Summary and Conclusion

Patients with advanced cirrhosis and ascites show a hemodynamic disturbance characterized by low aretrial pressure, high cardiac output and plasma volume, low peripheral vascular resistance and a marked stimulation of the renin - angiotensin, aldosteron and sympathetic nervous system and antidiuretic hormone. In addition, arterial homostasis is also regulated by a vasoactive substance called endothelin. Endothelin is a 21 amino-acid peptide mainly produced by endothelial cells.

The aim of the work is to monitor plasma endothelin level in patients with portal hypertension and with variant degree of renal impairment .Thirty patients with portal hypertension . Ten of them had normal renal function, ten of them had renal impairment and ten had renal failure. Also fifteen normal subjects with matched age and sex were represented in the study as reference group. All of them constituted the subjects of our study.

Also,the subjects were classified into two groups. **Group A,** comprized nine patients had portal hypertension without ascites (compensated group). **Group B**, comprised twenty one patients had portal hypertension with ascites (decompensated group).

All subjects were subjected to full medical history and full clinical examination. The following investigations were done:-

1- Complete urine analysis

2-rectal snip

3- Complete blood picture.

4- Some renal function tests, as serum and urine creatinine, creatinine clearance test and serum and urine sodium.

5- Some liver function tests,as serum total protien, serum albumin, prothrombin activity and some of hepatitis markers.

6- Plasma endothelin level.

The following were reported in our work:-

1- There was significant increase of plasma endothelin level in portal hypertensive cases with ascites.

2- There was significant increase of plasma endothelin leval inportal hypertensive patients withe renal dysfunction. It increases with deterioration of renal function.

3- there was significant positive correlation between endothelin and both of serum creatinine and sodium excretion fraction.

4- There was significant negative correlation between endothelin and all of serum total protien, serum albumin, prothromin activity and creatinine clearance test. Lastly, we conclude that, circulating plasma levels of endothelin were elevated in cirrhosis with ascites. The level of endothelin had a role in deterioration of renal function. So future studies using spicific antagonists of endothelin-1 such as BQ-123 and BQ-153, that are potent and

specific for endothelin A receptor this may allow a better understanding of pathophysiologic role of endothelin on systemic and local hemodynamic and neurohumeral changes in cirrhosis.