ABSTRACT

Assessment of outcome of percutaneous drainage in treatment of liver abscess

Author information:

INTRODUCTION:
Liver abscess is collection of suppurative cavity in the liver resulting from the invasion, infection and multiplication of microorganisms. Advances in sonography and computerized tomography scanning and interventional radiology along with improvements in intensive care, administration of appropriate antibiotic therapy led to greater success in management of patients with liver abscess, thus improving the patient outcome.

AIM AND OBJECTIVE:
To evaluate need and the outcome of percutaneous drainage in treatment of liver abscess

METHODS OF COLLECTION OF DATA (INCLUDING SAMPLING PROCEDURE):
A. Study Design: Prospective cohort study.
B. Place of study: Govt. Kilpauk Medical College and Hospital, Chennai.
C. Study sample size: \[ N = \frac{Z^2 \cdot P \cdot (1-P)}{d^2} = 56 \] with 95% confidence interval z value is taken as 1.96

\[ P = \text{Propotion of people with reduction of abscess 70\%} \]
\[ D = \text{absolute error 12\%} \]

SAMPLE SIZE : 56 (selected by Random sampling method).
All patients diagnosed by ct-scan and aspiration of pus with abscess size of more than 5cm are included in the study irrespective of etiology.
RESULTS:-

Of the 56 patients enrolled in the study, 48 were male and 8 were female patients. The most common age group was 41-50 years among both male and female groups followed by the age group of 51-60 mean age was 46.625.

The mean hospital stay was 10.16 days we did not wait for complete resolution of cavity once the size of the abscess has reduced 70% the treatment was considered successful.

The size of the abscess of the patients before procedure ranged from 240cc to 1130cc, with the mean of 520.571. The standard deviation was 201.5 and standard error of mean was 144.67 and the standard error of mean being 3.598214.

The size of the abscess of patients after 1 week from procedure ranged from 40cc to 620cc. The mean of size of abscess 237.71. The standard deviation was 237.714 and the standard error of mean being 2.290732.

The difference in the mean between the two groups was 279.527. The p-value was 0.00001 (<0.05). Hence the value was statistically extremely significant.

CONCLUSION:-

Percutaneous drainage is needed for abscess more than 5cm. with successful outcome Ultrasound and/or CT scan to confirm diagnosis,

Microbiological analysis of abscess aspirates and blood cultures: antibiotic regimen should be adjusted according to culture results and sensitivities.

Percutaneous drain placement is in first line therapy and there is 100% success rate which is equivalent to that of international literatures it also decrease the rate of reduction of abscess size in treatment of liver abscess.

Percutaneous drainage can be used in even in multiple and/or large hepatic abscess with septations and in critically ill patients without any major complications with mean reduction time of 10.16 days.