

A COMPREHENSIVE STUDY OF LIVER ABSCESS.

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INTRODUCTION

Descriptions of Liver abscesses date back to Hippocrates in approximately 4000 BC. But an understanding of their Etiology, Bacteriology, diagnosis and treatment is a recent event in Twentieth Century and is still emerging.

Hepatic abscess often presents a pitfall in diagnosis and challenge to surgical diagnostic acumen. Early diagnosis and prompt initiation of treatment almost certainly leads to complete cure.

Of the two types of hepatic abscess, the Amoebic and Pyogenic, the former seems to be more prevalent in our country. Because studies of Hepatic abscess especially amoebic abscess have often originated from endemic areas, they offer little information on the application of modern diagnostic techniques. Diagnosis in this area mainly depends on the clinical presentation. But since the introduction of Ultra sonogram as a diagnostic device a more Accurate Diagnosis can be made in every case.

OBJECTIVES

1. To determine the incidence of Hepatic abscess in our Hospital.
2. To evaluate the various clinical parameters of both Uncomplicated and complicated Liver abscess and various modalities of treatment available.

MATERIAL AND METHODS

The material used in this study consisted of 55 cases of liver abscess which were admitted in the Department of General Surgery.

CRITERIA FOR INCLUSION

1. Enlarged and tender liver.
2. Presence of Macroscopic and Microscopic features of pus in the liver.
3. Culture and sensitivity of aspirated pus.
4. Radiological evidence of raised and fixed right dome of diaphragm.
5. Ultrasonogram evidence of liver abscess.

The pathophysiology, Clinical behaviour and investigative modalities and treatment patterns are thoroughly analyzed and presented here.

RESULTS

Table 1: Baseline characteristics of study participants

Parameter	Total n=55	Percentage (%)
Age	41.49±10.14 (mean±SD)	

Gender		
Male	48	87
Female	7	13
Type of disease		
Colloid goitre	1	2.56
Solitary nodule	16	29.06
Multinodular goitre	27	49.58
Toxic multinodular goitre	6	18.8
Type of Surgery		
Hemithyroidectomy	17	29.06
B/L subtotal thyroidectomy	25	53.85
Near total thyroidectomy	1	1.7
Total thyroidectomy	7	14.53

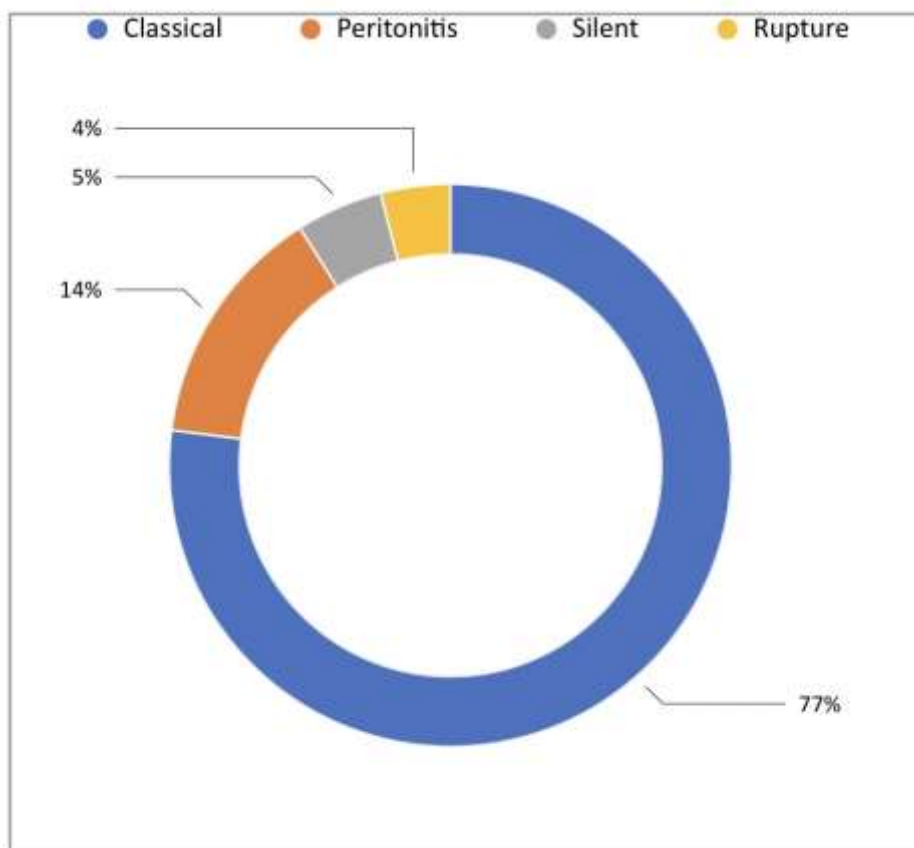
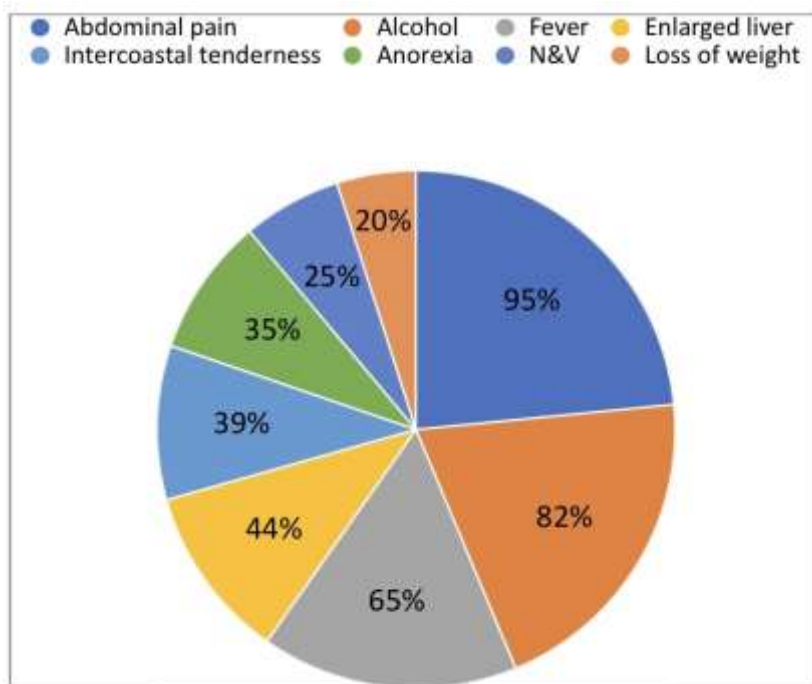


Figure 1: clinical presentation

Figure 2: modes of presentation

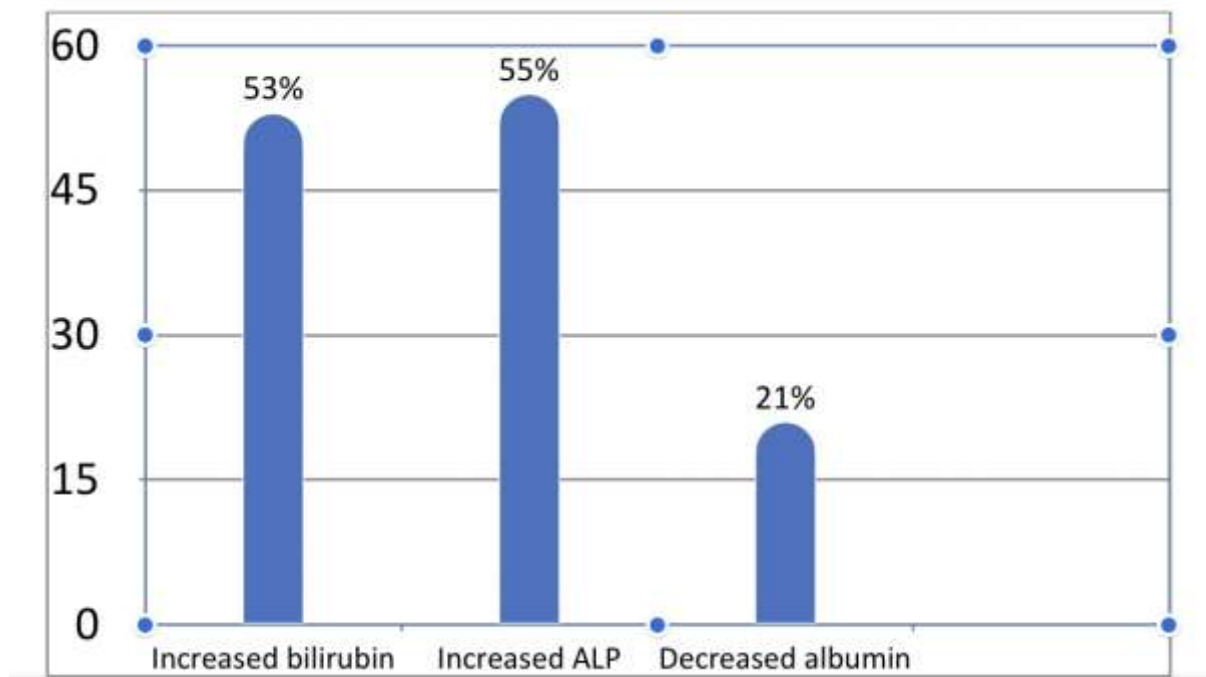


Figure 3: Liver function tests

DISCUSSION

The condition of hepatic abscess and its grave prognosis were known in ancient times to Hippocrates (460 BC – 370 BC) and Celsus (53 BC – 7 AD) Hippocrates was able to distinguish from cystic liver disease. Celsus appreciated the poor prognosis of hepatic abscess associated with Jaundice. Not until 1936 did Bright in his own observation on Jaundice clearly described hepatic suppuration with true abscess formation.

Oschner, Debaquey and Murray 1938 in their classic article reported amoebic liver abscess, 75% as very common in the warmer southern climate. Liver abscess though a well defined clinical entity yet many difficulties were faced in determining the site, size and number of abscess. Chuttani et al 1963 have commented that the difficulties in clinical diagnosis of hepatic amoebiasis can be diverse and real. Those who do not meet the condition frequently are not likely to appreciate them fully. Untreated liver abscess has mortality rates approaching 100%. Reports of successful medical management with or without aspiration describe case fatality rates as low as 6%.

Highest incidence of liver abscess in males 96% in our study has been attributed to alcoholism, (Present study H/o alcoholism was present in 82% Cases). This correlates with the study of Oschner & Debaquey which predispose to hepatitis. Alcohol produces hepatocellular damage and may make it prone to develop hepatic abscess – Sheila – Sherlock.

Data concluded in his study that Jaundice in liver abscess is primarily of cholestatic origin. Intrahepatic cholestasis which is due to compression of Both hepatic ducts. Though Lamot and Pooler, Vakil et al, Hazra et al have noted an increase mortality in liver abscess with Jaundice we have not encountered such thing in this study.

In the present study we had a protocol of managing the liver abscess of size less than 5 cm on ultrasonogram with conservative management (drugs).

We used to treat the amoebic liver abscess patients with Ciprofloxacin 200 mg twice daily, metronidazole 500 mg thrice daily both parenterally for five days (and then changed to oral preparation) along with chloroquine 300 mg twice daily orally.

Pyogenic liver abscess were treated first with empirical antibiotics – Ampicillin Gentamycin and Metronidazole and then changed according to culture and sensitivity we haven't faced any major complications of chloroquine except vomiting. Most of the patients (90%) resolve and do better with conservative management. About 10% patients whose size doesn't decrease with antibiotics even after 4-5 days were aspirated under ultrasound guidance.

CONCLUSION:

1. Incidence of liver abscess is 0.8% of total admissions in our hospital. Incidence of Amoebic liver abscess is very common in our study. The ratio of amoebic liver abscess: pyogenic liver abscess being 19:1
2. About 82% of patient were alcoholic.
3. Male predominates both in amoebic and pyogenic liver abscess in the ratio of 7:1.
4. Anemias, Leucocytosis were common Accompaniments.
5. Commonest symptom is abdominal pain and fever, sign being Tender hepatomegaly and Intercostal Tenderness.
6. Only 14% of patients presented with Jaundice
7. Right Lobe was predominantly involved in the ratio of 5:1
8. Clinical diagnosis of liver abscess is straight forward except for those presenting with complications.

REFERENCES :

1. Ochesner A, Debakay, M. Murray, A. Pyogenic abscess of the liver. A.M.J.Surg 1938: 40:292.
2. Barnes PF, Decock KM et al. A Comparison of Amoebic and Pyogenic abscess of the liver. Medicine 1987 66: 472.
3. Dela Rey N.J, Simjee AE, Patel A. Indications for Aspiration of Amoebic liver abscess. S Afr med.J.1989 : 75:373.
4. Balasegaram M. Management of Hepatic abscess. Curr Surg 1981 18:283.
5. Bailey and Love's short Practice of Surgery. 24th Edition.
6. Lamont N.M, and Pooler NR (1958). Hepatic Amoebiasis. Quart, J.Med 27:389.
7. Patterson M, Healey, GR. Shabot JM (1980). Serological Testing for Ameobiasis. Gastroenterology 78, 136.
8. Essential Surgical Practice A. Cuschieri M.D., G.R. Giles MS, A.R.Moosa M.D. 4th Edition.
9. Wilmott AJ. (1962) Clinical Ameobiasis, Blackwell Scientific Publication, Oxford.
10. Lippincott's Color Atlas and Text Book of Diagnostic Micro Biology 5th Edition.
11. Singh DS, Sankaian A, Bhata V.N. Srivatsava K.K. Chandrasekaran S. Extra intestinal Amoebiasis – A Clinical and Serological study.
12. Reynolds T.B. Amoebic abscess of liver Gastroenterology 60:952- 953 1971.
13. Diseases of the liver 5th Edition. Leon. Schiff M.D., Ph. D., Eugene R. Schiff M.D.
14. Sheila Sherlock & James Dooley 10th Edition. Diseases of the liver and Biliary System.
15. WHO (1969) Amoebiasis Tech. Report Series. 421.