Enhancing ocular health: Advocating for Vitamin D serum testing and supplementation in patients with recurrent episcleritis

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Episcleritis is a benign inflammation of the episcleral tissues, involving vascular congestion within the superficial episcleral plexus, accompanied by infiltration of inflammatory cells, which manifests as redness and irritation in one or both eyes. Although mostly idiopathic, it is commonly associated with autoimmune disorders, systemic vascular diseases, or allergic reactions.[1]

Currently, the mainstream treatment of recurrent episcleritis involves the use of topical steroids and NSAIDs. However, despite the quick relief provided by topical steroids in alleviating the symptoms of episcleritis, their prolonged use poses consequences, such as glaucoma and cataract formation. Steroids may also Increase the likelihood of recurrence and induce a rebound effect characterised by exacerbated redness, potentially leading to a more severe episode. Furthermore, given that these agents only address symptoms, discontinuing their application may result in episcleritis recurrence if the underlying cause is not addressed.[1]

A frequently overlooked risk factor is Vitamin D deficiency., known to possess antioxidative and anti-inflammatory properties and play a well-established immunoregulatory role in the maintenance of ocular health.[2] Despite this, ophthalmologists conventionally overlook Vitamin D serum testing as a possible diagnostic tool. Based on recent findings, assessing Vitamin D concentration, particularly 25-hydroxyvitamin D, serves as a feasible indicator for tracking clinical progression and severity of some ocular conditions, including episcleritis, also suggesting that supplementation could mitigate some disorders.[2]

Alarmingly, the prevalence of Vitamin D deficiency within the paediatric, adolescent, adult, and geriatric cohorts of the Pakistani population is indicative of an endemic condition. A survey conducted at Aga Khan University revealed that up to 61% of ambulatory individuals visiting general OPD exhibited Vitamin D deficiency, results that align with that of a cross-sectional study from Dow University of Health Sciences reporting Vitamin-D deficiency in 56% of OPD patients.[3]

Considering the significant correlation between hypovitaminosis D and heightened ocular inflammation risk, substantiated by recent research showing a 2.4-fold higher risk for those with insufficient Vitamin D levels, we recommend routine Vitamin D serum tests for individuals experiencing recurrent episcleritis.[4] If deficient, Vitamin D paired with antioxidant-rich vitamin C supplementation is recommended, as the latter has shown marked potential in mitigating ocular inflammation.[5]

In consideration of this, we urge the medical community especially those within the domain of ophthalmology to reconsider their approach towards patients with a past or current history of recurrent episcleritis. By addressing the root cause, healthcare professionals can adopt a more holistic management strategy for this condition.

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