

The Assessment of Erythrocyte Reduced Glutathione Concentration in the Neonates suffered from G6PD Deficiency

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Abstract

Background and Objective: Glutathione as a master antioxidant plays a key *role* in eliminating free radicals from your body and in preserving cell membrane integrity esp. blood cells. We aimed to assess the Erythrocyte Glutathione level of favism and non-favism neonates.

Material and Methods: This study was conducted in Ekbatan hospitals of Hamadan (2009) on 15 favism patients and 60 non-favism ones matched by sex and age. Using Beutler method, the reduced Glutathione (GSH) level of red blood cells was measured.

Results: Based on the results, the amount of erythrocyte GSH in favism patients was 14.99 ± 4.62 mg/dl and that of controls was 58.2 ± 10.59 mg/dl.

Conclusion: the results show that the erythrocyte GSH in favism patients is significantly lower than that of non-favism subjects; therefore, the former seems more likely to be afflicted by hemolytic crises owing to the use of oxidant stuff.

Keywords: Favism; Glutathione; Neonates; G6PD