

Simultaneous choroidal and conjunctival metastases from renal cell carcinoma

An-Ning Chao^{1,2}, Bayardo Perez-Ordóñez³,
Mostafa Hanout¹, Kalpana Rose¹, Hatem Krema¹

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¹Princess Margaret Cancer Center/University Health Network, Ocular Oncology Service, Department of Ophthalmology and Visual Sciences, University of Toronto, Toronto, Ontario, ³Department of Pathology, Toronto General Hospital, Toronto, ON, Canada, ²Department of Ophthalmology, Chang Gung Memorial Hospital, Linkou, and College of Medicine, Chang Gung University, Taoyuan, Taiwan

Correspondence to: Dr. Hatem Krema, Ocular Oncology, Princess Margaret Cancer Centre/UHN, University of Toronto, 610 University Avenue, Toronto, ON, M5G 2M9, Canada. E-mail: hatem.krema@uhn.ca

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A 50-year-old male patient was referred for an assessment of a choroidal lesion in the right eye. He also noticed a rapidly growing caruncle lesion about 2 weeks prior to his visit. His medical history was remarkable for metastatic diseases from clear cell renal carcinoma 1 year before.

On ophthalmic evaluation, his visual acuity was 20/20 in both eyes. Anterior segment examination of the right eye showed a red protruding mass at the caruncle [Fig. 1]. Dilated fundus examination demonstrated an amelanotic choroidal lesion at the inferior temporal arcade [Fig. 2]. Ultrasound examination identified a dome-shaped choroidal tumor, with medium internal reflectivity [Fig. 3]. The left eye examination was normal. The caruncle tumor was excised totally. Histopathological examination revealed nests of clear cells with abundant cytoplasm, which confirmed a metastatic

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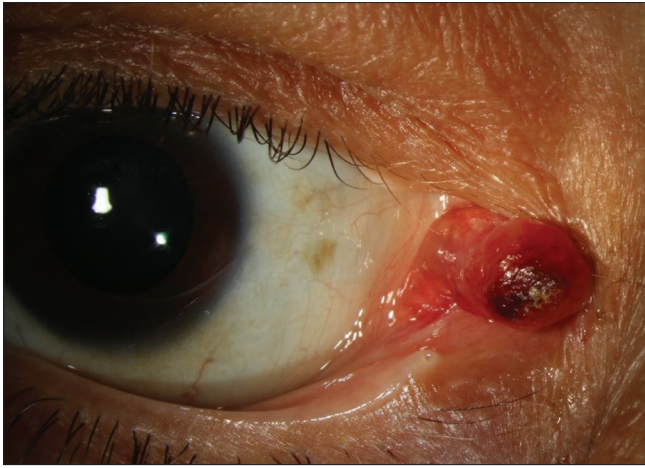


Figure 1: Anterior segment examination of the right eye showed a red protruding mass at caruncle

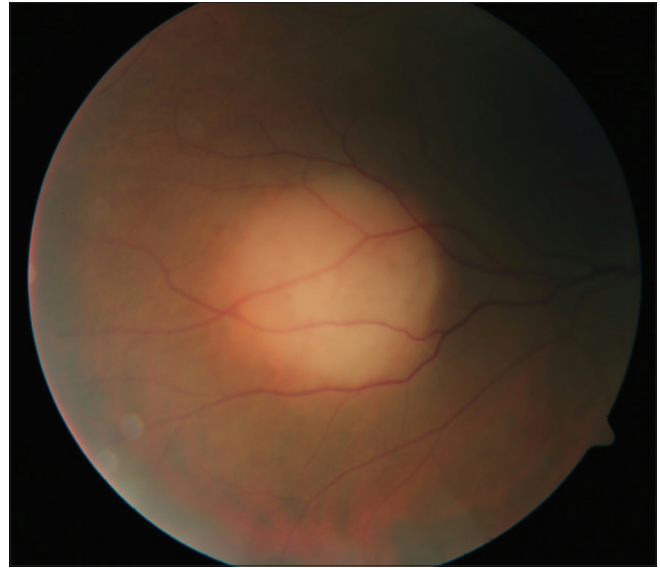


Figure 2: Dilated fundus examination demonstrated an amelanotic choroidal lesion measuring 5 mm in diameter at inferior temporal fundus

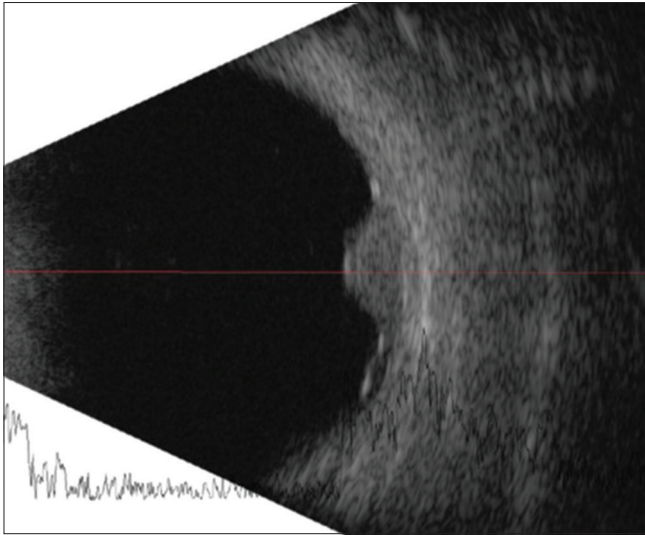


Figure 3: Ultrasound examination revealed a domed shaped choroidal tumor, 2.9 mm in thickness with variable internal reflectivity

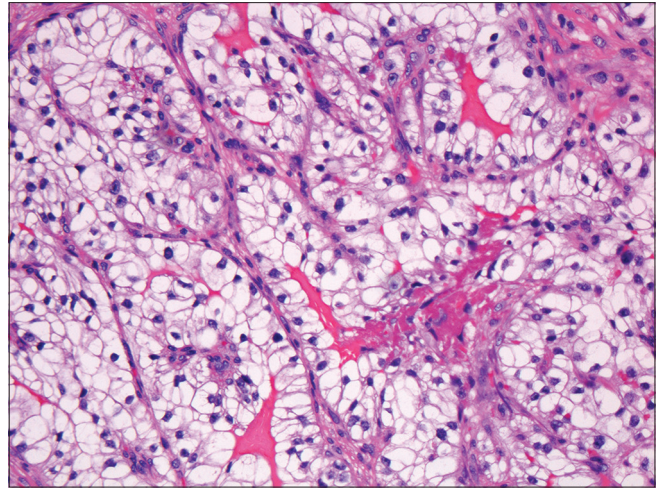


Figure 4: The histopathological examination of the excised caruncle tumor revealed nests of clear cells with abundant cytoplasm, which was conclusive of a metastatic renal cell carcinoma in the caruncle

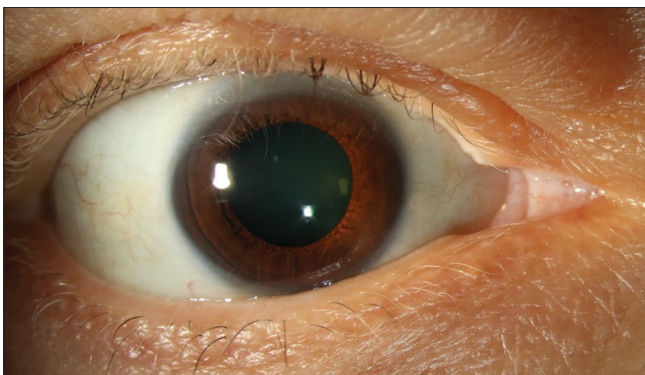


Figure 5: There is no recurrence of conjunctival tumor

renal cell carcinoma (RCC) [Fig. 4]. The right eye was treated with radiotherapy in addition to the second line of systemic targeted therapy. There is no recurrence of conjunctival tumor or choroidal tumors 18 months after treatment [Fig. 5].

Discussion

Choroidal metastasis from RCC accounts for only 3% of all choroidal metastases.^[1-3] There were only three cases of conjunctival metastasis from RCC reported in the literature.^[4,5] Two cases presented with a unilateral conjunctival mass as the first presentation of RCC. The third case presented with bilateral choroidal metastases from RCC and developed bilateral conjunctival metastases 6 months later.

This is a patient who has an advanced stage of RCC, which is refractory to first-line targeted therapy and immunotherapy. The biopsy of the tumor at caruncle confirmed the nature of the intraocular tumor. To the best of our knowledge, this is the first case to describe concurrent conjunctival and choroidal metastases from RCC, which may represent a more aggressive phenotype of RCC, and requires close monitoring of advanced disease.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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Nil.

Conflicts of interest

There are no conflicts of interest.

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