

Child-Pugh Score of Decompensated Chronic Liver Disease Patient as a Predictor of Short-Term Prognosis

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Abstract

Original Research Article

Objective: The study was carried out to produce the short-term prognosis of decompensated Liver Disease through the Child-Pugh scoring system and as the complications of cirrhosis and to find out the eligible Percentage of patients for liver transplantation suffering from advanced liver disease. **Methodology:** This cross-sectional prospective study was conducted in two best institutes of Bangladesh (DMCH and RSMMU) from January to June 2010. The target population for this study was patients with chronic liver disease in the decompensated state. The patient was selected by meticulous history and clinical examination, including stigmata of chronic liver disease and decompensation, especially ascites, edema, hematemesis melaena, and hepatic encephalopathy. The ultrasonography evidence of coarse echogenicity and Albumin: Globulin ratio alteration was recorded as chronic liver disease evidence. Investigation such as serum bilirubin serum albumin, prothrombin time, ultrasonography of the whole abdomen, the viral marker was done in all cases. If the patients are compensated states or decompensated signs explained by any other illness were excluded from the enrollment, 50 patients were randomly selected, and the child Pugh scoring was done within 24 hours of hospitalization. The study physician followed the patients daily up to discharge or death, whichever comes first. **Result:** In this study, the maximum age incidence among the decompensated CLD patients was between 46-55 years (36%), and the male-female ratio was 4.55:1. Among 50 patients, 64% of patients fall in the Child-Pugh class C group, 28% fall in the class B group, and only 8% fall in the class A group. In the first three months of the study period, death occurred in 37.5% in class C, 14.28% in class B and 0% in class A. Overall, death occurred in 14 patients out of 50 patients (28%). In total, 46 patients out of 50 have Esophageal varix. The most frequent presenting symptoms in different Child-Pugh classes are swelling of the abdomen, weakness, Anorexia, nausea, and vomiting. Yellow coloration of skin and urine, and the most important and common signs are ascites, jaundice, etc. And splenomegaly, hepatomegaly, cirrhotic face, and Disorientation is relatively prominent in class B, and C. Regarding biochemical findings this study fourth percent patients have clinical jaundice(34-51 mol/L), Serum albumin level is <30 g/L in 46% of patients and prothrombin time is 26 seconds prolonged in 52% patients ascitic fluid study is done 31 patients Out of 50 patients and among the 31 patients 28 patients have Transudative that is SAAG is 1.1 g/dl and 7 patients fluid study suggestive for Spontaneous Bacterial Peritonitis. Hepatitis B positive patients' number is 40, and Hepatitis C positive patients' number is 6 out of 50 patients. **Conclusion:** This study is primarily concerned with predicting the short-term prognosis of decompensated chronic liver disease through the Child-Pugh score. Such a database of the study shows that the Child-Pugh scoring of decompensated chronic liver disease is a reliable predictor of short-term prognosis as well as major complications and to guide management of complications.

Keywords: Chronic Liver Disease, Child-Pugh Score.

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INTRODUCTION

Chronic liver disease in the clinical context is a disease process of the liver that involves a process of progressive destruction and regeneration of liver parenchyma leading to fibrosis and cirrhosis. occurs at Age and causes prolonged and is an important cause of premature death World health that 20 million people world and/ liver cancer [1].

Chronic liver disease is a common hepatobiliary problem encountered in day-to-day clinical practice in Bangladesh. About 15 million people are now suffering from the chronic liver disease hepatitis B virus, 8 lakh people from hepatitis C virus, and nearly 20 million cirrhosis and fatty liver disease [2].

The patient we come across in the hospital ward is mostly in advanced disease and serious complication Variceal bleeding, Spontaneous bacterial peritonitis), carry a high mortality. Established cirrhosis has 10-year mortality of 34-66%, largely dependent on the cause of cirrhosis. But in established cases with severe hepatic dysfunction (serum Bilirubin>3mg/dl, serum Albumin <3 g/dl, Ascites. Encephalopathy), only 50% survive 6 months. Alcoholic cirrhosis is worse than primary biliary cirrhosis and cirrhosis due to hepatitis [3].

The staging of cirrhosis is a reliable predictor of major complications and guides the management of complications. Although liver biopsy is considered the gold standard for assessing the stage of fibrosis by advanced stage of cirrhosis, there are some clinical systems. Among them, a reliable staging system is THE MODIFIED CHILD-PUGH CLASSIFICATION". The MELD (Model for End-stage liver disease) is another reliable scoring system for assessing the stage of cirrhosis, but it is more difficult to calculate at the bedside and, unlike the includes renal function [4].

BACKGROUND

The prognosis of acutely ill cirrhotic patients is influenced by the dysfunction of both hepatic and extrahepatic systems. The child-Pugh scoring is still the cornerstone in the prognostic evolution of cirrhotic patients. Besides predicting survival, it predicts the major complication of cirrhosis, provides the standard criteria for liver transplantation, and prepares management protocol at the patient's bedside [5].

RATIONALE

Usually, the child-Pugh Score system is used to evaluate the hepatic reserve of patients with cirrhosis. Evaluating the severity of decompensated chronic liver disease patients will provide information for better understanding the prognosis of decompensated patients' cirrhosis Patient. Assessment of the prognosis of decompensated chronic liver disease patients and the

Percentage of decompensated chronic liver disease patients eligible for liver transplantation has not been studied adequately in our country. So, evaluation of chronic liver disease patients on the mirror of the Child-Pugh Score system will provide useful information for better understanding and management of the cases in our setting [6].

OBJECTIVES

General Objective

To study the child Pugh score of decompensated chronic liver disease patients admitted in our country's tertiary hospital. Such as Dhaka Medical college hospital (OMCH) Bangabandhu Sheikh Mujib Medical University (SMMU) to find out short-term prognosis.

Specific Objective

1. To assess the prognosis of decompensated chronic liver disease patients.
2. To predict the major complications of cirrhosis such as bleeding from the varices and spontaneous bacterial peritonitis along with perioperative mortality.
3. To find out the eligibility for liver transplantation.

METHODOLOGY

Type of the study- A descriptive cross-sectional prospective study number of patients n=50. Admitted patient in medicine Department of Dhaka Medical College Hospital (DMCH) and Hepatology Department of Bangabandhu Sheikh Mujib Medical University (BSMMU). From January 2010 to June 2010. Adult cases of diagnosed chronic liver diseases in the decompensated state in hospital.

Inclusion Criteria

- a) Age-16 Years
- b) Both sexes (Male and Female)
- c) Admitted patient
- d) Cases fulfilling the diagnosis of decompensated chronic liver disease, e.g., Ascites. Edema. Bleeding esophageal varices, encephalopathy, Altered A: G ratio, Prolonged prothrombin time etc. Any single clinical criteria with single biochemical criteria or altering the A: G ratio or increasing bilirubin level will be enough for enrollment.

Exclusion Criteria

- a) Cases refusing informed consent.
- b) CLD in compensated states.
- c) Decompensated sign confirmed by any other illness.
- d) Comorbid conditions like DM HTN. Uremia etc., will be excluded.

PROCEDURES

Patients who fulfilled the inclusion criteria were enrolled in the study. Written informed consent

taken from all the cases were by the investigator himself, pointing to demographic information, duration of illness, clinical Presentation. Clinical examination, including stigmata of chronic liver disease and decompensation signs, especially Ascites, edema, Hematemesis, melaena, and hepatic encephalopathy, had taken into account. If the patient was already diagnosed as a case of Chronic liver disease and had the decompensated signs were enrolled in the study automatically. If the patient presented for the first time, the stigmata of CLD and the decompensated sign had taken as clinically confirmed Chronic liver disease for enrollment. If the patient didn't have stigmata but the signs of ascites, edema, etc., investigation help was taken for diagnosing Chronic liver diseases, and then enrollment was done. If the patient's clinical condition and signs came to a different diagnosis like Tuberculosis, Lymphoma, CCF, CRF, etc., they were excluded from the enrollment. The USG evidence of coarse echogenicity and A: G ratio alteration was recorded as Chronic liver disease evidence. Investigation such as serum bilirubin, serum Albumin Prothrombin time, USG of the whole abdomen, Viral marker was done for All cases Selective cases were investigated for metabolic and autoimmune causes of CLD. All the information was recorded in the pre-structured questionnaires form.

The child-Pugh scoring was done within 24 hours of hospitalization in the enrolled patients. The patients were followed up by the stud physician daily up to discharge or death, whichever comes first. During discharge, the mobile phone number of patients or attendants was collected, and regular follow u in the telephonic discussion had done (Child-Pugh score was done again in selected cases) by the study physician up to the study period.

Data Analysis

The information recorded in 50 cases with decompensated CLD. is analyzed to determine the occurrence of the Child Pugh class of these patients to

predict the prognosis and major complications (Especially Variceal bleeding, Spontaneous bacterial peritonitis) Eligible Percentage for Liver transplantation among them. All patients are categorized as Child-Pugh class A, B, and C. Death incidence at different Child-Pugh class in the first three months of the investigation period is analyzed Age and sex of all patients and different grading of Esophageal Varices has been recorded and analyzed. Presenting complaints and signs (stigmata of CLD) has been recorded and analyzed according to different Child-Pugh classes. Biochemical parameters and Ascitic fluid studies related to Child-Pugh classes have been analyzed. Evidence of Hepatitis B and C virus infection has been searched and analyzed.

All data are entered, checked, rechecked, and scrutinized by the principal investigator to follow standard procedure and analyzed by SPSS 22.0. v Programme Categorical variables are reported as frequency and Percentage. Numerical (continuous) variables are reported as Mean±SD, and group comparisons between survivors and non-survivors are carried out using the independent sample t-test. Univariate analysis and multiple forward stepwise logistic is used to identify clinical and biochemical parameters directly correlated with mortality.

RESULT

Fifty cases were included in the present study. All data were analyzed and are presented in tabulated form with the necessary diagram.

Table 1: Child-Pugh class incidence (N-50)

| Class | Number of Patients | Percentage |
|-------|--------------------|------------|
| A | 4 | 8% |
| B | 14 | 28% |
| C | 32 | 64% |

Table 1 shows that most of the CLD patients admitted to the hospital are child-Pugh class-C.

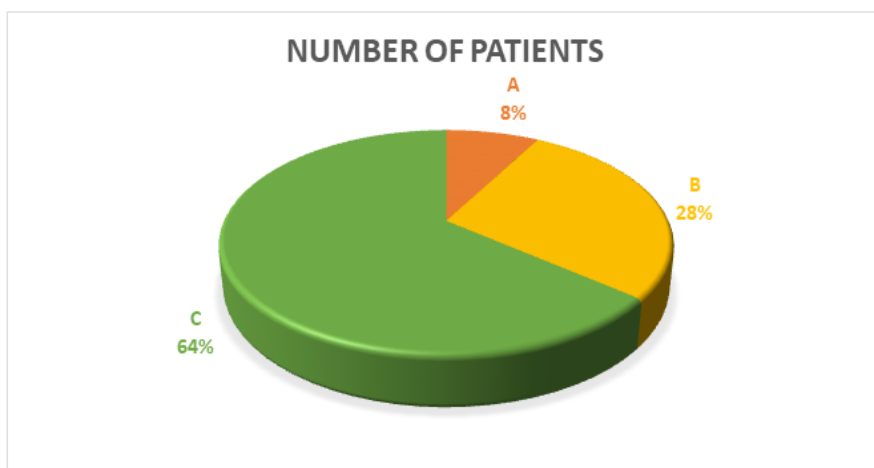


Diagram Pie diagram shows the percentage of patients in different classes Child-Pugh score.

Table 2: Incidence of death in the first three months of investigation period in different classes of child-Pugh score

| Class | Number of Patients | Death Incidence | Percentage |
|-------|--------------------|-----------------|------------|
| A | 4 | 0 | 0% |
| B | 14 | 2 | 14.28% |
| C | 32 | 12 | 37.5% |

Table-2 shows that short term incidence of death of the Decompensated CLD patient in class-C (37.5%) is relatively greater than in other classes.

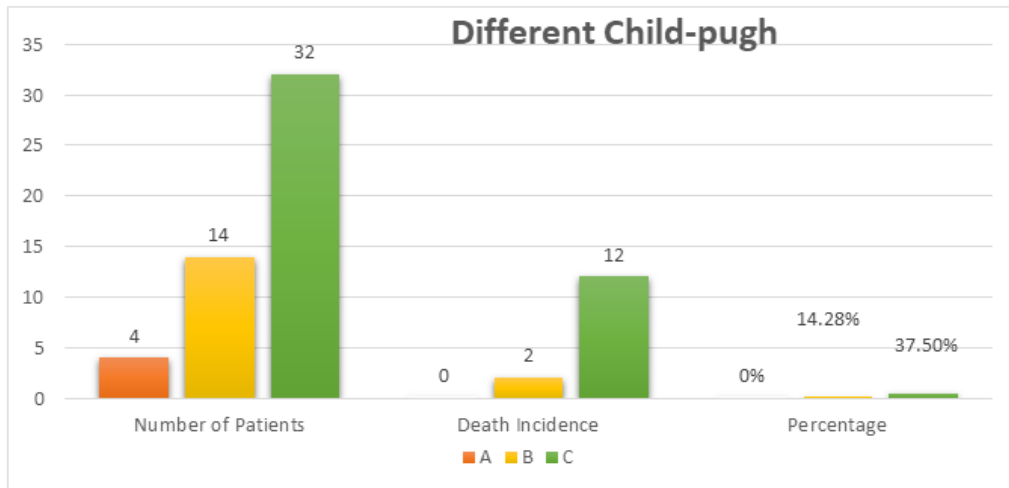


Diagram - Bar diagram shows the occurrence of death in different Child-Pugh classes in Percentage

Table-3: Sex incidence According to Child-Pugh class (N-50)

| Class | Total numbers of patients (n-50) | Male N-41 | Female N-9 |
|-------|----------------------------------|-----------|------------|
| A | 4 | 4 | 0 |
| B | 14 | 11 | 3 |
| C | 32 | 26 | 6 |

Table 3 shows that most of the patients with CLD are male (82%).

Table 4: Age distribution according to child-pugh class (N-50)

| Age | Class A | Class B | Class C | Total |
|---------------|---------|---------|---------|-------|
| 15-25 | 1 | 1 | 3 | 5 |
| 26-35 | 0 | 3 | 4 | 7 |
| 36-45 | 0 | 3 | 8 | 11 |
| 46-55 | 1 | 3 | 12 | 18 |
| 56-65 | 1 | 5 | 3 | 5 |
| 66- and above | 1 | 1 | 2 | 4 |

Table 4 shows that nearly about 1/3rd of the patients were in the age group of 46 to 55 years and

around 60% of patients were in the age group of 36 to 55.

Table-5: Occurrence and grading of esophageal Varices in different child-pugh classes of CLD patients. (N-50)

| Class | No Varix | Gr-I Varix | Gr-II Varix | Gr-III Varix | Gr-IV Varix | Total |
|--------------|----------|------------|-------------|--------------|-------------|-------|
| A | 1 | 1 | 2 | 0 | 0 | 4 |
| B | 2 | 2 | 4 | 3 | 3 | 14 |
| C | 1 | 6 | 12 | 8 | 5 | 32 |
| Total | 4 | 9 | 18 | 11 | 8 | 50 |

Table 5 shows 46 patients out of 50 having varix, and among them, more than 50% of patients have Gr-II and Gr-III varix.

Table 6: Symptoms Profile in different child-pugh Classes

| Symptom | Child-Pugh Class-A | | Child-Pugh Class-B | | Child-Pugh Class-C | |
|-------------------------------------|--------------------|------------|--------------------|------------|--------------------|------------|
| | No. of Pt's | Percentage | No. of Pt's | Percentage | No. of Pt's | Percentage |
| Anorexia nausea and Vomiting | 3 | 75% | 8 | 57.14% | 16 | 50.13% |
| Weakness | 3 | 75% | 8 | 57.14% | 16 | 50.13% |
| Yellow Coloration of skin and urine | 2 | 50% | 7 | 50.02% | 21 | 65.63% |
| Swelling of Abdomen | 1 | 25% | 10 | 71.42% | 28 | 87.50% |
| Confusion | 0 | 0% | 1 | 7.14% | 4 | 12.5% |
| GI Bleeding | 1 | 25% | 4 | 28.57% | 9 | 28.13% |
| Abdominal pain | 2 | 50% | 6 | 42.86% | 10 | 31.25% |
| Fever | 0 | 0% | 2 | 14.29% | 11 | 34.38% |
| Loss of hair | 1 | 25% | 3 | 21.43% | 13 | 40.63% |

Table 6 shows 75% of patients of child-pugh class A is suffered from weakness, Anorexia, nausea, and vomiting. The predominant symptom, Swelling of

the abdomen, is 71.42% and 87.50% in class B and C patients, respectively.

Table 7: Important signs related to CLD patients in different Child-Pugh classes.

| Sign | Child-Pugh Class-A | | Child-Pugh Class-B | | Child-Pugh Class-C | |
|--------------------|--------------------|------------|--------------------|------------|--------------------|------------|
| | No. of Pt's | Percentage | No. of Pt's | Percentage | No. of Pt's | Percentage |
| Cirrhotic face | 1 | 25% | 4 | 28.57% | 10 | 31.25% |
| Disorientation | 0 | 00% | 1 | 7.14% | 7 | 21.87 |
| Jaundice | 1 | 25% | 8 | 57.14% | 27 | 84.38 |
| Clubbing | 1 | 25% | 3 | 21.43% | 4 | 12.5 |
| Leukonychia | 0 | 0% | 3 | 21.43% | 4 | 12.5 |
| Palmer Erythema | 1 | 25% | 4 | 28.57% | 5 | 15.62 |
| Spider navai | 0 | 0% | 2 | 14.24% | 6 | 18.75 |
| Gynecomastia | 1 | 25% | 3 | 21.43% | 9 | 28.12 |
| Testicular atrophy | 1 | 25% | 5 | 35.71% | 16 | 50.01 |
| Ascites | 2 | 50% | 10 | 71.43% | 28 | 87.5 |
| Hepatomegaly | 1 | 25% | 1 | 7.14% | 7 | 21.87 |
| Splenomegaly | 0 | 0% | 2 | 14.24% | 15 | 46.8 |

Table 7 Shows predominant sign is ascites, and it is present in 50%, 71.43%, and 87,5% of Patients of Child-Pugh class A, B, and C, respectively.

Table-8: Biochemical finding related to child-pugh score in child-pugh Class A Patients (N-4)

| Biochemical findings | No. of Patients | |
|----------------------|-------------------------|-----------------|
| | | Serum Bilirubin |
| | 34-51 $\mu\text{mol/L}$ | 1 |
| | >51 $\mu\text{mol/L}$ | 1 |
| Serum Albumin | >35 g/L | 1 |
| | 30-35 g/L | 3 |
| | <30 g/L | 0 |
| Prothrombin Time | <04 Seconds prolonged | 2 |
| | 04-06 Seconds prolonged | 1 |
| | >06 Seconds prolonged | 1 |

Table 8 shows 2 Patients have S. Bilirubin less than 34 $\mu\text{mol/L}$, where 3 Patients have albumin levels

between 30-35 g/L and 2 Patients have prothrombin time less than 4 seconds prolonged.

Table 9: Biochemical finding related to child-pugh score in child-pugh Class B Patients (N-14)

| | Biochemical findings | No. of Patients |
|------------------|-------------------------|-----------------|
| Serum Bilirubin | <34 µmol/L | 4 |
| | 34-51 µmol/L | 8 |
| | >51 µmol/L | 2 |
| Serum Albumin | >35 g/L | 2 |
| | 30-35 g/L | 10 |
| | <30 g/L | 2 |
| Prothrombin Time | <04 Seconds prolonged | 3 |
| | 04-06 Seconds prolonged | 9 |
| | >06 Seconds prolonged | 2 |

Table 9 shows 8 Patients have S. Bilirubin 34-51 µmol/L, where 10 Patients have albumin levels between 30-35 g/L and 9 Patients have prothrombin time 04-06 Seconds prolonged.

Table 10: Biochemical finding related to child-pugh score in child-pugh Class C Patients (N-32)

| | Biochemical findings | No. of Patients |
|------------------|-------------------------|-----------------|
| Serum Bilirubin | <34 µmol/L | 5 |
| | 34-51 µmol/L | 11 |
| | >51 µmol/L | 16 |
| Serum Albumin | >35 g/L | 3 |
| | 30-35 g/L | 8 |
| | <30 g/L | 21 |
| Prothrombin Time | <04 Seconds prolonged | 2 |
| | 04-06 Seconds prolonged | 7 |
| | >06 Seconds prolonged | 23 |

Table 10 shows 16 Patients have S. Bilirubin >51 µmol/L, where 21 Patients have albumin levels <30 g/L and 23 Patients have prothrombin time > 06 seconds prolonged.

Table 11: Ascitic fluid and Spontaneous Bacterial Peritonitis child-pugh A Patients (N-4)

| | Investigation | No. of Patients |
|--|----------------------------|-----------------|
| Ascitic fluid study (N-2) | Exudative | 0 |
| | Transudative/SAAG >1.1g/dL | 2 |
| Spontaneous Bacterial Peritonitis (neutrophil count >250/mm ³) | Suggestive | 0 |
| | Not Suggestive | 2 |

Table 11 shows the Ascitic fluid study in 2 Patients. All are Transudative, and none of them are suggestive of Spontaneous Bacterial Peritonitis.

Table-12: Ascitic fluid and Spontaneous Bacterial Peritonitis in child-pugh Class B Patients (N-14)

| | Investigation | No. of Patients |
|--|----------------------------|-----------------|
| Ascitic fluid study (N-10) | Exudative | 1 |
| | Transudative/SAAG >1.1g/dL | 9 |
| Spontaneous Bacterial Peritonitis (neutrophil count >250/mm ³) | Suggestive | 2 |
| | Not Suggestive | 8 |

Table 12 shows the Ascitic fluid study done in 10 Patients, and among them, 9 have Transudative fluid and 2 patients' fluid analysis suggestive for SBP.

Table-13: Ascitic fluid and Spontaneous Bacterial Peritonitis in child-pugh Class C Patients (N-32)

| | Investigation | No. of Patients |
|--|----------------|-----------------|
| Ascitic fluid study (N-19) | Exudative | 2 |
| | Transudative | 17 |
| Spontaneous Bacterial Peritonitis (neutrophil count >250/mm ³) | Suggestive | 5 |
| | Not Suggestive | 14 |

Table 13 shows 17 Patients have Transudative ascitic fluid among 19 Patients and SBP suggestive for 5 patients.

Table 14: Hepatitis B and C virus status in child-pugh Class A Patients (N-4)

| | Virus Status | No. Of Patients |
|----------------|--------------|-----------------|
| HBsAg (N-4) | Positive | 3 |
| | Negative | 1 |
| Anti HCV (N-4) | Positive | 1 |
| | Negative | 3 |

Table 14 shows 3 Patients out of 4 have B virus positivity, and 1 Patient is C virus-positive,

Table-15: Hepatitis B and C virus status in child-pugh Class B Patients (N-14)

| | Virus Status | No. Of Patients |
|-----------------|--------------|-----------------|
| HBsAg (N-14) | Positive | 10 |
| | Negative | 4 |
| Anti HCV (N-14) | Positive | 3 |
| | Negative | 12 |

Table 15 shows 10 Patients is B virus-positive, and 2 Patient is C virus-positive.

Table-16: Hepatitis B and C virus status in child-pugh Class C Patients (N-32)

| | Virus Status | No. Of Patients |
|-----------------|--------------|-----------------|
| HBsAg (N-32) | Positive | 27 |
| | Negative | 5 |
| Anti HCV (N-32) | Positive | 3 |
| | Negative | 29 |

Table 16 Shows 27 Patients Out of 32 are B virus-positive, and 3 Patient is C virus-positive.

DISCUSSION

The present study focused primarily on the Child-Pugh class of decompensated CLD patients to predict the prognosis, complications leading to increased morbidity and mortality, and to find out the eligible candidate for liver transplantation, admitted to the tertiary hospital [7].

About 50 patients were included in this study, and 64% of patients fell in the Child-Pugh class C group, and 28% fell in the class B group. Only 8% fall in class A group Generally, class B (score 7-9) is considered as Decompensation state and use o more is a well-accepted level for Liver transplantation. This study shows that 92% of patients are considered for liver transplantation, supported by other studies [8]. Although individual comorbid conditions and per operative mortality should be considered [9].

In the first three months of the study period, death occurred 37.5% in class C. 14.28% in class B, and 0% in class A. Overall, death occurred in 14 out of 50 patients (28%), and the Child-Pugh scoring system confidently predicts the mortality in this study, and this prediction has similarities to other studies [10].

The male preponderance in this hospital-based study is most probably due to social prejudice. In this study, the Male-Female ratio was 4.55:1. The maximum age incidence in CLD patients was between 46-55 years (36%), the Next age group was between 36-45 years

(22%), and the lowest incidence was between 66 and above. These data are consistent with other studies [11].

Regarding esophageal varix, among the 50 patients, 46 patients have varix. Grade-I varix was 9 (18%), Grade -II varix was 18(36%), Grade-III varix was 11(22%), and Grade-IV varix was 8(16%) patients. In CHILD-Pugh class C 31 out of 32 patients have varix, and 8 and 5 patients have Grade III and IV varix, respectively. In class B, 12 out of 14 patients have varix, and total 6 patients have Grade III and IV varix 3 patients out of 4 in class A have varix, and 2 of them have Grade II varix. The described data regarding variceal bleeding predicting that an alarming percentage of the study people in class B and C (Total 19 patients of class B and C have Grade III and IV varix) are admitted with the chief complaint of G.I. bleeding presenting as Hematemesis and/or Melaena, and other studies support it [12, 13].

The most frequent presenting symptoms in Child-Pugh A class patients were Weakness, Anorexia, Nausea and Vomiting (75%), Yellow coloration of skin and urine 50% Swelling of the abdomen, and GI bleeding 25. Class 8 patients most frequently presented with Swelling of the abdomen (71.42%) followed by Weakness, Anorexia, Nausea and Vomiting (57.14%), Yellow coloration of the skin and urine 30% Abdominal pain (42.86%), and GI is bleeding (28.5%) In class C patients' symptoms most frequently presented were Swelling of the abdomen (87.50%) followed by Yellow coloration of skin and urine (65.63%), Anorexia. Nausea and Vomiting (50.13%) Loss hair (40.63%) and Fever 04.38% In case of sign class A patients presented Ascitis most frequently, and it was 50% Class B

patients shows Ascitis 71.43% Jaundice 57.14%, Testicular atrophy 15.71% and Palmer Erythema 28.5%, Disorientation rate was 7.14%. The most important sign found in class C patients was Ascitis 87.5%, followed by jaundice 84.38 Testicular atrophy 50.01%, Splenomegaly 46.8%, Cirrhotic face 31.25%, Hepatomegaly 21.87% face 31.25%, Disorientation 21.87% Spider navy 18.75% and Palmer Erythema 15.62% Such database regarding symptoms and signs conclude that Decompensation and Complication are more prominent among the study people in class B and C and thus strongly predict the prognosis [14].

Biochemical findings related to different Child-Pugh classes are, Class A 2 Patients have S. Bilirubin less than 34 $\mu\text{mol/L}$, where 3 Patients have albumin level between 28-35 g/L and 2 Patients have prothrombin time less than 4 seconds prolonged Class B: 8. Patients have S. Bilirubin 34-50 $\mu\text{mol/L}$, whereas 10 Patients have albumin levels between 28-35 g/L. 2 Patients have <28 g/L, and 9 Patients have prothrombin time 04-06 Seconds prolonged. Class C: 16 Patients have S. Bilirubin $>50\mu\text{mol/L}$, where 21 Patients have albumin level < 28 g/L and 23 Patients have prothrombin time > 06 seconds prolonged. Here, Hepatic dysfunction comes out in different classes of Child-Pugh score and indicates that prognosis in class B and Care is worst [15].

An ascitic fluid study was done in 2 Patients out of 4, and all are Transudative (50%) that SAAG is >1.1 g/dl, and none of them is suggestive for SBP in class A. in class 8: a fluid study done in 10 Patients and among them, 9 have Transudative fluid and SBP suggestive for 2 patients. In class C:17, Patients have Transudative ascitic fluid among 19 Patients and 5 patients fluid study suggestive for SBP. This study suggests that SBP is relatively more common in classes B and C, increasing the mortality among these classes [16].

Hepatitis B virus is endemic in Southeast Asia. Hepatitis B virus and C virus status checked in present series. 3 Patients out of 4 have B virus positivity, and 1 Patient is C virus-positive in class A. In class B: 10 Patients among the 14 were B virus-positive, and 2 patients were C virus-positive. 27 out of 32 were B virus-positive, and 3 patients are C virus-positive in class C. B virus endemic figure in our country is clearly demonstrated here [17].

SUMMARY

A series of 50 cases of decompensated Chronic Liver Disease is collected from Dhaka Medical College Hospital (DMCH) and Bangabandhu Sheikh Mujib Medical University (BSMMU). And analyzed to find out the occurrence of Child-Pugh class of these patients to assess the short-term prognosis and along with this to predict the major complication (Especially Variceal bleeding, Spontaneous bacterial peritonitis) and to find

out the eligible Percentage for Liver transplantation among them. In this study, 4 patients (8%) fall in class A, 14 patients (28%) in class B, and in-class C, there are 32 patients (64%).

In the first three months of the study period, 37.5% of death occurred in class C, 14.28% in class B, and no death in class A. Overall, death occurred 14 patients out of 50 patients (28%).

In total 46 patients out 50 have Esophageal varix. In Child-Pugh class A, 2 patients have Grade II varix, and in-class B total 6 patients have Grade III and IV varix in class C 31 out of 32 patients have varix and 8, and 5 patients have Grade III and IV varix, respectively.

The most frequent presenting symptoms in different Child-Pugh classes are Swelling of the abdomen, Weakness, Anorexia, Nausea and vomiting, yellow coloration of skin and urine, and the most important and common signs are Ascites, Jaundice, Testicular atrophy, Palmer Erythema. Splenomegaly, Hepatomegaly, Cirrhotic face, and Disorientation are relatively prominent in class C. Regarding biochemical findings, 40% of patients have clinical jaundice (34-51 mol/L). Serum Albumin level is <30 g/L in 46% of patients, and Prothrombin time is >6 seconds prolonged in 52% of patients. The ascitic fluid study is done in 31 patients, 28 patients have transudative ascites, and 7 patients have fluid study suggestive for Spontaneous Bacterial Peritonitis. Hepatitis B positive patients' number is 40, and Hepatitis C positive patients' number is 6.

LIMITATION

- an Insufficient number of patients is taken, and selection bias is possible as individual patients may have more than one diagnosis.
- Insufficiency Ventilatory insufficiency, Cognitive dysfunction, and Age >65 , along with the risk of death in decompensated CLD patients is associated with Renal severe hepatic dysfunction, and this study ignores these risk factors by focusing only the hepatic dysfunction.

CONCLUSION

Decompensated Chronic Liver Disease is a grave condition, and it is encountered most among the admitted patient in a tertiary hospital. This study is primarily concerned with the prediction of short-term Prognosis of decompensated CLD through the Child-Pugh score. While predicting the prognosis, such a database also tries to provide information regarding complications of cirrhosis, which are helpful to prepare appropriate management protocol in our setting. Liver Transplantation is now starting in our country, and through such type of study on a broad canvas, it is possible to find out the eligible candidate for liver transplantation suffering from decompensated CLD.

This study is a descriptive cross-sectional prospective study, where data is collected from 50 consecutive adults decompensated CLD patients of two best institutes (DMCH & BSMMU) within a period of six months, and the 50 subjects are analyzed based on clinical and biochemical parameters following a common protocol and results are tabulated along with necessary diagram and discussion.

The short-term prognosis of decompensated CLD patients in different classes of Child-Pugh score has been shown in a standard way in this study. With the establishment of recommendation, such type of study will be a useful asset for predicting short-term prognosis and complications and preparing management protocol in our setting.

RECOMMENDATION

- a) To reach a definite conclusion regarding the short-term prognosis of decompensated Chronic Liver Disease patients in our country, it is necessary to take a study program involving multiple centers from all over the country.
- b) To draw the actual picture of cirrhosis complications and determine the Percentage of liver cirrhosis patients suitable for liver transplantation. The meticulous study should be done on a big canvas, including the effect of advanced cirrhosis on another body system and other comorbid conditions.
- c) To prevent Chronic Liver Disease, awareness about Vaccination, Safe blood transfusion, and the worse effect of alcohol should be made among the masses. Treatment and regular follow-up of chronic hepatitis have a good prognosis. This theme should be focused on; for our poor people, we have to prepare a modified management protocol for cirrhosis and cirrhosis and other comorbid conditions like D.M. with complications. Renal disease, HTN, Heart disease, Thyroid function disorder, etc.

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