SUMMARY AND CONCLUSION

Pre-eclampsia is a syndrome defined as the onset of hypertension and proteinurea after 20 weeks of gestation in previously normotensive and nonproteinuric women.

Though pathogenesis is not yet clear, several theoretical mechanisms have been proposed which result in uteroplacental insufficiency.

Endoglin, a co-receptor for transforming growth factor β1 and β3 (TGF-β1 and TGF-β3, respectively), is highly expressed on cell membranes of vascular endothelium and syncytiotrophoblasts. Placental endoglin is up-regulated in preeclampsia, releasing soluble endoglin into the maternal circulation. Soluble endoglin is an antiangiogenic protein that may inhibit TGF-β1 signaling in vasculature.

The principal pathologic changes of the placenta in PIH include decidual arteriolopathy, infarcts and ischemic change in central portions of the placenta, abruptio placentae, "Tenney-Parker changes," and restricted fetal growth. These pathologic features are not all invariably present but they are significantly overrepresented in PIH.

This study was designed to compare between maternal serum concentration of soluble endoglin & histopathological changes of the placentae of the normal pregnancy and those of the preeclampsia at parturition.

This study was carried out on fifty pregnant women after delivery. Twenty five of them were normal pregnant and twenty five were Preeclamptic. Those women were clinically assessed, their placentae were examined macroscopically

and microscopically and maternal venous blood sampling for estimation of serum soluble endoglin was taken.

The results of the present study revealed that higher endoglin level in preeclamptic mothers compared to normal group was noticed with statistically highly significant difference in between. Preeclamptic mothers had lower placental weight and decreased number of cotyledons with marginal insertion of umbilical cord. Microscopic examination revealed that infarctions, atherosis, hyalinized areas and Tenny Parkers changes were present in greater amount in hypertensive placentae.

We may advise to do soluble endoglin assay for detection and prognosis of preeclampsia if further studies on large group of patents are done and confirm other results.