SUMMARY

Pregnancy has been described as a successfull allograft of foregin tissue and the role of immune reactions in human reproduction is recieving increasing attentions. Recently, data accumulated on depression of cell-mediated immunity during pregnancy, but still little is known about humoral immunity in pregnancy.

Five types of immunoglobulins are are present in human sera. These are IgG, IgM, IgA, IgD and IgE. IgG, IgM and IgA are the classes of immunoglobulins with antibody activity. IgG passes through the placental barrier from the mother to the fetus.The newborn entirely depends upon its stock of IgG recieved through the placenta for its protection against infection during early postnatal period .

There has been a considerable debate as to whether, or not, certain pathological conditions of pregnancy, particularly preeclampsia are associated, either as cause or effect with changes in the maternal antibody response.

The purpose of the present study was to asses the immunoglobulin concentrations in maternal and neonatal sera in normal and toxemic pregnancies.

Immunoglobulins IgG, IgM, IgA, IgD and IgE were estimated in 20 women with normal pregnancy, 10 patients suffering from preeclampsia and 10 from eclampsia. In addition, IgG and IgM were determined in their neonates. Observations were made regarding immunoglobulin concentrations in relation to severity of toxaemia.

It was noted that there was significant reduction in IgG and IgD levels in mothers suffering from preeclampsia, with further reduction in those with eclampsia . On the other hand,the IgM and IgA levels showed no significant change in women with pregnancy toxaemia compared to normal pregnant ones. The IgE level was found to increase in patients with eclampsia compared to normal control group .

Regarding the neonates, we found that there was a significant reduction in IgG level in infants born to toxemic mothers compared to infants born to normal pregnant

mothers. There was also a decrease in IgM level in infants born to mothers suffering from pregnancy toxaemia, but the decrease was significant only in infants born to eclamptic mothers.