Orbital Complication of Allergic Fungal Rhino-sinusitis

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Background: Allergic fungal rhino-sinusitis (AFRS) is a benign non-invasive sinus disease related to hypersensitivity to fungal inhalation which occurs in young immunocompetent individuals. AFRS could present with serious orbital complication.

Objective: To evaluate the common features of orbital complications due to allergic fungal rhinosinusitis.

Design: A Retrospective Study.

Setting: Aseer Central Hospital, Abha, Saudi Arabia.

Methods: Sixty patients were diagnosed and treated for allergic fungal rhino-sinusitis from 2010 to 2013. The diagnosis was based on Bent–Kuhn criteria and CT scan report; the data was coded, edited and analyzed using SPSS IBM version 22.

Results: Twenty-seven (45%) orbital complications were encountered: 16 (26.7%) eye proptosis, 7 (11.7%) diplopia and 4 (6.7%) unilateral complete blindness. Fungal hyphae were not demonstrated histopathologically in any of these patients. The presence of fungal mucin was prevalent in all patients. Eye proptosis had good response to surgical and postoperative treatment while diplopia took longer to improve after surgical and medical treatment.

Conclusion: Allergic fungal rhino-sinusitis (AFRS) could present with serious orbital complications: eye proptosis, diplopia and/or unilateral complete blindness. All patients with orbital involvement should be evaluated clinically and radiologically for sinus disease even in the absence of the stigma of rhino-sinusitis. Early diagnosis and immediate treatment is extremely essential to prevent serious complications such as visual loss.

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