

### Study of Relation between Hepatorenal Syndrome and Hepatic Encephalopathy in Cirrhotic Patients

#### **Thesis**

Submitted for Partial Fulfillment of Master Degree in Internal Medicine

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# List of Abbreviations

Abb.	Mean
AAT	Alpha 1-antitrypsin deficiency
ACU	Area under the result curve
AKI	Acute kidney injury
ALD	Alcoholic liver disease
ALF	Acute liver failure
ALT	Alanine transferase
ANA	Antinuclear antibody
ANCA	Antinuclear cytoplasmic antibody
Anti IL-6R	Anti interleukin six receptor
APACHE	Acute physiology and chronic health
	evaluation
AST	Aspartate transferase
BCS	Budd-chiari syndrome
CCA	Cholangio carcinoma
$CD_4$	Cluster of differentiation four
CNTF	Cilliary neurotrophic factor
CTP	Child-turcotte-Pugh
ET-1	Endothelin-1
FAP	Familial amyloid polyneuropathy
FHVP	Free hepatic venous pressure
GABA	Gamma-amino butyric acid
HCC	Hepatocellular carcinoma
HE	Hepatic encephalopathy
ННТ	Hereditary hemorrhagic telangelictasia
HPS	Hepatopulmonary syndrome
HR	Heart rate

Abb.	Mean
HRS	Hepatorenal syndrome
HSC	Hepatic stellate cells
HVPG	Hepatic venous pressure gradient
IBD	Inflammatory bowel disease
ICU	Intensive care unit
IL-6	Interleukin six
INR	International normalized ratio
KIM-1	Human kidney injury molecule-1
MELD	Model of end stage liver disease
MHE	Minmal hepatic encephalopathy
MODS	Multiple organ dysfunction score
MPM	Mortality probability models
NAG	N-acetyl-b-D-glucosaminidase
NASH	Non-alcoholic steatohepatitis
NASH	Non-alcoholic steatohepatitis
OHE	Overt hepatic encephalopathy
PCLD	Polycystic liver disease
POPH	Portopulmonary hypertension
PSC	Primary sclerosing cholangitis
PT	Prothrombin time
ROC	Receiver operating characteristic
RTA	Road traffic accident
SAAG	Serum-ascites albumin gradient
SAPS	Simplified acute physiology score
SBP	Spontaneous bacterial peritonitis
SD	Standard deviation
SOFA	Sequential organ failure assessment

Abb.	Mean
TIPS	Trans-jugular intrahepatic porto-systemic
	shunt
TLC	Total leukocytic count
WHVP	Wedged hepatic vein pressure

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### Abstract

In these patients the first urine sample which taken 12 hours after admission for assessment of NAG level ranged from 40 to 200 IU/L (mean+SD= 88.7±39.9) and second urinary NAG sample which taken 48 hours after admission ranged from 41 to 198 IU/L.

#### **Keywords:**

Ascites, cirrhosis, hepatic encephalopathy, hepatorenal syndrome Urinary, medicine, biomarkers