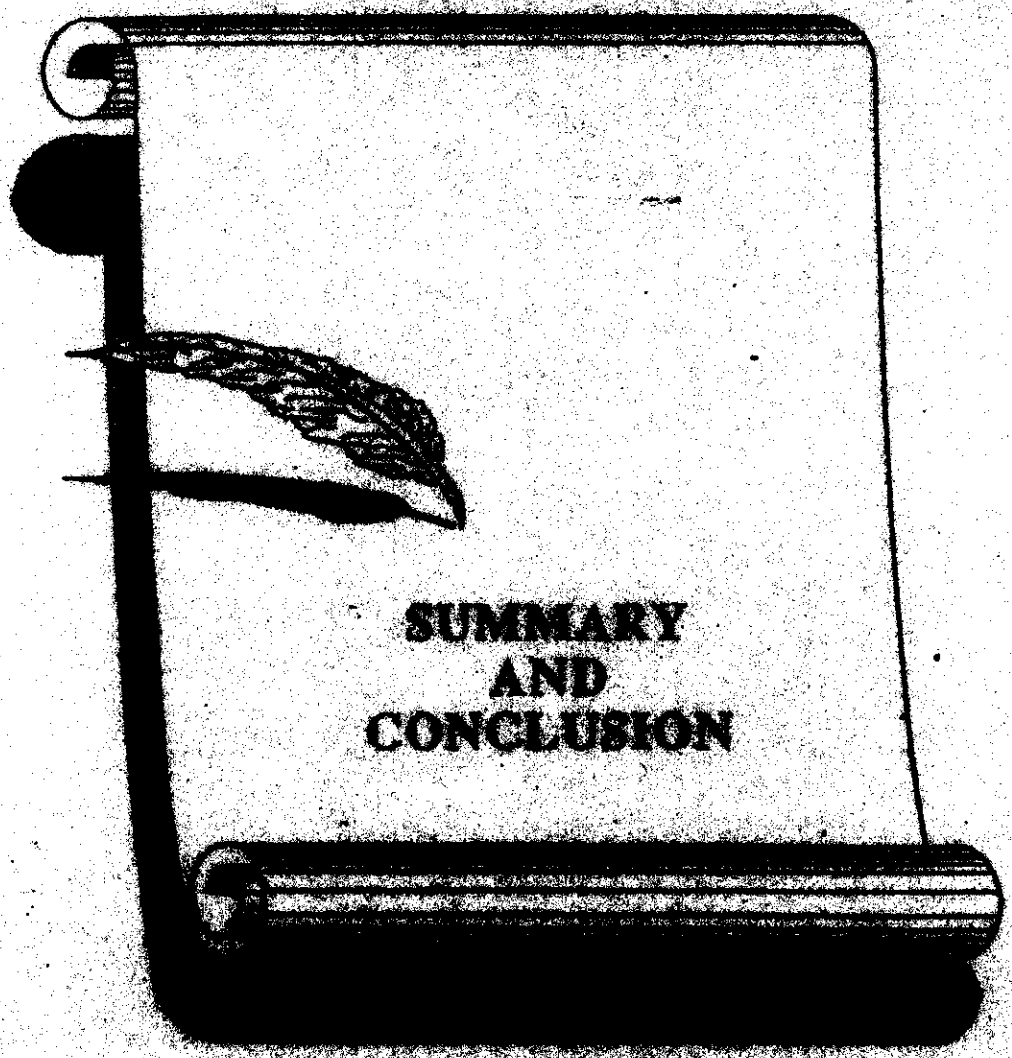
SUMMARY
AND
CONCLUSION

SUMMARY & CONCLUSION

There are many factors that have a direct and indirect effect on the afferent and efferent vascular tone which determine the perfusion of macula densa, stimulate renin and aldosterone so they have an effect on ANP level .

The study was carried on 20 cirrhotic children and compared with 15 well matched apparently normal (control) children and it was found that it may be valuable to add another group of 20 cirrhotic adults with well matched 13 control volunteers .

The cirrhotic children and adults were classified into compensated and decompensated groups.

Patients and controls were subjected to the following :

- Thorough history and clinical examination.
- Abdominal ultrasound and liver biopsy.
- Laboratory investigations which included :

a) Liver functions: total bilirubin, SGOT, SGPT, ALP, albumin and prothrombin concentration.

b) Some of the kidney functions: creatinine and serum sodium

c) Specific investigations : PRA , ANP and SA.

Results of the study :

1. All biochemical liver function tests with the exception of total protein were deranged in cirrhotic patients.

2. The serum creatinine was insignificantly increased in all patients.

3 PRA decreased by age due to progressive loss of functional mass of juxtaglomerular cells.

4. ANP was insignificantly decreased by age.

5. A decreased with ageing which may be explained by failure of suprarenal cortex to stimulate properly .

6. In compensated cirrhotic children there was insignificant increase in PRA and ANP but highly significant increase in SA, which reflects the maintenance of kidney functional reserve and portal hypertension was due to salt and water retention.

. In decompensated cirrhotic children there was insignificant increase in PRA and highly significant increase in ANP and SA which means that the kidney functional reserve is still preserved inspite of hypervoleamia and defect in clearance of aldosterone. The portal hypertension is due to salt and water retention accompanied by splanchnic vasodilatation.

8. In comparison of the compensated and decompensated cirrhotic children the results were insignificant for PRA and SA , but there was highly significant increase of ANP which proves the importance of splanchnic vasodilatation in precipitation of portal hypertension in decompensated children.

9. In compensated adults PRA was insignificantly increased while ANP and SA were highly significantly increased in compensated when compared to controls, which indicates that vasodilatation and salt retention are the main causes of portal hypertension

10. In decompensated cirrhotic adults PRA was significantly increased while ANP and SA were highly significantly increased , this means that salt and water retention accompanied with vasodilatation are the most important factors causing portal hypertension and high PRA is a compensatory increase to vasodilatation caused by ANP. high level of PRA may lead to ischemic vascular injury and reduction of the pressor response in this group.