



FACULTY OF CLINICAL SCIENCES
COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS



13th Annual Scientific Conference & Gathering

THEME

**Environmental Virology,
Exposomics and Epigenetics**

VENUE

Old Great Hall, College of Medicine,
University of Lagos, Idi Araba,
Lagos State

DATE

WEDNESDAY 8TH JUNE 2016

TIME

8.00 am - 5.00pm

• PROGRAMME & BOOK OF ABSTRACTS •

THE PREVALENCE AND SPECTRUM OF RENAL DYSFUNCTION IN PATIENTS WITH LIVER CIRRHOSIS IN LUTH

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Background: Liver cirrhosis is an increasing cause of mortality world-wide. Renal dysfunction is a common occurrence in this group of patients and often occurs with worsening liver disease. Current evidence suggest that 12-60% of subjects with liver cirrhosis have renal dysfunction and this has been documented in western countries, Asia and Africa. Few studies have been done in Nigeria to report the prevalence of renal dysfunction in this group of patients, and to show the risk factors for renal dysfunction.

Method: This was a cross sectional study that assessed 109 patients with liver cirrhosis. Liver cirrhosis was diagnosed based on clinical features of hepatic decompensation and / or ultrasound features. Renal function was assessed by evaluating serum and urinary electrolytes. Urine test-strip urinalysis was also carried out to rule out evidence of renal parenchymal disease.

Results: Of the 109 subjects evaluated, 20 (18.3 %) had renal failure of which 70% was pre-renal and 20% acute tubular necrosis (ATN). Subjects with renal failure were significantly more likely to be dehydrated, have ascites, severe Child-Pugh grades and severe MELD scores ($p = 0.0005$). Hyponatraemia ($\text{SNa} \leq 130\text{mEq/L}$) was found in 17.4% of the participants and was significantly associated with ascites and severe liver disease. Renal sodium retention ($\text{UNa:K} < 1$) was seen in 31%. The risk factors for renal dysfunction were older age, dehydration, and the degree of severity of liver cirrhosis. In addition, raised bilirubin and urea, and hyponatraemia were also found to be risk factors.

Conclusion: Renal dysfunction is quite common in patients with liver cirrhosis, and the risk factors include older age, features of reduced intravascular volume and severe liver disease. There is an important need for earlier detection of features of these risk factors and their prevention where feasible.

Keywords: liver cirrhosis, renal dysfunction, pre-renal failure, acute tubular necrosis, risk