

A Case Report on Steroid Induced Diabetes Mellitus

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Abstract:- A steroid is a biologically active organic compound having immunosuppressive action in living organism. Different classification of steroids are available in pharmaceutical industry. Steroids are mostly suggested by clinician to patients for the reduction of inflammation caused by body immune system. Steroid can cause elevation of patient blood sugar level. Those who take steroid for a longer period of time are more susceptible to develop steroid induced diabetes mellitus. The most commonly used steroids are prednisone and cortisone. These drugs promote glucose production in liver and reduce the sensitivity of cells to insulin. A 74 year old male patient suffering from mononeuritis multiplex was advised to take Inj. Methyl Prednisolone. The administration of this drug lead to a rise in his blood sugar level. It is a typical case of steroid induced diabetes mellitus.

Keywords:- Diabetes Mellitus, Steroids.

I. INTRODUCTION

Glucocorticoids have profound effects on carbohydrate metabolism: stimulating liver to form glucose from aminoacids and glycerol. Steroids continued to be used as an adjuvant in most of the drug combinations and in pulses despite known complications associated with its use. (1,2) Adverse effects associated with the use of steroids include hyperglycemia, gastritis, glaucoma and hypertension, there are reports on these adverse effects in its use in the treatment of many disease conditions but we are not aware of any report on the side effects of steroids. (1,3,4) New-onset diabetes Mellitus has occurred in patients without documented hyperglycaemia before corticosteroid therapy. However hyperglycemia has been reported as an adverse effect of steroids such as Prednisolone. (2,5)

II. CASE REPORT

A 74-year-old man admitted to a hospital presented with sensory loss in both limb along with motor symptoms and numbness in foot. He was diagnosed with diabetes mellitus, (blood glucose level was 208mg/dl) who had a history of mononeuritis multiplex. His past medical history showed that he was on treatment with 75 mg of oral Prednisolone (maxyalin), which was initiated 3 days before. After the withdrawal of Prednisolone his blood sugar level became normal. We can understand that the increased blood sugar level was due to Prednisolone. The treatment taken by the patient was glycomet.

III. CONCLUSION

Diabetes is a known complication of steroid therapy whether as a single agent or in combination with other drugs. The diabetogenic effect of glucocorticoids is said to be determined by dose, duration of administration and type of steroid. Hence physician has to adjust the dose based upon patients pharmacokinetic properties.

AUTHORS CONTRIBUTION

All the authors are in agreement and signed the author statement indicating their role in the paper entitled "A CASE REPORT ON STEROID INDUCED DIABETES MELLITUS"

CONFLICT OF INTEREST

No conflict of interest was reported.

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