

RELATIONSHIP BETWEEN THE USE OF CORTICOSTEROIDS AND INCREASED BLOOD GLUCOSE AND CHANGES IN VISUAL ACUITY: A CASE REPORT

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Abstract

Visual acuity is one of the most significant indicators of the general state of health, being able to reveal systematic problems in a timely manner. The article is a case study of paramount importance to draw the attention of the community to the importance of visual acuity as an effective way of perceiving a wide variety of systemic comorbidities. Glucocorticoids, used as anti-inflammatories and immunosuppressants, causes, in addition to other adverse effects, imbalance of body metabolic pathways. Hyperglycemia is one of the main alterations observed, acting in different ways to increase the glycemic level. Fluctuations in the glycemic level, both hyperglycemia and hypoglycemia, are associated with changes in refraction and, consequently, in visual acuity, which can lead to myopia or hyperopia. In the work, we report the case of a male patient, 60 years old, with ocular hypertension and systemic arterial hypertension (SAH), with no history of diabetes mellitus (DM) who sought ophthalmological care on 10/18/2021 with a complaint of visual blur. He reported using oral corticosteroids (Dexamethasone) for 15 days to treat rhinosinusitis. Fasting blood glucose and glycated hemoglobin tests were requested, which were well above the reference values. Glycemic control plays a central role for health, drawing attention to visual acuity, such as cases of refraction alteration and retinopathies. Studies are inconclusive as to the etiopathogenesis of these alterations, which highlights the need for studies on the subject, in addition, fosters the medical community about its role in raising awareness about the conscious use of medications, especially glucocorticoids, as they can alter blood glucose.

Keywords: visual acuity, corticosteroids, diabetes mellitus, glycemia.

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