

Reticulocyte haemoglobin equivalent (ret-he) as a marker of bioavailability of iron in pregnant female- a study of 75 cases in a tertiary care centre

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Abstract

Background: Anaemia is the most frequent derailment of physiology in the world throughout the life of a woman. Women in the gestational period have a higher risk of presenting with iron-deficiency anaemia. The anaemia may occur due to inadequate intake of dietary iron, greater foetal demand and haemodilution, a physiological anaemia common in pregnant women in which changes in the maternal organism, such as changes in blood volume and factors associated with haemostasis, decrease haemoglobin concentration. The aim of study is to utilize Ret-He as a marker of bioavailability of iron in pregnant female. **Material and Methods:** This was a retrospective and prospective study carried out for a duration of 1 years and included total of 75 cases referred to Pathology Department, M. P. Shah Govt. Medical College and Guru Gobind Singh Hospital, Jamnagar- Gujarat. Clinical history, RET-He and other important parameters as well as findings of all the concerned pregnant females were collected. **Results:** Age of pregnant females varied from 19 years to 42 years. Mean age being 25.2 years. The reference ranges of RET-Hewas between 32.1 and 38.8 pg with a median of 34.17 pg. Hb and/or ferritin level were low in 3 pregnant women in 1st trimester with anaemia, 7 in 2nd and in 16 patients in 3rd trimester. **Conclusions:** Early diagnosis of iron deficiency anaemia in pregnancy is essential to prevent damage to both maternal and foetal health. In this study, we showed that the RET-He presents an excellent supplementary tool for the diagnosis of iron deficiency in pregnant women.

Keywords: Anaemia, Iron deficiency, Pregnancy diagnosis, Reticulocytes, RET-He.