**Evaluation of pharmacist intervention in the management of steroid-induced hyperglycemia**

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**Background**: Steroids are common therapeutic agents used extensively in a variety of conditions for their anti-inflammatory and immunosuppressive properties. Their use is limited by the wide array of side effects such as hyperglycemia which is common and often seen in patients with or without diabetes.

**Objective**: The main objective of this study was to evaluate the impact of pharmacist intervention on the management of steroid-induced hyperglycemia utilizing institutional guidance.

**Methods**: This was a retrospective chart review approved by the Institutional Review Board. The review included patients that were at least 18 years of age, hospitalized for 48 hours or more, received dexamethasone 6 mg daily for one dose or more, and were managed on an electronic glycemic management system during hospitalization at Novant Health Huntersville Medical Center. Patients were excluded if they were pregnant, hospice patients, on insulin infusion, received parenteral nutrition, continuous or intermittent tube feedings. Patients who received dexamethasone 6 mg and insulin were identified through drug utilization reports using the hospital’s electronic medical record. The primary endpoint was the percentage of blood glucose at target range of 100-180 mg/dl and secondary endpoint was the percentage of recorded hypoglycemia defined as blood glucose ≤ 70 mg/dl. Primary endpoint was analyzed using unpaired student t-test and descriptive statistics was used for baseline characteristics and secondary endpoint.

**Results**: The mean percentage of blood glucose within target range before intervention was 26.96% and after intervention was 34.95%. The mean difference of blood glucose within target range between the before and after intervention group was 7.99 with a p value of 0.25. Although there was an increase in blood glucose in target range after intervention, it was not statistically significant. The mean percentage of hypoglycemia before the intervention was 1.09% and after intervention was 0.525%.

**Conclusion**: Implementing institutional interventions actively led by pharmacists did not significantly affect blood glucose within target range. However, there was an increase in blood glucose within target range and a reduction of hypoglycemia after intervention. The clinical significance of these effects should be determined in larger, long-term retrospective trials involving different steroids and exploring other patient populations.