ISSN: 2573-9573

Case Report

Journal of Ophthalmology & Clinical Research

Unusual Association of Uveitis and Buerger's Disease

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Submitted: 04 Mar 2020; **Accepted:** 10 Mar 2020; **Published:** 20 Mar 2020

Introduction

Buerger's disease or thromboangiitis obliterans TAO is a rare arteriopathy, which usually affects young male smokers and is classically responsible for ischemia of the extremities [1]. Ocular involvement is rarely described in the literature. We report an unusual combination of uveitis with TAO in a young man.

Case report

30-year-old male smoker previously healthy, who consults for rapidly progressive visual acuity drop on his right eye quantified at 5/10 and blurred vision on his left eye quantified at 10/10 weak. The ophthalmological examination shows: mixed bilateral Granulomatous Keratic precipitates with a greasy appearance commonly known as 'mutton fat' deposited at the bottom without anterior chamber flare (Figure 1,2).

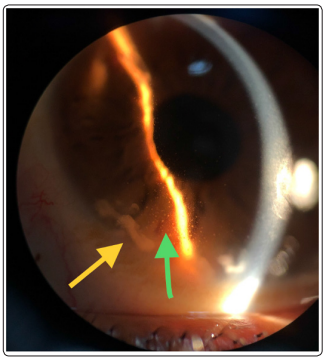

Figure 1: Slit lamp: keratin precipitates, yellow arrow: large precipitates, green arrow: multiple precipitates of small round sizes

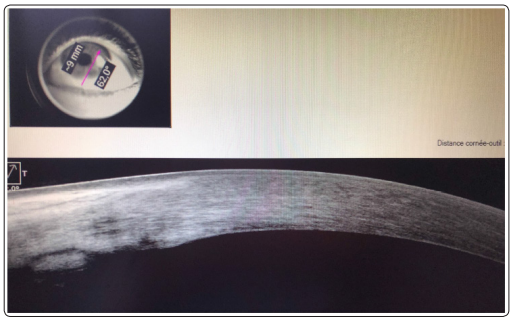

Figure 2: OCT section of the anterior chamber showing the keratic precipitates

The fundus examination (Figure 3): objectified the bilateral coexistence of multiple deep yellowish-white spots and greyish pigmented lesions, mainly in the retinal periphery and reaching the macula especially on the right, reflecting choroidal lesions.

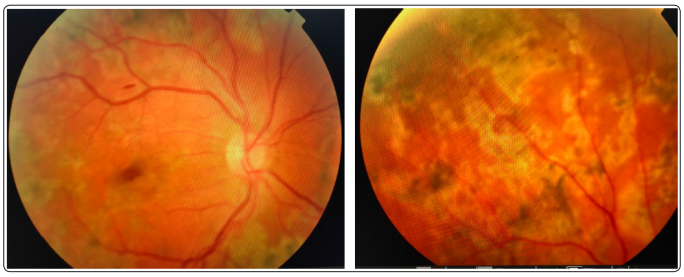

Figure 3: Retinography, diffuse choroidal lesions with right macular involvement

A radiological exploration was done: AGF with fluorescein (Figure 4): which shows a delay in filling the choriocapillary, and progressive impregnation of the lesions with slight diffusion per area; absence of macular and papilla edema.

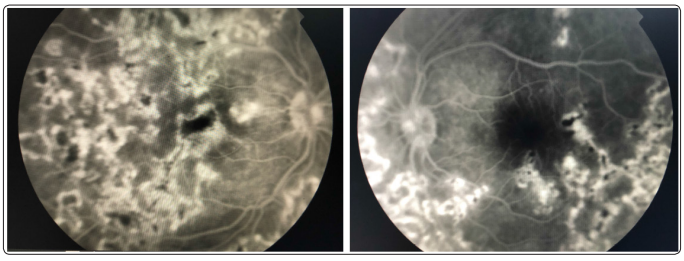

Figure 4: Fluorescein angiography

Macular OCT (Figure 5): no macular edema

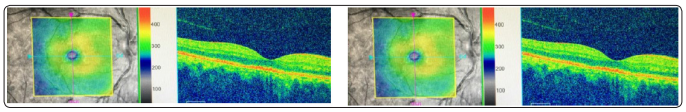

Figure 5: Macular OCT

Based on this clinical presentation of bilateral panuveitis an extensive etiological assessment is carried out especially since the young man had no specific history guiding the diagnosis:

-Infectious (NFS, different serologies: viral, bacterial, parasitic…, Quantiferon, search for Bk Koch bacillus in sputum, Lung radio, ECBU) -inflammatory (VS, CRP)
-Immunological (anti-native DNA antibodies, antinuclear CA, complement)
-Phospho-calcium balance, ECA assay, chest CT, salivary gland biopsy

The check-up returned negative with no inflammation.

During the hospitalization the patient presented paraesthesia of the lower right extremity with intermittent coldness of the feet; clinical examination and vascular imaging showed a characteristic hemodynamic and morphological appearance that made the diagnosis of hromboangiitis obliterans. Unfortunately, the right little toe necrosed (Figure 6) despite physical treatment, and amputation was performed.

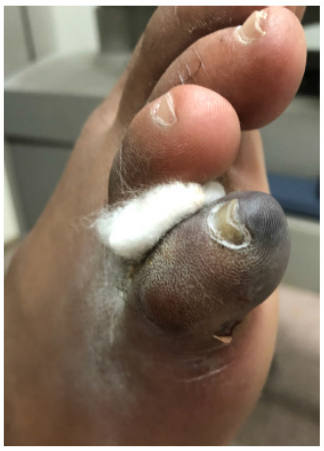

Figure 6: Gangrene of the fifth right toe

Discussion

The ocular manifestations of Buerger's disease are rarely described in the literature [2-6].

The cases described were mainly ischemic lesions ranging from involvement of bulbar conjunctivitis vessels to retinal arterial occlusion, and ischemic papilledema.
Uveitic inflammatory disease was reported only once by Böke W, Duncker G in 1983 [7].

Uveitis may be an inaugural TAO and should be looked for in young smokers.

TAO is an inflammatory and occlusive segment vascular disease of pathogenesis still poorly understood. Its diagnostic test is simple combining a number of clinical criteria published by Olin in 2000 [8,9]. These diagnostic criteria do not include ischemic damage to organs other than the extremities, although several publications have shown its systemic involvement preceding or occurring after the diagnosis of the disease, such as cerebral, visceral, ophthalmological and other damage [10-12].

Although the lesions are essentially occlusive and ischemic, an immunological and inflammatory mechanism during TOB is suggested by several studies, in particular a T cell-mediated immune response and our case supports this hypothesis by uveitic association [13,14]. Understanding pathophysiology could tell us more about the mechanism of systemic damage and will allow better management of this pathology.

Conclusion

Thromboangiitis obliterans is now a systemic pathology with a probably inflammatory component which can be revealed by uveitis. This underlines the interest of looking for it especially in young smokers.

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