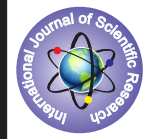


Spontaneous resolution of serous retinal detachment in a patient with choroidal osteoma

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ABSTRACT

We present a case of choroidal osteoma in a 63-year-old man. Fundus examination revealed a yellowish-brown lesion in the posterior pole. Ultrasonic B-scan echography showed a highly reflective lesion. Optical coherence tomography revealed serous retinal detachment. Five months later, serous retinal detachment was returned to normal aspect.

INTRODUCTION

Choroidal osteoma is a unique tumor that comprises mature bone in the circumpapillary or macular region.¹ Choroidal osteoma showed evolution with change in clinical features over many years, and cases of tumor growth, tumor decalcification or involution, and related choroidal neovascularization (CNV) were documented.¹⁻⁴ Herein, we present a case of choroidal osteoma with serous retinal detachment (SRD) in a 63-year-old man.

CASE PRESENTATION

A 63-year-old Japanese man was referred to our clinic for blurry vision in the right eye. Best corrected visual acuity was 1.2 in his both eyes. Slit-lamp examination showed cortical opacities in both lenses. Examination of the fundus of the right eye demonstrated yellowish-brown lesion at the posterior pole (Figure 1).



Fig. 1 Fundus photograph of the right eye
Note a yellowish-brown lesion in the posterior pole

Ultrasonic B-scan echography showed a highly reflective lesion (Figure 2).

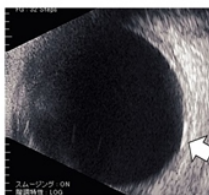


Fig. 2 Ultrason
Note a highly reflective lesion (arrows).

Optical coherence tomography (OCT) revealed hyporeflective mass (Figure 3 framed arrows). In addition, serous retinal detachment was also detected (Figure 3 arrows). On fluorescein angiography and indocyanine gr

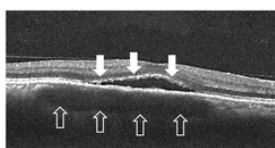


Fig. 3 OCT ima
Note hyporeflective mass and serous retinal detachment.

Five months later, serous retinal detachment was gradually returned to normal aspect (Figure 4A-F).

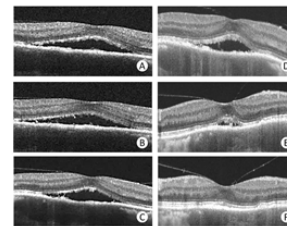


Fig. 4 OCT images during 5 months
The serous retinal detachment gradually improved.

A: initial visit, B: 2 weeks later; C: 1 month later, D: 2 months later; E: 3 months later, F: 5 months later

DISCUSSION

In 1998, Aylward et al.⁴ provided observations on long-term outcome in a series of 36 patients with choroidal osteoma. According to their report, tumor growth was observed for 9 (41%) of 22 well-documented osteomas. The probability of loss of visual acuity to 20/200 or worse was 58% by 10 years and 62% by 20 years. The probability of developing CNV was 47% by 10 years and 56% by 20 years. In addition, of the 22 eyes with SRD at the initial examination, the detachment had resolved in 14 (64%) by the time of the final examination.

Shields et al.² described 74 eyes of 61 patients with choroidal osteoma. According to their report, at 5 and 10 years, Kaplan-Meier analysis revealed tumor growth in 22% and 51% of eyes, tumor decalcification in 28% and 46% of eyes, CNV in 31% and 31% of eyes, visual acuity loss in 26% and 45% of eyes, and poor visual acuity in 45% and 56% of eyes, respectively. In particular, factors predictive of CNV included irregular tumor surface and subretinal hemorrhage. In 6 eyes that had both CNV and tumor decalcification, CNV was detected prior to or at the same time as the decalcification. The factor predictive of visual acuity loss was presence of subretinal fluid whereas the factors predictive of poor visual acuity included symptoms and tumor decalcification. Therefore, SRD overlying a choroidal osteoma is a recognized association that triggers a search for possible underlying CNV.

CONCLUSIONS

Although our findings were based on a single case of choroidal osteoma with SRD, they may contribute to a better understanding of this condition. Choroidal osteoma can lead to poor visual acuity, most often related to CNV, SRD, or photoreceptor atrophy [1]. Therefore, long-term follow-up is necessary in this case.

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