ZINC AND ALKALINE PHOSPHATASE CORRELATION TO MATERNAL DISEASES.

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Abstract:

The aim of this study is to evaluate alkaline phosphatase level and to find out it's correlation to maternal diseases. Zinc is an "essential trace element" because very small amounts of zinc are necessary for human health. It is used for treatment and prevention of zinc deficiency and its consequences. It is also used for treating the common cold and recurrent ear infections, and preventing lower respiratory infections. Alkaline phosphatase is a zinc-metalloenzyme that requires magnesium for activity and specific dietary deficiencies of either Zn or Mg, have been found to lower the alkaline phosphatase activity in serum. We took into consideration 100 pregnant women and we divided them according to maternal diseases. We measured serum zinc directly using by Atomic Absorption Spectrometry (VARIAN AAS-220) and at the same time alkaline phosphatase activity by a rapid method using p-nitrophenyl phosphate. The data was analyzed to see if there was any positive correlation between serum zinc and alkaline phosphatase activity in all diseases: Preterm delivery, preeclampsia, anemia, cephalic, anomalies. As a conclusion, the statistical evaluation showed that there was a negative correlation between serum zinc and alkaline phosphatase activity in patients suffering from preeclampsia, whereas a positive correlation in diagnosis such as: preterm delivery, anemia, cephalic and anomalies.

Key words: *zinc deficiency diseases, zinc and pregnancy, zinc measurement, maternal diseases.*