

## SUMMARY

This study was carried in Nasr City Health Insurance Hospital in order to establish a reference data representing the value of a single measurement of maternal serum CRP.

*The study group was divided into three groups:*

- Group A (25 pregnant women with mild preeclampsia),
- Group B (25 pregnant women with sever preeclampsia) and
- Group C (25 normal pregnant women as a control group).

This study tried to determine the levels of serum CRP in preeclampsia and its association with severity of the disease to prove that CRP may be used as an additional test with severe of preeclampsia.

All data was tabulated and statistically analyzed and the results showed that:

As regard demographic data, there were no statistically significant differences between women of the three groups regarding age, parity and gestational age at recruitment.

The mean serum CRP titre was significantly higher among women with severe PE when compared to women with mild PE and control group [ $25.92 \pm 13.72$  vs.  $6 \pm 4.9$  mg/L vs.  $5.76 \pm 5.04$  mg/L, respectively,  $p < 0.001$ ]. There was no significant difference between women with mild PE and control group regarding serum CRP titre.

There was a significant positive correlation between serum CRP titre and each of systolic blood pressure, diastolic blood pressure, mean arterial blood pressure and albuminuria level.

Receiver operator characteristics (ROC) curve was constructed for estimating the association between serum CRP titre and the diagnosis of severe PE. The curve showed a significant association, denoted by the significantly high area under the curve [AUC = 0.936, 95% CI (0.885 to 0.987),  $p < 0.001$ ].

A serum CRP titre  $\geq 12$  mg/L was significantly associated with diagnosis of severe PE (sensitivity of 100%, specificity of 70%, PPV 65.4%, NPV 100%).

Our results showed that CRP measurement is of great value in assessing the severity of preeclampsia.