# Inflammatory Retinal vessel occlusion in a Young Chinese Female alleviated by B cell depletion therapy.

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#### Background:

To report a case with inflammatory retinal vessel occlusion in a Young Chinese Female alleviated by B cell depletion therapy.

## Patients & Methods:

A case report

## Case

A 13-year-old girl was referred to our clinics due to blurred vision with progression over 4 days. Past history revealed intermittent episodes of dizziness and blackout in the past 6 months. However, brain CT showed negative findings in local hospital. On ophthalmic examination, visual acuity (VA) was hand motion 30 cm over her right eye (OD) and 6/60 over her left eye (OS). Fundus exam showed retinal vessel engorge with macular exudation, as well as swollen disc (OD) more marked than (OS)( figure 1 A,B). Fluorescein angiography (FA) demonstrated delayed filling of retinal vessels ( figure 2). Lab data showed elevated C-reative protein (CRP) and erythrocyte sedimentation rate (ESR). Magnetic resonance angiography showed remarkable stenosis of bilateral common carotid arteries and their branches ( figure 3). Under the impression of Tagayasu's arteritis, B cell depletion therapy with rituximab was prescribed. The ocular and systemic symptoms relieved. The vision revealed improvement to counting finger 30cm (OD) and 6/15 (OS), respectively. However, the visual field defect was noted ( figure 4). Besides, the retinal arterioles progressively attenuated and the optic disc turned pale. ( figure 1. C,D).

## Result

Fig.1

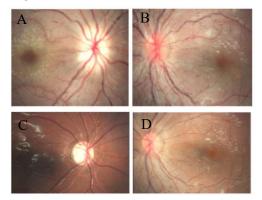


Fig.2

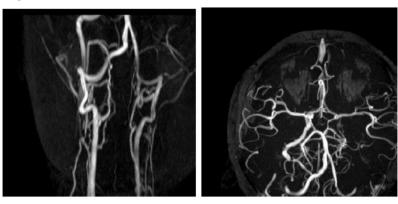


Fig.3

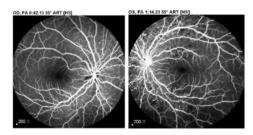
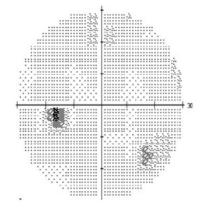


Fig.4



## Comments:

Intermittent blackout and slur pupillary reflex may resulted from Tagayasu's arteritis. Early diagnosis and prompt treatment are necessary.

#### **Conclusions:**

B cell depletion therapy with rituximab is potential in the treatment of Tagayasu's arteritis - related ocular abnormality