLE 11:

LFT	HYO MIN ET ALL	PRESENT STUDY
LEUCOCYTOSIS	78%	76%
S.ALBUMIN(<3mg%)	4%	8%
SAP	18%	36%
PROLONGED PT(>16SECS)	2%	4%

USG FINDINGS:

TABLE12:

USG FINDING	WORLD J GASTROENTEROL 2008 april 7:14 (13): 2089-2093	PRESENT STUDY
SOLITARY ABSCESS	76.29%	92%
RIGHT LOBE ABSCESS	74.12%	88%
LEFT LOBE ABSCESS	14.28%	8%
MULTIPLE	23.7%	4%

TREATMENT ANALYSIS:

TABLE 13:

TREATMENT	PRESENT STUDY %	HYO MIN YOO ET ALL %
CONSERVATIVE	10%	26%
USG GUIDED ASPIRATION	8%	46%
PIGTAIL DRAINAGE	82%	4%
OPEN DRAINAGE	21%	-

COMPLICATIONS:

TABLE 14:

STUDY	%
HYO MIN YOO ET ALL	59%
PRESENT STUDY	-

HIV SEROLOGY AND LIVER ABSCESS:

No significant difference was found in HIV serology positive and negative patients

CONCLUSION:

Liver abscess is a very common problem in India. It occurs in age group of 40-60 yrs. Males are most affected in this study. Most cases present with an acute onset. Pain abdomen was most commonly present in 100% of the cases. The most consistently occurring symptom is fever. The single most important factor is alcohol consumption. Liver abscesses are mostly solitary and present in right lobe of liver

Leucocytosis is seen in most of the cases. Hypoalbuminemia, leucocytosis, ALP level , Prolonged PT were considered as predictive factors.

USG guided pigtail drainage aspiration is less invasive, safe & effective management of liver abscess. No recurrence and no complications in present study

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