DIFFERENTIAL DIAGNOSIS OF ORBITAL INFLAMMATION IN A TERTIARY REFERRAL HOSPITAL – FOCUS ON INFLAMMATORY DISEASES

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BACKGROUND

Analysis of frequency of inflammatory diseases leading to orbital disease requiring hospitalization.

METHODS

A retrospective analysis of medical records of patients hospitalized from January 2011 to January 2021 due to orbital signs and symptoms in a tertiary referral hospital.

RESULTS

We assessed 258 patients for eligibility. Exclusion criteria were met by 217 patients (109 infections, 18 neoplasms, 10 endocrine causes and 80 other noninflammatory causes). Idiopathic or autoimmune diseases accounted for 41 cases, which were studied in detail. The majority was women (75%) with median age of 42 (29–59) years and unilateral involvement in 70%. Associated findings were: maxillary sinusitis (30%), headache (22%), pulmonary involvement (7%), saddle nose (5%) and retroperitoneal fibrosis (5%). The ocular findings were: proptosis (63%), hyperemia (24%), ophthalmoplegia (22%), low visual acuity (20%), pain (13%), diplopia (12%) and tearing (7%). Computed tomography showed expansive (40%) or infiltrative (37%) lesions, with extraconal (15%) or intraconal involvement (12%) and myositis (30%). The biopsy defined the diagnosis in 24 patients, showing infiltration by mononuclear cells (80%), plasmacytes (37%) and histiocytes (24%); vasculitis (20%) and granuloma (10%); fibrosis (24%); and IgG4 plasmacytes (15%), with IgG4/IgG > 0.4 in 2/3 of them. Each patient had only one diagnosis, distributed as: idiopathic inflammation in 16, ANCA-associated vasculitis in 14, IgG4-related disease in 6, ocular myositis in 3, sarcoidosis in 1 and amyloidosis in 1. The most frequent treatment was oral glucocorticoid (e.g., prednisolone 1 mg/kg/day), which had satisfactory response for 21 patients. For 20 patients, it was necessary to add immunosuppressive drugs: methotrexate (14), cyclophosphamide (10), azathioprine (4) and rituximab (2).

CONCLUSION

Inflammatory orbital disease can be a manifestation of systemic diseases and contribute to general low quality of life. Biopsy was fundamental to differential diagnosis and the treatment was based on immunosuppressive drugs.

KEYWORDS

Inflammatory diseases, Orbital inflammation, Systemic diseases.