Summary

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In this study one hundred parturients picked at random were studied. Our aim was to find out the effect of maternal iron deficiency on the fetal birth weight, cord blood haemoglobin level and serum iron status. Our results showed that 46% of the parturients were anaemic, with a haemoglobin level less than 11 gm/dl. The means of red blood cell count and packed cell volume were below the normal values only in more severly anaemic women with haemoglobin level less than 10 gm/dl. Although the means of the mean corpuscular volume and mean corpuscular haemoglobin concentration were reduced with lowering in haemoglobin level. Yet, they were not below the lower normal limit even in severly anaemic women with haemoglobin level less than 10 gm/dl. The mean transferrin saturation was significantly reduced in anaemic women.

Regarding the fetus, our results showed that the mean fetal birth weight and the mean cord blood haemoglobin level were significantly reduced in more severly anaemic women with haemoglobin level less than 10 gm/dl.

Regarding serum iron, our results showed that the mean cord serum iron level was significantly reduced with

lowering of the maternal haemoglobin level.In addition a direct relationship between the maternal and cord serum levels was found.

It is concluded that fetal haemoglobin level and fetal birth weight were not reduced except in more severly anaemic mothers (haemoglobin level less than 10 gm/dl.). The fetal serum iron level was reduced even in those mothers with mild anaemia (Haemoglobin level between 10 to 10.9 gm/dl.). Also, the serum iron level in the fetus was directly proportional to the serum iron level in the mother.