SECTION A

EFFECT OF PREGNANCY ON THE FASTING BLOOD GLUCOSE LEVEL (FBG), HAEMOGLOBIN (Hb) AND PACKED CELL VOLUME (PCV)

R. Sivakanesan, G. K. K. Gunatileka *and* **C. Galappathi**
(*Faculty of Medicine, University of Peradeniya*)

Pregnancy is usually accompanied by a high metabolic turnover with hormonal influences on many biochemical reactions. These changes alter the normal metabolic processes in the body leading to a state of metabolic imbalance and subsequently to metabolic diseases.

The changes in the FBG, Hb and PCV levels were studied in pregnant mothers. The increase in FBG from 4.31 mmol l^{-1} in first trimester to 5.52 mmol l^{-1} in third trimester was significant. The mean FBG value of 5.23 mmol l^{-1} was significantly higher than the mean value of 4.63 mmol l^{-1} in non-pregnant women. This increase was only seen in multiparous women and a positive correlation was observed. The economic state of the mothers did not influence the FBG level.

The mean PCV in pregnant mothers was 32.2% which was significantly higher than the mean value of 27.9% for non-pregnant women. Parity and age had no influence on PCV.

The mean Hb level of 11.6 g dl^{-1} was significantly lower than the mean value of 13.1 g dl^{-1} in non-pregnant women. However this difference was observed from the second parity onwards, indicated by a gradual decline. This decline was not due to aging. Even though a much gradual decline in Hb level with increasing age became apparent, statistical evidence suggests that this decline is not significant.

These results indicate that the FBG increases with advancing of the pregnancy and parity, whereas Hb decreases with advancing of the parity.