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# Contralateral eyelid metastasis of uveal melanoma with further systemic dissemination

## Metastaza malignog melanoma uvee u kontralateralnom kapku sa naknadnom sistemskom diseminacijom

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**Abstract**

**Background.** The usual way of dissemination of an uveal malignant melanoma comprises hematogenous metastases to various organs, liver in the first place. Uncommon development of the disease is always possible, while unusual ways of dissemination and secondary deposits in the unexpected sites have been observed. We presented an unusual case of a patient with uveal melanoma metastatic to the contralateral eyelid with very fast further dissemination in the manner typical for primary malignancies. **Case report.** This observational case report included a 70-year-old male, enucleated for uveal melanoma in his left eye, appeared again 2.5 years later with a fast growing contralateral eyelid metastasis, followed by submandibular lymph node involvement on the same side and further systemic dissemination. **Conclusion.** The firts revealed solitary contralateral eyelid metastasis of uveal melanoma is extremely rare, such as an uncommon secondary deposit with a strange way of further dissemination.

**Key words:**
**melanoma; uveal neoplasms; eyelid neoplasms; neoplasm metastasis; treatment outcome.**

**Apstrakt**

**Uvod**. Po pravilu maligni melanom uvee metastazira hematogeno, pri čemu se sekundarni depoziti prvo javljaju u jetri. Neuobičajen tok bolesti uvek je moguć, a neobični načini metastaziranja, kao i prvi registrovani sekundarni depoziti neočekivanih lokalizacija već su uočeni. Autori prikazuju nesvakidašnji slučaj malignog melanoma uvee koji je najpre dao metastazu u kontralateralnom kapaku, a potom se dalje diseminovao načinom karakterističnim za primarni tumor kapka. **Prikaz slučaja.** Kod muškarca, starog 70 godina, kod koga je 2,5 godine ranije učinjena enukleacija desne očne jabučice zbog malignog melanoma uvee, registrovan je brzorastući sekundarni depozit u donjem kapku levog oka. Potom su se pojavile metastaze u regionalnim limfnim čvorovima levo, a kasnije sistemska diseminacija bolesti. **Zaključak.** Prva registrovana metastaza malignog melanoma uvee u kontralateralnom kapku ekstremna je retkost, kao što je i izneti dalji put diseminacije maligniteta apsolutno neuobičajen.

**Ključne reči:**
**melanom; uvea, neoplazme; kapak, neoplazme; neoplazme, metastaze; lečenje, ishod.**

### Introduction

Uveal malignant melanoma is the most common primary intraocular malignancy in adults. The clinical course is unpredictable and metastatic disease may occur after a prolonged disease-free interval [1]. The liver is the sole site or the initial site of metastases in more than 50% of cases, followed by lungs, bone and skin [2]. Unexpected behavior or an uncommon development of the disease is always possible [3], as well as strange and unusual ways of dissemination: contralateral choroids [4], ipsilateral orbit [5], contralateral orbit [6], brain [7, 8], brest [9], heart [10] or adrenal gland [11]. The mechanisms of the peculiar modes of dissemination sometimes are really difficult to explain. Unusually located metastases may appear as solitary or as a part of a metastatic disease. Life prognosis in patients with metastatic disease is always poor, with a median survival between 2 and 9 months after detection of metastases [12]. A solitary metastasis of a choroidal melanoma to the contralateral eyelid has been reported, too [13]. In this paper, we described a case of uveal melanoma metastatic to the contralateral eyelid with very fast further dissemination in an unusual way.

### Case report

A 70-year-old male patient was first admitted with clinical signs of an intraocular tumor in his left eye. A large uveal melanoma was found both clinically and by ultra-

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sound, without detectable signs of dissemination. The function of the eye being reduced to light perception, an enucleation was performed. Malignant melanoma of the choroid and the ciliary body was confirmed by histology. The same patient appeared again 30 months later, with a large, fast growing tumor of his right lower eyelid. The lesion was not pigmented, it was red colored, with fleshy appearance, bilobar in shape, with subcutaneous and a subconjunctival part (Figure 1). At the time of admission, a huge submandibular lymph node was already present (Figure 2). The patient stated that the eyelid tumor appeared one month previously, but that he had not paid very much attention until he noted the lymph node enlargement soon after that. General checkup revealed secondary deposits in the lungs and in the liver. Removal of the eyelid lesion was advocated for diagnostic purposes, so that a surgical excision was done. Malignant melanoma was found by histology, once again. There was no further treatment and the family notified us informally when he died at home 3 months later.

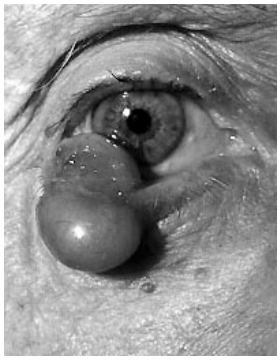

**Fig. 1 – Clinical appearance of eyelid tumor**

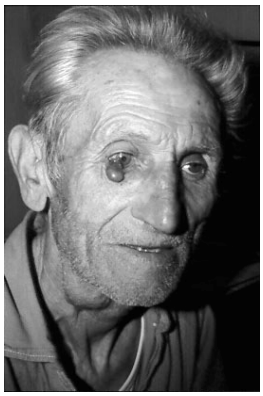

**Fig. 2 – The patient on second admission with eyelid tumor and enlarged submandibular lymph node on the same side (Note anophthalmus and an artificial left eye)**

In the first specimen, after enucleation, there was an eyeball of a normal size and shape. On vertical section, an irregularly pigmented choroidal and ciliary body tumor filled the inferior half of the globe, with partial retinal detachment (Figure 3). Microscopically, a moderately pigmented malignant melanoma of the mixed cell type (Figure 4), with a predomination of the epitheloid cells, with a number of bizarre, multinucleated or giant ones was found. There were no signs of extrabulbar penetration. The second one was a 15 mm wide full thickness eyelid resection specimen, with a tumor and the surrounding skin. The tumor was whitish and flashy on cross section. Microscopically (Figure 5), a non- pigmented, epitheloid cell type malignant melanoma was found (Figure 6). Neither conjunctival nor cutaneous origin of the tumor could be traced on serial sections. Positive immunostains for S-100 and HMB-45 confirmed the diagnosis.

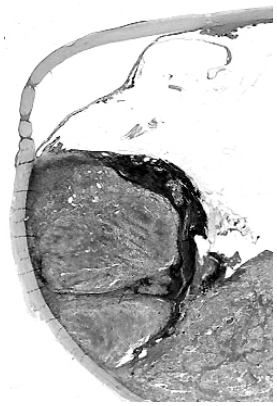

**Fig. 3 – Uveal melanoma – histological section of the enucleated left eyeball**

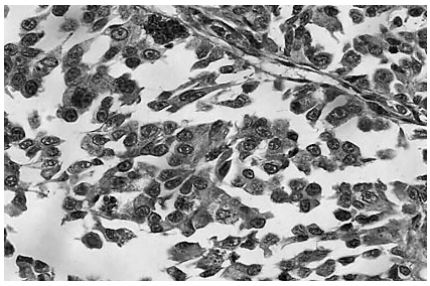

**Fig. 4 – The same section. Uveal melanoma, mixed cell type (HE, original magnification 400×)**

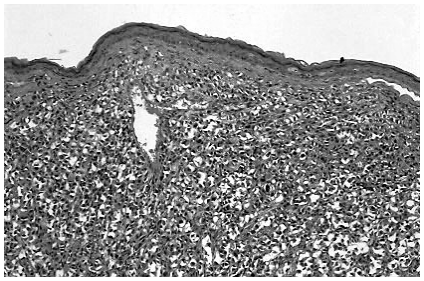

**Fig. 5 – Subcutaneous part of the eyelid tumor, low power histologicval appearance (HE, original magnification 40×)**

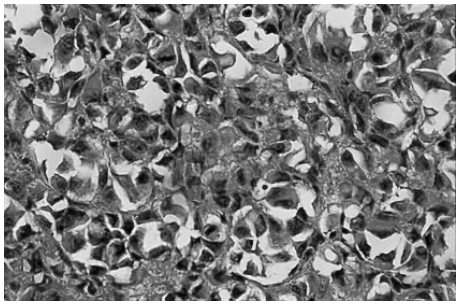

**Fig. 6 – The same section. Melanoma, epitheloid cells (HE, original magnification 400×)**

## Discussion

Regional lymph node involvement with subsequent further dissemination is typical for primary malignancies of the conjunctiva and the eyelids. A second primary melanoma would be an exceptional rarity. Even if it was a new tumor, what had it developed from? Without convincing histological evidence of neither cutaneous nor conjunctival origin of the eyelid tumor in serial sections, we are prone to rule out the possibility of an independent second primary tumor in our case. A solitary contralateral eyelid metastasis being an extreme rarity itself [13], such an uncommon secondary deposit with very fast further evolution and systemic dissemination typical for primary tumors made us believe that, among other cases of atypical or uncommon metatases of the uveal malignant melanoma, this one is worth publishing, too.

## Conclusion

The first revealed solitary contralateral eyelid metastasis of uveal melanoma is extremely rare, such as an uncommon secondary deposit with a strange way of further dissemination.

## REFERENCES


1. *Jensen OA.* Malignant melanoma of the human uvea: recent follow up of the cases in Denmark, 1943-1952. Acta Ophthalmol Scand 1970; 48: 1113–28.
2. *Pyrhönen S.* The treatment of metastatic uveal melanoma. Eur J Cancer 1998; 30 (Suppl 2): 527–30.
3. *Kujala E, Makitie T, Kivela T.* Very long-term prognosis of patients with uveal melanoma. Invest Ophthalmol Vis Sci 2003; 44: 4651–9.
4. *Sing AD, Shields JA, Shields CL, Sato T.* Choroidal melanoma metastatic to the contralateral choroids. Am J Ophthalmol 2001; 132: 941–3.
5. *Sotodeh M, van den Bosch W, Keunen J, Paridaens D.* Metastatic choroidal melanoma to the ipsilateral orbit 7 years after enucleation. Eye 2006; 20: 265–8.
6. *Fujii K, Komurasaki Y, Kanno Y, Ohgou N.* Unilateral exophthalmos due to orbital metastasis from a contralateral intraocular melanoma. Eur J Dermatol l998; 8: 343–6.
7. *Midena E, de Belvis V, Dei Tos AP, Antonini C.* Isolated brain metastasis of malignant choroidal melanoma 27 years after enucleation. Arch Ophthalmol 1999; 117: 1553–6.
8. *Achtaropoulos AK, Mitsos AP, Detorakis ET, Georgakoulias NV, Drakonaki EE, Kozobolis V.* Late isolated brain metastasis following enucleation for choroidal melanoma. Ophthalmic Surg Lasers Imaging 2005; 36: 151–4.
9. *Demirci H, Shields CL, Shields JA, Eagle RC Jr, Honavar SG.* Bilateral brest metastasis from choroidal melanoma. Am J Ophthalmol 2001; 132: 951–2.
10. *Gaudrée L, Chabrun A, Corbi P, Levillain P, Herpin D.* Intracardiac metastasis of malignant melanoma. Literature review and case report. Arch Mal Coeur Vaiss 2000; 93(11): 1339–42. (French)
11. *Vitri P, Caravati C, Guzzetti S, De Angelis S, Buzzi G, Gornati R.* Adrenal metastasis of choroidal melanoma: a case report. Ann Ital Chir 1994; 65(5): 537–41. (Italian)
12. *Schmittel A, Bechrakis NE, Martus P, Mutlu D, Scheibenbogen C, Bornfeld N,* et al. Independent prognostic factors for distant metastases and survival in patients with primary uveal melanoma. Eur J Cancer 2004; 40: 2389–95.
13. *Shields JA, Shields CL, Augsburger JJ, Negrey JN Jr.* Solitary metastasis of choroidal melanoma to the contralateral eyelid. Ophtal Plast Recontsr Surg 1987; 3: 9–12.


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