Oral | Abstract 24

UVEITIS / ENDOPHTHALMITIS

A RELENTLESS TALE OF TUBERCULAR GRANULOMA

2-min Case presentation

Sinha P.*

A.B Eye Institute ~ Patna ~ India

Tubercular granulomas are a hallmark sign of Intra ocular Tuberculosis. Ocular involvement has been reported in 6.8 percent of patients with pulmonary tuberculosis. Tubercular granulomas are hypoxic granulomas. There is high vascularity and angiogenesis due to increased VEGF production. Combination of ATT, Oral corticosteroids and anti VEGF agents have been shown to decrease infection load, reduce angiogenesis and limit the spread of infection.

A 25 year female patient presented with dimunition of vision in the RE for 3 months. Associated with severe headache On ATT for pulmonary tuberculosis for 3 months. BCVA RE CFCF and LE 6/6,N6 Subretinal elevated yellowish lesion completely overriding the macula s/o tubercular granuloma.OCT scan passing through the granuloma shows elevation of retinal layers with underlying choroidal bump, SRF and thickening of retinal layers. Intravitreal injection of Ranibizumab and Moxifloxacin were given. Systemic steroids 1 mg/kg body weight was also added.

Aggressive treatment with weekly intravitreal Ranibizumab and moxifloxacin lead to resolution of the lesion and limited further recurrence.

Tubercular granulomas are hypoxic granulomas. In response to hypoxia there is upregulation of VEGF .Tubercular granulomas have reduced oxygen tension with increased expression of VEGF in retinal pigment epithelium and photoreceptors. Anti VEGF drugs decreases hypoxia and promotes normal vascularization in tubercular granulomas. Combination of ATT, Oral corticosteroids and anti VEGF agents have been shown to decrease infection load, reduce angiogenesis and limit the spread of infection. Weekly intravitreal Ranibizumab and moxifloxacin was added as VEGF load in these eyes has been found to be twice as high as CNVM eyes. Also the half life of the drugs may be shortened due to breakdown of the blood retinal barrier secondary to inflammation leading to early dissolution of drug in the vitreous cavity. Thus more aggressive weekly injections are needed. Moxifloxacin was added as adjunctive role second line ATT to decrease the bacterial load.

Intravitreal bevacizumab in the management of vascular choroidal granuloma. Bansal R et al BMJ case reports 2013 Correlation of vascular endothelial growth factor with the clinical regression of Tubercular granuloma . Indian journal of Ophthalmology 2020