LETTER TO EDITOR

Occurrence and morphological characteristics of cataracts in patients treated with general steroid therapy at the Cantonal Hospital Zenica

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Dear Editor,

We read with interest the article by Čerim et al. regarding the occurrence and morphological characteristics of cataracts in patients treated with general steroid therapy (1). Similar to the results of previous studies, the authors found that the use of corticosteroids is associated with a higher incidence of cataract development and posterior subcapsular (PSC) cataract as most prevalent morphological type (2).

Older age and heredity are the most important risk factors associated with different types of cataracts and females are at increased risk of cortical cataract (2,3). Myopia (≤ −1.0 D) and elevated intraocular pressure are also associated with an increased risk of nuclear and PSC cataracts (3). The major causal external risk factors influencing cataract formation include: smoking, excessive UV-B exposure, diabetes mellitus (DM) and steroidal treatment (2,3). There is also a significant relationship between the risk of cataracts and delivered corticosteroid dose (4). Lower monthly household income, lower education, hypercholesterolemia, hypertension and DM are independent risk factors for the development of any cataract type, while older age and DM are independent risk factors for the development of pure PSC (5). Elevated body mass index (BMI) and rapid weight gain may also increase the risk for age related cataract, especially PSC cataract (3,6). Other risk factors for PSC development also include hypertension, the use of amiodarone, thiazide diuretics, aspirin and vitamin E (2).

For these reasons, we would kindly ask the authors to perform the correlations for age, gender, BMI, length and regimen of steroid use, cumulative steroid dose, the use of other systemic drugs, DM duration, spherical equivalent and intraocular pressure changes, with cataract occurrence and morphology between the groups. Without this information it would be difficult to hypothesize the direct steroid induced cataractogenesis, especially in the group on the steroid therapy >4 years, where all patients had iatrogenic diabetes. In these patients, it is the indirect impact of steroids on body metabolism that might initiate the cataractogenesis. These findings will significantly contribute to the paper’s scientific value and contribution.

Overall, we agree with Čerim et al. that general steroid therapy remains the important risk factor for cataract development and all patients should have regular ophthalmological control examinations. Other systemic risk factors such as BMI, DM, smoking history, duration of basic systemic disease and corticosteroid dose should be carefully monitored too.

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