TITLE OF THE STUDY: “STEROID INDUCED HYPERGLYCEMIA DURING FIRST 48 HOURS OF STEROID THERAPY IN HOSPITALISED PATIENTS”

Abstract

Introduction

As hyperglycemia is an independent predictor of increased mortality in hospitalized patients with a range of co-morbidities, including an exacerbation of chronic obstructive lung disease, we conducted this descriptive study.

Aim

To see for the occurrence of hyperglycemia within 48 hours in hospitalized patients started on corticosteroid therapy with respect to the nature of corticosteroid used and presence of risk factors for diabetes.

Methods

The study was a longitudinal descriptive study. It was conducted at Government Royapettah Hospital attached to Govt. Kilpauk Medical College. Data were collected from Medical wards in Govt. Royapettah Hospital. Totally 100 patients of bronchial asthma / chronic obstructive pulmonary disease started on oral / parental corticosteroid therapy were included in this study from April 2016 to September 2016. The occurrence of hyperglycemia within 48 hours of steroid therapy & the other outcomes were assessed.

Results

Of 100 patients admitted, 38% were given Hydrocortisone, 38% Dexamethasone & 24% Prednisolone. The capillary blood glucose level after administration of the drug is highest (191.47) with Hydrocortisone > (162.47) with Dexamethasone > (152.42) with Prednisolone especially at the 12th hour.

Conclusion

Hydrocortisone has highest capillary blood glucose level rise. Oral form of steroid (prednisolone) is best when compared to parental forms. The risk factors HbA1C, Systolic BP, Waist Circumference are found to have significant correlation.