Correlation between abscess size and liver function tests in cases of liver abscess

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Background: Liver abscess has shown a major change in demographics, etiology, diagnosis, and treatment over the past 100 years. The modern diagnostics like ultrasound and computed tomography to locate and drain the abscess have reduced the mortality to 2-12%. However, due to the complications of liver abscess especially the amebic ones the morbidity is still high. This study aims to study the correlation of various LFT parameters with abscess volume for early detection of high risk patients and early treatment thus reducing morbidity.

Methods: The study was conducted over a period of six months on 50 patients of liver abscess. History and physical examination was done. All patients were subjected to complete hemogram, liver function test, coagulation profile (PT/INR) and USG abdomen. The data was recorded and compiled in excel sheets and analyzed using correlation coefficient (R) method.

Results: The mean age of the patients was 41.2 years with male preponderance. Amoebic liver abscess (88%) was predominant over pyogenic liver abscess (12%). Alcoholism (48%), smoking (42%) and diabetes mellitus (18%) are main predisposing factors in case of liver abscess. Hepatomegaly was found in 88% cases. Elevated ALP, low albumin, increased PT INR points to the diagnosis of liver abscess. Complications seen were pleural effusion (10%) and ascites (4%). On analysis, liver abscess size is significantly positively correlated with INR, ALP, liver enzymes, and negatively correlated with serum albumin level.

Conclusions: Liver abscess size was found to be positively correlated with INR and alkaline phosphatase (ALP), liver enzymes (SGOT, SGPT) and negatively correlated with serum albumin levels. There was no correlation of abscess size and bilirubin levels. Hence, LFT can be used to estimate the liver abscess size and predict the severity and prognosis of patient.

References

Biography
Vineet Jain is an Associate Professor at Hamdard Medical College, New Delhi, India. He has an experience of eight years post MD. His special interest has always been towards Infectious Diseases. He believes that all infectious disease if diagnosed in time and managed appropriately can lead to a drop in mortality. So lot of my research work is focused on understanding various aspects of infections.

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