SUMMERY AND CONCLUSION

Calprotectin is calcium- and zinc-binding protein complex composed of 8 and 14 kD subunits. These 8 and 14 kD peptides belong to the S100 protein family which is a subfamily of proteins with Ca++-binding motif, EF-hand in each molecule. Calprotectin is released from activated circulating leukocytes.

Pre-eclampsia is a serious complication of pregnancy characterized by maternal hypertension and proteinuria. The etiology of pre-eclampsia is still uncertain, but an insufficient trophoblast invasion into the maternal endometrium (decidua) leading to suboptimal development of the placenta with reduced placenta perfusion is assumed to be a predisposing factor for pre-eclampsia.

The aim of the current study is to investigate whether calprotectin levels in the serum from women with pre-eclampsia differ from that of normotensive pregnant and non pregnant women.

Serum calprotectin was assayed in 20 patients with pre-eclampsia, 15 normal pregnant control and 10 non pregnant control.

The study revealed that:

- Significant elevation in serum calprotectin level in pre-eclampsia group in comparison with normal pregnant and non pregnant groups.

- Significant decrease in platelet count in pre-eclampsia group in comparison with normal pregnant and non pregnant groups.

- Significant elevation in serum uric acid in pre-eclampsia group in comparison with normal pregnant and non pregnant groups.

In conclusion, the elevated serum calprotectin level found in pre-eclampsia in this study is consistent with findings of leukocyte activation in this disorder. It is thought that calprotectin may play role in the development of pre-eclampsia.