Bilateral choroidal metastasis from carcinoma of the submandibular gland

Sheeja S John, FRCS; Saban Horo, MS; Andrew D Braganza, MS; Thomas Kuriakose, FRCS

Metastatic tumor is the most common uveal malignancy. However, choroidal metastasis from a salivary gland neoplasm is extremely rare. We report a case of bilateral, multifocal choroidal metastasis from carcinoma of the submandibular gland.

Key words: Adenoid cystic carcinoma, choroidal metastasis, submandibular gland

Indian J Ophthalmol 2008;56:75-6

Adenoid cystic carcinoma is a rare tumor of the head and neck. It accounts for less than 1% of all head and neck malignancies and about 10% of all salivary gland tumors. However, it is the most common malignancy of the submandibular gland. Choroidal metastasis from adenoid cystic carcinoma of the salivary gland is extremely rare. We report a case of bilateral, multifocal choroidal metastasis from adenoid cystic carcinoma of the submandibular gland.

Case History

A 56-year-old woman was referred from the palliative care unit with complaints of gradually progressive, painless decrease in vision in the left eye of one month duration and in the right eye of one week duration. She had undergone excision of a mass in the left submandibular region ten months ago. Histopathological examination showed a poorly differentiated adenoid cystic carcinoma of the left submandibular gland with extensive perineural infiltration. She underwent radiotherapy to the submandibular bed, followed by six cycles of chemotherapy with carboplatin and 5-fluoro-uracil. She developed back pain five months later due to multiple bone metastases. She was given palliative radiotherapy to the spine. Subsequently, lung and brain metastases were diagnosed.

On examination, the best corrected visual acuity was 20/40 in the right eye and 20/200 in the left eye. There was a relative afferent pupillary defect in the left eye. Anterior segment examination did not reveal any other abnormalities. Ophthalmoscopic examination of the right eye revealed an edematous disc with a yellow choroidal mass, measuring about three disc diameters, inferior to it [Fig. 3]. There was an exudative detachment of the examination of the left eye revealed an edematous disc with a yellow choroidal mass, measuring about three disc diameters, inferior to it [Fig. 3]. There was an exudative detachment of the

Figure 1: Fundus photograph of the right eye showing choroidal nodule with minimal exudative retinal detachment at the macula

Figure 2: Fundus photograph of the right eye showing the second choroidal nodule just outside the superotemporal arcade

Figure 3: Digitally processed composite fundus photograph of the left eye showing the two choroidal nodules with exudative retinal detachment
overlying retina, which extended to the fovea. Another yellow choroidal nodule, measuring about half disc diameter, at the supertemporal arcade was noted. B-scan ultrasonography showed choroidal masses with high internal reflectivity and detachment of the overlying retina. A diagnosis of bilateral choroidal metastasis with exudative retinal detachment was made. She was advised palliative chemotherapy and radiotherapy to the orbit, brain and spine. However, the patient refused further treatment. She expired six weeks later.

Discussion
Metastatic tumor is the most common uveal malignancy and the choroid is the most common site for uveal metastasis. Although breast and lung cancers represent the most common source of choroidal metastases, malignancies of the gastrointestinal tract, kidney, prostate and skin have all been reported to metastasize to the choroid.

Adenoid cystic carcinoma is the most common malignancy of the submandibular gland. Although there have been reports of choroidal metastasis from tumors of the parotid and the minor salivary glands, we are aware of only two other case reports of adenoid cystic carcinoma of the submandibular gland metastatic to the choroid. In one case, the metastasis was unilateral while in the other, both eyes were involved.

We document a hitherto unreported case of bilateral, multifocal choroidal metastasis from submandibular gland carcinoma. The paucity of reports on this subject could be due to the practical difficulties associated with the documentation of findings in these patients who may be unable or unwilling to cooperate with tedious procedures when they are in very poor systemic condition, as was the case with our patient.

References
1. Dutta NN, Baruah R, Das L. Adenoid cystic carcinoma-clinical presentation and cytological diagnosis. Indian J Otolaryngol Head Neck Surg 2002;54:62-4.
2. Shields JA, Carvalho C, Shields CL, Singh AD, Wagner D. Bilateral choroidal metastasis from adenoid cystic carcinoma of the submandibular gland. Retina 2000;20:406-7.
3. Shields CL, Shields JA, Gross NE, Schwartz GP, Lally SE. Survey of 520 uveal metastases. Ophthalmology 1997;104:1265-76.
4. Jenrette JM, Fitzgerald RH Jr. Metastasis to the choroid complicating adenoid cystic carcinoma. Arch Otolaryngol 1982;108:509-10.

Intravitreal live adult Brugian filariasis

Nageswar G Rao, MD; Sontosh K Mahapatra, MS; Sabyasachi Pattanayak, MS; Kaumudee Pattnaik, MD

Human ocular infestation by live filarial worm is a rare occurrence and has been reported mostly from South-East Asia. It involves the eyelids, conjunctiva, cornea, anterior chamber and uvea. No case of intravitreal Brugian microfilaria / adult worm has been found by Medline search. Here we report a case of live intravitreal adult Brugian filaria, where the parasite was successfully removed by pars plana vitrectomy. Identification of the worm was done by light microscopy and confirmed by immuno chromatographic test.

Key words: *Brugia malayi*, intravitreal filariasis, ocular infestation

*Indian J Ophthalmol* 2008;56:76-8

Intraocular infestation by the filarial worm is a rare occurrence in humans. Most of the published reports are from South-East Asia. We report a very rare case of intravitreal Brugian filarial worm, where the worm was removed live and intact by pars plana vitrectomy.

Case History
A 35-year-old male presented to us with complaints of “something moving in front of his left eye for two days”. His visual acuity was 20/20 in both eyes. Anterior segment findings were within normal limits. Indirect ophthalmoscopy of the left eye showed clear ocular media, but there was a motile whitish thread-like worm entangled with vitreous strands found near the optic disc [Fig. 1]. Posterior segment of the right eye showed no abnormality.

The patient had history of recurrent fever. Peripheral blood smear examination showed eosinophil count of 523/µl of blood but no detectable microfilaria. Systemic examination revealed no abnormality. Chest X-ray was normal. No cutaneous lesions were seen. Routine and microscopic examination of urine showed no abnormality.

Pars plana vitrectomy was planned to remove the worm live and intact. Limited vitrectomy was carried out leaving vitreous strands around the worm intact, which helped in removing the parasite by grasping the vitreous strands around it [Fig. 2]. The worm measuring 30 mm in length and 0.1 mm in diameter was alive and actively motile upon removal from the eye. It was sent to the parasitologist and on light microscopy identified to be adult filarial worm because of twisted body curves with smooth cuticle, fine transverse striations, ventrally coiled tail [Fig. 3] and the slightly swollen head end [Fig. 4]. Immuno