

## SUMMARY AND CONCLUSION

The present study was performed on 95 individuals categorized as follows :

**Group (I) :** Thirty patients with ischaemic heart disease ( IHD) and had one or more of the known risk factors for IHD e.g. hypertension, Diabetes, smoking, hyperlipidemia.

**Group (II) :** Twenty patients with IHD but devoid of any known risk factor that predisposed to IHD.

**Group (III) :** Thirty patients who had one or more of risk factors for IHD but had no history of IHD.

**Group (IV) :** Fifteen healthy volunteers serving as reference group.

It was excluded from this study any subject taking drugs that elevate PRA e.g. ( Diuretics, oral contraceptive pills, ACE inhibitors,.....). Also subjects with diseases affecting PRA such as (renal diseases, heart failure, liver cirrhosis,.....).

*All cases were subjected to the following :*

- A thorough history taking and clinical examination with special stress on :
  - Risk factors of IHD.
  - Characteristics of the cardiac attack.

The following laboratory investigations were performed :

- Serum creatinine, BUN and Uric acid.
- Fasting and 2h P.P. blood sugar.
- Serum cholesterol, Triglycerides, HDLc, LDL-c and Risk ratio.
- Serum sodium and potassium.
- Plasma Renin activity.
- Plasma Angiotensin II concentration.
- Serum Angiotensin converting Enzyme activity.

*The following had been reported in this work :*

- There was a statistically significant change of FBS, 2hpp blood sugar, serum uric acid, Total Cholesterol, Triglycerides, LDL-c, HDL-c and Lipid risk ratio, in group I and III when compared with control group. However there was no statistical significant change of these parameters between group II and the control group.
- There was no statistically significant change of BUN serum creatinine, serum sodium and serum potassium in groups I, II and III when compared with the control group.
- There was a statistically significant increase of PRA, A II and ACE activity in groups I, II and III when compared with the control group.

- There was a statistically significant increase of PRA, AII and ACE activity in group I when compared with group III.
- There was a statistically significant increase of PRA, AII and ACE activity in group II when compared with group I and group III.
- There was a statistically significant increase of PRA, AII and ACE in severe cases of IHD when compared with other cases of IHD.
- There was patients significant correlation between the development of IHD and PRA, AII, ACE and LDL-c.
- Finally it was found that the best predictors of development of IHD among the studied groups were Angiotensin II and LDL -c .

**Conclusion :** The increased activity of RAS is considered as one of the risk factors for development of IHD, moreover this increase can be considered as independent risk factor for IHD. So we can recommend searching for the increased activity of this system in patients of IHD particularly when no other risk factors of IHD could be detected.