



ASSOCIATION OF IRON DEFICIENCY AND GLUCOSE HOMEOSTASIS

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(ABSTRACT) **Background and Objectives of Study** Iron deficiency is one of the major health issue in both developed and developing countries. It is most common in diabetics compared to that of non-diabetic individuals. Only few studies are done to assess Iron deficiency and its correlation with glucose metabolism. Early correction of iron deficiency in diabetics will delays both micro and macrovascular complications. This study is aimed at studying the iron deficiency and glucose metabolism by evaluating Hemoglobin (Hb), Iron profile, Glycosylated Hemoglobin (HbA1C), Random blood sugars (RBS). **Methods** The data for this study was collected from 30 patients of Iron deficient diabetic individuals who met with inclusion and exclusion criteria were clinically evaluated and underwent relevant investigations including Hb, Iron profile, HbA1C, RBS. **Results** Most cases fell in the age group of 40-60 years. There was an overall female preponderance over all age groups with mean age 48 years. On general examination easy fatiguability and uncontrolled sugars were found in 76.66% and 63.33% of patients respectively. Diabetic foot seen in 40% and Diabetic neuropathy seen in 33% of patients. Diabetic nephropathy seen in 26.67% of patients. **Conclusion** Among 30 cases of iron deficient diabetics, 33% was found to be with Diabetic neuropathy, 26.67% was found with Diabetic nephropathy. Therefore all diabetics with diabetic neuropathy and nephropathy should screen for Iron deficiency.

KEYWORDS : Iron deficiency, Glycemic control, Iron profile, HbA1C.