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EXPLORE THE LATEST DEVELOPMENTS IN CLINICAL RESEARCH ON CASES OF LIVER ABSCESS- STUDY OF 100 PATIENTS AT OUR INSTITUTE.

General Surgery

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ABSTRACT

Background: Liver abscess is a serious condition that can result from a variety of infections, including those originating from the biliary or intestinal tract, hematogenous seeding, or contiguous infection. Despite appropriate medical-surgical management, the mortality rate for liver abscess can range from 20% to 60%. The aims of this study were to investigate the prevalence of etiological factors in liver abscess, study the clinical presentations of the condition, and evaluate the outcomes of different modes of treatment for liver abscess. **Methods:** This retrospective study included 100 patients diagnosed with liver abscess, spanning various age groups and socio-economic statuses. Written consent was obtained from all patients, and a pre-designed proforma was used to collect relevant data from each patient. **Results:** Of the 100 cases of liver abscess included in the study, the age range was 16 to 65 years, with the majority of patients being in the young age group (14-34 years), and a median age of 31. There were more male patients (82%, n=82) than female patients (18%, n=18) in our study. Right hypochondrium pain (24%, n=24) was the most common presenting symptom among all liver abscess cases. Percutaneous aspiration along with medical management yielded better results, with ultrasonography being the most important recommended tool for the initial diagnostic investigation. Pigtailing was also used in some cases. Overall, advanced modalities in the management of liver abscess have led to improved prognosis, with less or no mortality except in patients with malignant disease. **Conclusions:** In conclusion, liver abscess is a serious condition with potentially high mortality rates, but with appropriate management, outcomes can be significantly improved. Our study highlights the importance of percutaneous aspiration along with medical management, as well as the use of ultrasonography and other advanced modalities in the diagnosis and treatment of liver abscess.

KEYWORDS

INTRODUCTION:

Liver abscess is a serious condition characterized by the accumulation of pus within the liver parenchyma. It is a potentially life-threatening condition, with mortality rates ranging from 20% to 60%, even with appropriate medical-surgical management. The incidence of liver abscess is increasing, and it is estimated to affect approximately 3.6 people per 100,000 population annually. The etiology of liver abscess can vary, but it is commonly associated with biliary or intestinal tract infections, hematogenous seeding, or extension of contiguous infection.

The clinical presentation of liver abscess can be varied, with symptoms such as fever, abdominal pain, nausea, and vomiting. Early diagnosis and prompt treatment are essential to reduce morbidity and mortality associated with this condition. The management of liver abscess has evolved over the years, and different modalities such as percutaneous aspiration, antibiotics, and surgical intervention have been used in the treatment of this condition.

This study aimed to investigate the prevalence of etiological factors in liver abscess, study the clinical presentations of the condition, and evaluate the outcomes of different modes of treatment for liver abscess admitted at Zydus Medical College & Hospital During the Year of 2019-2021. The results of this study may help in improving the management and outcomes of liver abscess

AIMS & OBJECTIVES :

The aim of this study is to investigate the prevalence of etiological factors in liver abscess, study the clinical presentations of the condition, and evaluate the outcomes of different modes of treatment for liver abscess. The specific objectives of the study are:

1. To determine the demographic profile of patients with liver abscess, including age, gender, and socio-economic status.
2. To identify the etiological factors associated with liver abscess, including biliary or intestinal tract infections, hematogenous seeding, and contiguous infection.
3. To evaluate the clinical presentations of liver abscess, including symptoms and signs associated with the condition.
4. To assess the different modes of treatment used in the management of liver abscess, including percutaneous aspiration, antibiotics, and surgical intervention.
5. To evaluate the outcomes of different modes of treatment used in the management of liver abscess, including morbidity, mortality, and complications.
6. To determine the impact of advanced modalities, such as ultrasonography and pigtailing, on the management and outcomes of liver abscess.
7. To provide recommendations for the management of liver abscess based on the findings of the study.

By achieving these objectives, this study aims to contribute to the understanding of liver abscess and improve the management and outcomes of this potentially life-threatening condition.

MATERIALS AND METHODS:

Study Design: This is a retrospective observational study conducted at Zydus Medical College ,Dahod, Gujarat, India. The study was conducted from patient indoored at Zydus in Surgical & Medical Units During the Year of 2019-2021.

Study Population: The study included 100 patients diagnosed with liver abscess, belonging to different age groups and socio-economic status, who were admitted to the hospital during the study period. Written consent and a pre-designed proforma were obtained from all patients included in the study.

Inclusion Criteria:

1. Patients diagnosed with liver abscess based on clinical and radiological findings.
2. Patients of both genders and all ages.
3. Patients who were admitted to the hospital during the study period.

Exclusion Criteria:

1. Patients with pre-existing liver disease, such as cirrhosis, hepatitis B or C.
2. Patients with other medical conditions that may affect the outcome of liver abscess, such as malignancy or immunodeficiency.
3. Patients who refused to participate in the study or did not provide written consent.

Data Collection:

A pre-designed proforma was used to collect relevant data from the patients included in the study. The data collected included demographic information, clinical presentations, laboratory investigations, imaging studies, modes of treatment, and outcomes.

Statistical Analysis:

The data collected were entered into a Microsoft Excel spreadsheet and analyzed using Statistical Package for Social Sciences (SPSS) version 25.

Descriptive statistics were used to analyze the data, including mean, median, and standard deviation for continuous variables, and frequency and percentages for categorical variables. Chi-square test was used to compare the categorical variables.

Ethical Considerations: The study was conducted in accordance with the ethical principles of the Declaration of Helsinki. Written consent was obtained from all patients included in the study, and their identities were kept confidential. The study was approved by the Institutional Ethics Committee of [name of hospital].

DISCUSSION:

Our study aimed to investigate the prevalence of etiological factors in liver abscess, study the clinical presentations of the condition, and evaluate the outcomes of different modes of treatment for liver abscess. Our study population included 100 patients diagnosed with liver abscess, belonging to different age groups and socio-economic status.

Our findings showed that the most common presenting symptom of liver abscess was right hypochondrium pain, which was seen in 24% of the cases. This was consistent with previous studies, which have shown that abdominal pain is a common presenting symptom of liver abscess. The median age of our study population was 31, and the majority of patients belonged to the young age group (14-34 years).

Our study showed that percutaneous aspiration along with medical management yielded better results than medical management alone. Ultrasonography was the most important recommended tool for the initial diagnostic investigation in liver abscess cases, and pigtailing was found to be useful in some cases. The use of antibiotics, in combination with percutaneous aspiration and surgical intervention, showed favorable outcomes in our study.

Our study has some limitations. As it is a retrospective study, we were dependent on the accuracy and completeness of the medical records. Moreover, the study was conducted at a single center, which may limit the generalizability of our findings.

CONCLUSION:

Liver abscess is a potentially life-threatening condition that requires prompt diagnosis and appropriate management. Our study showed that percutaneous aspiration along with medical management yielded better outcomes than medical management alone. Ultrasonography was found to be the most important recommended tool for the initial diagnostic investigation in liver abscess cases, and pigtailing was found to be useful in some cases. The use of antibiotics, in combination with percutaneous aspiration and surgical intervention, showed favorable outcomes in our study. By understanding the clinical presentations, etiological factors, and treatment outcomes of liver abscess, we can improve the management and outcomes of this condition. Further studies are required to validate our findings and explore the use of advanced modalities in the management of liver abscess.

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