Summary and Conclusion

In this study Blood samples were collected from 60 women and their serum were analysed for detection of calcium, magnesium, copper and zinc levels. The cases divided into three group each consist of 20 cases.

First group of 20 pregnant women came to the hospital in labour at full term with no association of any medical disorder and served as control group, second group 20 cases of pregnant women complaining of preterm labour and the third group 20 cases of pregnant women with prelabour spontaneous rupture of membranes.

The level of those trace elemets were also analysed in the fetal membranes of the first and third groups. We found that:

There were a significant decrease in the maternal serum levels of calcium, magnesium, zinc and copper in cases of prelabour spontaneous rupture of membranes compared with the control group.

We found also a significant decrease in maternal serum calcium level, serum magnesium level, serum zinc level in cases of preterm labour as compared with fullterm group, but when we compared serum copper level in both groups we found nonsignificant change.

As regard fetal membranes's calcium, magnesium, there were a significant decrease in cases of prelabour spontaneous rupture of membranes compared with the control group. But when we compared fetal membrane zinc in both groups there was nonsignificant change.

In our study also we found a significant increase in fetal membrane's copper in prelabour spontaneous rupture of membranes compared with the control..