SUMMARY AND CONCLUSION
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The steroid patterns have been studied in normal non-pregnant, normal pregnant, pre-eclamptic toxaemia mild and severe and anaemia in pregnancy. The whole study was divided into three groups. In the first group pregnanediol and estriol estimations were carried out in normal pregnant cases. The studies were followed from 36 to 40 weeks of pregnancy. Urinary pregnanediol and estriol values were found to be significantly increased from 36-40 weeks of pregnancy. The differences in the values were statistically significant. Urinary excretion of pregnanediol and estriol were studied in Primi and Multi gravid women (cases between 36 - 40 weeks of pregnancy). The differences in values of pregnanediol between Primi and Multi gravid women were significant while the differences in urinary estriol values were not significant.

In the second group the patterns of excretion of pregnanediol and estriol as indices of placental function and the patterns of excretion of 17-oxosteroids, 17-hydroxy-corticosteroids, dehydroepiandrosterone and pregnanetriol as indices of adrenal function have been studied. In the
third group, the patterns of excretion of pregnanediol and estriol as indices of placental function were studied. Measurements of serum total cholesterol, free cholesterol, serum phospholipids have been studied besides thymol turbidity, serum bilirubin, icteric index and cephalin cholesterol flocculation as indices of liver function. Serum total cholesterol was included since it plays a role both as a precursor for steroid hormones and the percentage of its component as a liver function test.

The groups of cases studied were (1) normal non-pregnant, (2) normal pregnant, pre-eclamptic toxaemia (mild and severe) and anaemia in pregnancy. (Cases between 26 - 40 weeks of pregnancy). All the factors studied were carried out in the same patient. In anaemia in pregnancy pregnanediol and estriol estimations were carried out in the same group of cases after treatment. Progesterone levels in placenta were also included. Normal non-pregnant cases were studied in both groups for comparison. The conclusions of the present study may be summarised as follows:

1. Excretion of pregnanediol and estriol levels were decreased in pre-eclamptic toxaemia mild and severe as compared to normal pregnancy which were statistically significant.
   In anaemia in pregnancy the differences in values were not significant.
2. An elevated level in all the factors namely excretion of 17-oxy steroids, 17-hydroxycorticosteroids, dehydroepiandrosterone and pregnanetriol were observed in normal pregnancy and all the abnormal groups of cases studied.

3. Progesterone levels in the placenta were found to be decreased which were statistically significant in all the abnormal groups of cases studied.

4. Serum Total Cholesterol (free and ester cholesterol) and Total Phospholipids levels were found to be increased in normal pregnancy, pre-eclamptic toxæmia mild and severe which were significant and further elevations were observed in pre-eclamptic toxæmia mild and severe statistically. In anaemia in pregnancy the levels of total cholesterol and phospholipids were diminished as compared to normal non-pregnant.

5. Liver function tests like, percentage of Free Cholesterol to Total Cholesterol, thymol turbidity, serum bilirubin, icteric index were found to be increased in normal pregnancy, pre-eclamptic toxæmia mild and severe and further elevations were observed in pre-eclamptic toxæmia mild and severe. In anaemia in pregnancy also liver function tests revealed abnormalities. All the abnormal groups of cases indicated that the liver functions were deranged.
A rise in total phospholipids were observed in normal pregnancy, pre-eclampsia - mild and severe cases and a decrease in anaemia in pregnancy. The percentage of Free Cholesterol was found to be elevated in all the abnormal groups as compared to normal non-pregnant.

The values for total cholesterol phospholipid ratio was quite variable and they were diminished in severe type of pre-eclampsia as compared to normal pregnant cases.

The ratios of total cholesterol to pregnanediol and total cholesterol to estriol were found to be increased in mild and severe type of pre-eclamptic cases and more or less in agreement in cases of anaemia in pregnancy, as compared to normal pregnant cases.

Estimation of pregnanediol and estriol is great value in the assessment of placental function and foetal status. Levels of the excretion of Pregnanediol and estriol run parallel with the levels of progesterone in placenta.

Factors relating to adrenal function reveal that there is hyperactivity which is reflected in the elaboration of steroid hormones wherein all round increases are observed.
Liver function tests are found to be abnormal in pre-eclampsia (mild and severe) and anaemia in pregnancy.

The results of the present study are discussed in the light of the opinion expressed by other authors and the values are compared with those of other workers.