

## Original Research

### Assessment of Psychiatric illness among liver cirrhosis patients: An observational study

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#### ABSTRACT:

**Background:** Cirrhosis is defined as the histological development of regenerative nodules surrounded by fibrous bands in response to chronic liver injury that leads to portal hypertension and end stage liver disease. Research in the field of psychiatric and hepatic sciences has concentrated on the organic psychiatric aspects of liver disease. Hence; the present study was undertaken for assessing psychiatric illness among liver cirrhosis patients. **Materials & methods:** A total of 60 patients diagnosed with liver cirrhosis were enrolled. Physical examination was concentrated to detect stigmata of chronic liver disease. Child Pugh score grading system was used for grading of patients liver cirrhosis. According to this grading system, patients were grade according to increasing order of severity as follows: Grade A, Grade B and Grade C. Psychiatric illness among liver cirrhosis patients was assessed and was correlated with severity of liver cirrhosis. **Results:** Out of 60 patients with cirrhosis of liver, psychiatric illness was seen in 60 percent of the patients. Non-significant results were obtained while correlating psychiatric illness with grading of severity of liver cirrhosis. **Conclusion:** Psychiatric disorders and liver illnesses are entangled in multiple ways. Screening for liver diseases for the presence of psychiatric disorders is necessary.

**Key words:** Liver, Cirrhosis, Psychiatric illness

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#### INTRODUCTION

Cirrhosis is defined as the histological development of regenerative nodules surrounded by fibrous bands in response to chronic liver injury that leads to portal hypertension and end stage liver disease. Recent advances in the understanding of the natural history and pathophysiology of cirrhosis, and in treatment of its complications, resulting in improved management, quality of life and life expectancy of cirrhotic patients.<sup>1-3</sup>

Research in the field of psychiatric and hepatic sciences has concentrated on the organic psychiatric aspects of liver disease. However, the emotional accompaniments of liver disease are assuming greater significance, especially now that the prognosis of fulminating and chronic disease has been radically

improved following the establishment of liver transplant programmes. Depression is a mental disorder characterized by a pervasive and persistent low mood that is accompanied by low self-esteem and by a loss of interest or pleasure in normally enjoyable activities. Liver cirrhosis has been long recognized and associated with depression. Clinical studies have shown that some patients with Liver cirrhosis have more severe depressive tendencies.<sup>4-6</sup> Hence; the present study was undertaken for assessing psychiatric illness among liver cirrhosis patients.

#### MATERIALS & METHODS

The present study was undertaken for assessing psychiatric illness among liver cirrhosis patients. A total of 60 patients diagnosed with liver cirrhosis were

enrolled. Physical examination was concentrated to detect stigmata of chronic liver disease. Liver cirrhosis was defined in histology as a bridging fibrosis-a late stage of hepatic fibrosis-leading to deranged liver architecture and regenerative nodules. Child Pugh score grading system was used for grading of patients liver cirrhosis. According to this grading system, patients were grade according to increasing order of severity as follows: Grade A, Grade B and Grade C. Psychiatric illness among liver cirrhosis patients was assessed and was correlated with severity of liver cirrhosis. All the results were compiled and analyzed by SPSS software. Chi- square test and one-way ANOVA were used for assessment of level of significance. P- value of less than 0.05 was taken as significant.

**RESULTS**

Out of 60 patients with cirrhosis of liver, psychiatric illness was seen in 60 percent of the patients. Mean age of the patients with psychiatric illness was 46.2 years. 66.67 percent of the subjects were males while the remaining were females. Non-significant results were obtained while correlating psychiatric illness with grading of severity of liver cirrhosis.

**Table 1:** Psychiatric illness among liver cirrhosis patients

Variable	Number of patients	Percentage
Psychiatric illness present	36	60
Psychiatric illness absent	24	40
Total	60	100

**Table 2:** Demographic details of patients with psychiatric illness

Variable	Number
Mean age (years)	46.2
Males (%)	66.67
Females (%)	33.33

**Table 3:** Correlation of Child-Pugh Score grading with psychiatric illness

Child-Pugh score grading	Psychiatric illness present (n)	Psychiatric illness absent (n)	p-value
Grade A	12	7	0.12
Grade B	15	9	
Grade C	9	8	
Total	36	24	

**DISCUSSION**

Cirrhosis is the final stage attained by various chronic liver diseases after years or decades of slow progression. There are, however, ways to prevent cirrhosis, because the diseases that most commonly lead to it progress slowly, and measures are available

to prevent and treat them. Moreover, most cases of hepatocellular carcinoma (HCC) arise in a cirrhotic liver, so cirrhosis prevention is, in fact, also HCC prevention.<sup>7- 10</sup> Hence; the present study was undertaken for assessing psychiatric illness among liver cirrhosis patients.

In the present study, out of 60 patients with cirrhosis of liver, psychiatric illness was seen in 60 percent of the patients. Mean age of the patients with psychiatric illness was 46.2 years. 66.67 percent of the subjects were males while the remaining were females. Patients with chronic psychiatric disorders such as mood disorders and schizophrenia have more frequent excessive alcohol consumption than the general population. Alcohol is the first psychoactive substance used in patients suffering from severe mental illness. Disorders linked to alcohol are three times more frequent in patients with schizophrenia or bipolar trouble than the general population. Conversely, 50 to 70% of patients with alcohol dependence are suffering from severe mental illness. Alcohol is the main cause of cirrhosis in Western countries. Alcohol can worsen hepatic lesions from other origins and increases the incidence of hepatocellular carcinoma. Abstinence is the most efficient treatment in alcoholic cirrhosis. In Europe, 30 to 50% of liver transplantations are related to alcohol, whereas the percentage is much lower (17.2%) in the USA. Despite all the precautions taken, unfortunately, 18% of these patients experience severe relapse and one third of them show alcoholic cirrhosis recurrence. A multi-disciplinary approach to select and follow patients is crucial to reduce the risk of alcohol recurrence after liver transplantation. Patients with acute alcoholic hepatitis can be included in specific liver transplantation programs, but no recommendations are now available.<sup>4-7</sup>

In the present study, non-significant results were obtained while correlating psychiatric illness with grading of severity of liver cirrhosis. Ewusi-Mensah I et al assessed psychiatric morbidity in patients with alcoholic liver disease. Seventy one patients with alcoholic liver disease and an equal number with non-alcoholic liver disease were interviewed using the schedule for affective disorders and schizophrenia. Forty seven (66%) of the group with alcoholic liver disease had or had had psychiatric illnesses compared with 23 (32%) of the control group (p less than 0.001). Affective disorder, particularly major depression, neurotic disorders, and antisocial personality, were all more common among the patients with alcoholic liver disease than the controls. No patient had schizophrenia or other forms of psychosis. Among the patients with alcoholic liver disease 11 men (24%) and 14 women (54%) had an affective or a neurotic disorder that had antedated their heavy drinking, and 30 (77%) of those who had had such a problem at any time had symptoms at the time of interview. Abstinence from alcohol is

essential for patients with severe alcoholic liver disease. In view of the high prevalence of psychiatric disorders in these patients psychiatric assessment is important to increase the patients' likelihood of complying with such advice.<sup>11</sup>

## CONCLUSION

Psychiatric disorders and liver illnesses are entangled in multiple ways. Screening for liver diseases for the presence of psychiatric disorders is necessary.

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