



# Clinical Findings of Rare Ocular Metastasis in a Patient Diagnosed with Epithelioid Sarcoma

Aykut Karatas,<sup>1</sup> Busra Dilara Yildirim Erdal,<sup>1</sup> Fundanur Karakus,<sup>1</sup> Tugba Taskin Turkmenoglu,<sup>2</sup>  
 Berrak Sekeryapan Gediz<sup>1</sup>

<sup>1</sup>Department of Ophthalmology, Etlik City Hospital, Ankara, Türkiye

<sup>2</sup>Department of Pathology, Etlik City Hospital, Ankara, Türkiye

## Abstract

Epithelioid sarcoma is a rare type of tumor that primarily affects young men and accounts for less than 1% of all soft tissue sarcomas. In this case, a patient diagnosed with epithelioid sarcoma and systemic metastases presented with complaints of decreased vision and eye pain. Examination revealed a mass lesion involving the conjunctiva, iris and lens, accompanied by conjunctival hyperemia, corneal edema and hyphema. Ocular metastasis was suspected, and samples were obtained through excisional biopsy of the conjunctival nodule and aspiration of fluid from the anterior chamber. Pathological examination confirmed that the conjunctival nodule represented an ocular metastasis of epithelioid sarcoma. Although there are reported cases of primary orbital epithelioid sarcoma, we present this report because it demonstrates a unique example of extra-orbital primary disease with subsequent ocular metastasis.

**Keywords:** Epithelioid sarcoma, ocular metastasis, conjunctival nodule

## Introduction

Epithelioid sarcoma mainly affects the soft tissue of the hand, forearm, and pretibial regions in young adults and usually shows slow growth. It tends to develop from facial structures and tendons (1). Although it constitutes less than 1% of all soft tissue sarcomas, it has a high recurrence rate. The location of the tumor is the most critical factor affecting survival in epithelioid sarcoma, and the disease occurs more frequently in men (2,3). The proximal type is linked to poorer outcomes compared to the classical type. Because it grows slowly and painlessly, patients may present months or even years after disease onset (3,4). Radical excision with a negative surgical margin and perioperative radiotherapy are

preferred for treating local disease. Local recurrence, which often occurs within one to two years after treatment, is the primary factor leading to treatment failure (3,5). Due to the frequent occurrence of lymph node spread, sentinel lymph node biopsy may be conducted in certain selected cases. Metastases in the lungs and pleura are the most common. Perioperative chemotherapy can be utilized for large, high-grade masses and cases with metastases (5). Tumor cells frequently exhibit immunoreactivity with cytokeratin (CK) and CD34, which is genetically linked to the loss of SMARCB1/INI1 protein expression (6). In this report, we describe a rare case of ocular metastasis originating from an extra-orbital primary epithelioid sarcoma.

**How to cite this article:** Karatas A, Yildirim Erdal B, Karakus F, Taskin Turkmenoglu T, Sekeryapan Gediz B. Clinical Findings of Rare Ocular Metastasis in a Patient Diagnosed with Epithelioid Sarcoma. *Beyoglu Eye J* 2026; 11(1): 77-80.

**Address for correspondence:** Aykut Karataş, MD. Department of Ophthalmology, Etlik City Hospital, Ankara, Türkiye  
**Phone:** +90 538 911 72 09 **E-mail:** draykutkaratas@gmail.com

**Submitted Date:** March 4, 2025 **Revised Date:** January 9, 2026 **Accepted Date:** February 6, 2026 **Available Online Date:** March 31, 2026

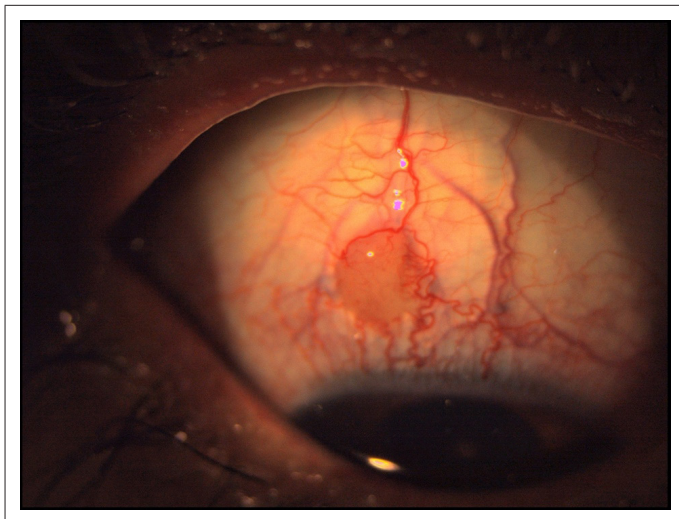
*Beyoglu Eye Training and Research Hospital - Available online at [www.beyoglueye.com](http://www.beyoglueye.com)*

**OPEN ACCESS** This is an open access article under the CC BY-NC license (<http://creativecommons.org/licenses/by-nc/4.0/>).

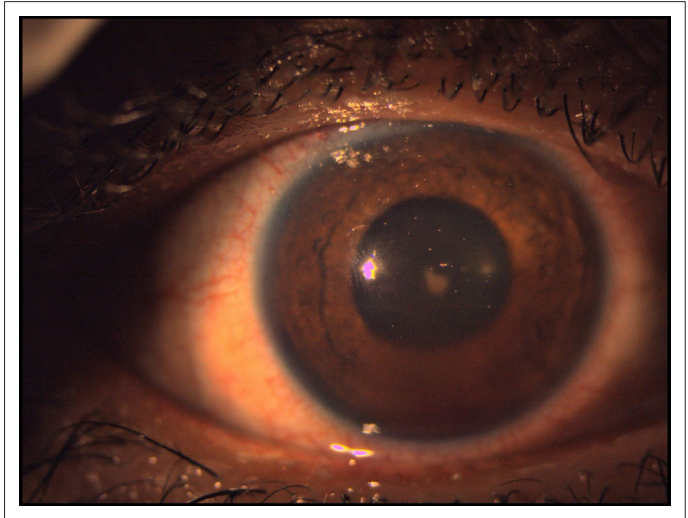


## Case Report

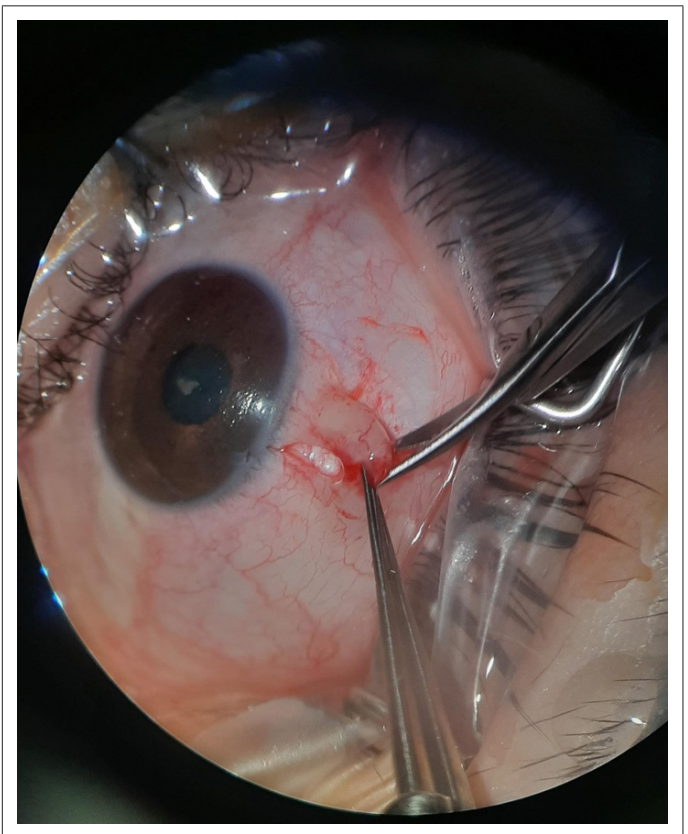
A 20-year-old male patient presented with complaints of decreased vision and pain in his right eye, which had worsened over the past month. During the examination, the best corrected visual acuity measured using the Snellen chart was recorded as hand movements in the right eye and 0.8 in the left eye. Intraocular pressure was measured at 45 mmHg in the right eye and 17 mmHg in the left eye using Goldmann applanation tonometry. A biomicroscopic examination revealed a nodular mass measuring 3 mm in length and 2 mm in width located in the superior bulbar conjunctiva of the right eye (Fig. 1). Additionally, there was corneal edema and a hyphema graded at 1/10. Obviously, due to corneal edema, the existing 1/10 hyphema cannot be seen very clearly and there was no rubeosis iridis, nor was any neovascularization or hemorrhage observed in the anterior chamber angle. The examination also showed a protruding mass in the iris at the 11 o'clock position, diffuse small nodular lesions, and a mass extending into the anterior chamber in the central area of the anterior capsule (Fig. 2). Due to corneal edema, the examination of the fundus was unable to be performed; however, both the vitreous and retina appeared normal on ultrasonography. When his comorbidities were assessed, it was revealed that he had been diagnosed with epithelioid sarcoma originating from the right shoulder region approximately two and a half years ago. He was currently receiving treatment in the medical oncology service due to hemoptysis and had multiple metastatic foci in the lungs, lymphatic system, and bones. Due to a preliminary diagnosis of ocular metastasis, cranial and orbital magnetic resonance imaging (MRI) were ordered. The MRI results revealed no mass formation in the orbit; however, small nodular lesions in the brain parenchyma were noted, which raised suspicion for metastasis. Subsequently, a fluid sample from the anterior chamber was



**Figure 1.** Nodular mass located in the superior bulbar conjunctiva.

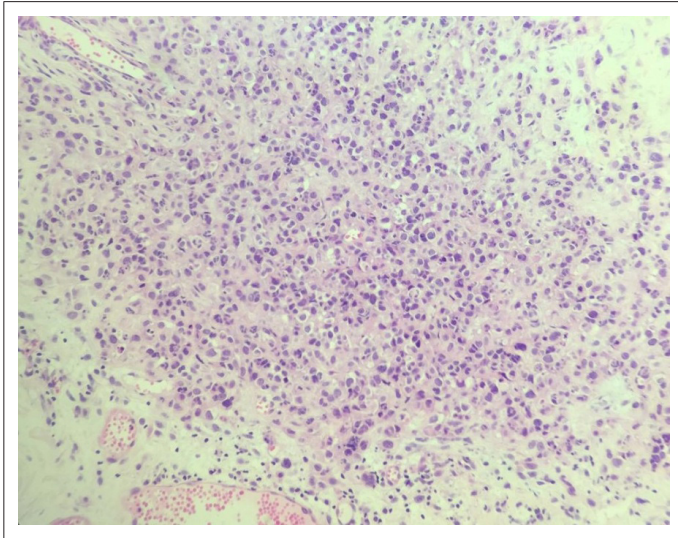


**Figure 2.** Mass formations on the iris and anterior capsule and hyphema which are hazy due to corneal edema.

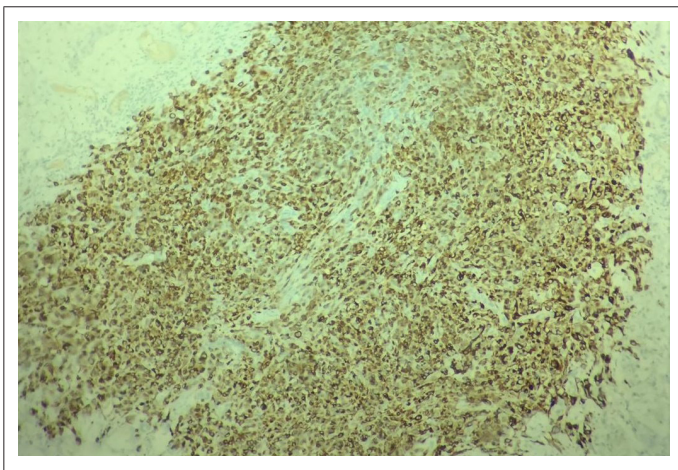


**Figure 3.** Excisional biopsy from the conjunctival mass.

obtained using a 26-Gauge needle. An excisional biopsy was carried out on the conjunctival lesion, ensuring a clean surgical margin of 3-4 mm (Fig. 3). A sample of anterior chamber fluid and an excised mass, placed in formaldehyde, were sent for pathological examination. Cryotherapy was applied to the conjunctiva at the margins of the excision. The excised area was reconstructed using an amniotic membrane.



**Figure 4.** Pathology specimen consisting of cells with an epithelioid appearance.

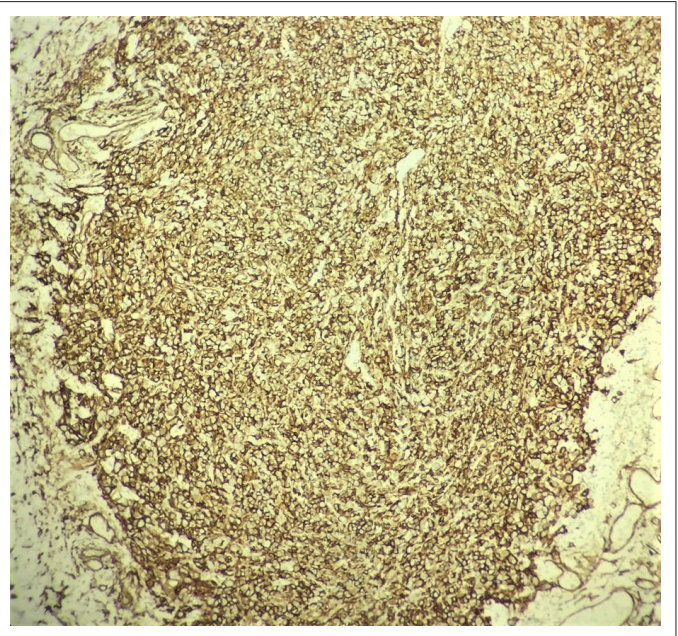


**Figure 5.** Pancytokeratin positivity immunohistochemically in tumor cells.

The anterior chamber fluid showed acellular cytology, while the conjunctival biopsy demonstrated epithelioid malignant tumoral infiltration (Fig. 4). Tumor cells exhibited strong and diffuse immunostaining for pan-cytokeratin (panCK) (Fig. 5) as well as CD34 (Fig. 6). Surgical margins were reported as free of tumor. A surgical procedure was not recommended due to widespread metastasis in the lungs, bones, and lymphatic system, along with the patient's poor general condition. The patient's systemic treatment in the oncology department is ongoing, and topical antiglaucomatous drop therapy has been initiated.

## Discussion

We present a case of ocular metastasis in a patient with epithelioid sarcoma, where the primary tumor is located outside the orbit and has disseminated metastases. While



**Figure 6.** CD34 positivity immunohistochemically in tumor cells.

there are reported cases of primary orbital epithelioid sarcoma, our case is unique, as it involves ocular metastasis from a primary tumor that originates distant from the orbital area.

When examining the reported cases of primary orbital tumors, it is observed that there are very few cases involving patients of various ages. In a case report by Alkatan et al. (7), an extraconal orbital mass was detected on an MRI conducted for a 5-month-old healthy infant. The infant exhibited inferior dystopia and conjunctival chemosis in the right eye for one month. Following a biopsy, the diagnosis of epithelioid sarcoma was confirmed. Despite undergoing chemotherapy and orbital exenteration surgery, the patient experienced intracranial spread of the recurrent tumor. In another report by Kaya et al. (8), an 87-year-old female patient underwent a biopsy after a soft tissue mass was found in the orbit. This finding was accompanied by the lateral displacement of intraocular structures noted on a computed tomography (CT) scan, which was associated with ectropion of the lower eyelid caused by a mass in the medial orbit of her left eye. The patient also presented with a rapidly growing mass in the medial orbit that resulted in epiphora. After diagnosing her with epithelioid sarcoma, she underwent orbital exenteration surgery, and there was no recurrence observed during the follow-up.

Additionally, a case report by Jurdy et al. (9) highlighted a 39-year-old female patient who was diagnosed with epithelioid sarcoma. A biopsy of a mass in her left eye demonstrated possible involvement of the medial rectus muscle. This mass was identified through an MRI due to her symptoms, which included recurrent conjunctival hemorrhage, headaches, and pain in

the left periorbital region. The patient was presented with the option of orbital exenteration; however, she refused this treatment. Instead, radical resection of the tumor was performed, and follow-up examinations revealed no signs of recurrence.

In the study conducted by White et al. (10), a 17-year-old female patient was referred due to a mass in the temporal area of her right upper eyelid. Upon examination, inferonasal dystopia of the globe was observed. A CT scan revealed a superior and inferolateral mass, and a biopsy confirmed the diagnosis of epithelioid sarcoma. There was no systemic metastasis. The patient underwent exenteration surgery on the orbit, and for three years of follow-up, no recurrence was noted. Additionally, a 34-year-old female patient had a biopsy for a right superolateral orbital mass that had persisted for nine months, leading to a diagnosis of epithelioid sarcoma. Following the biopsy, she also underwent exenteration surgery. Radiotherapy was administered due to positive surgical margins. However, ten months later, a CT scan demonstrated recurrence, although no systemic metastasis was observed.

Conjunctival metastases from malignancies originating in extraocular tissues are extremely rare. In a study examining ten cases of tumors that metastasized to the conjunctiva, Kiratlı H. (11) et al. reported the following findings: breast cancer was identified in four cases, lung cancer in two cases, laryngeal cancer in one case, cutaneous melanoma in two cases, and metastasis from an unknown primary cancer in one case. Among the patients, solitary metastasis was observed in eight patients. The metastasis occurred in the bulbar conjunctiva for six patients and in the palpebral conjunctiva for two patients. Additionally, metastasis to other ocular tissues was noted in eight patients.

## Conclusion

Our case is significant as it represents the first documented example of conjunctival metastasis from epithelioid carcinoma with a primary focus located distant from the eye. Patients presenting with metastatic malignancy, decreased vision, eye pain, hyphema, and nodular structures in the iris and conjunctiva may need further examination and treatment due to the suspicion of ocular metastasis.

## Disclosures

**Informed Consent:** Written informed consents were obtained.

**Conflict of Interest:** None declared.

**Funding:** The authors declare that this study has received no financial support.

**Use of AI for Writing Assistance:** Not declared.

**Author Contributions:** Concept – B.S.G.; Design – A.K.; Supervision – B.S.G.; Resource – A.K.; Materials – B.D.Y.E., T.T.T.; Data Collection and/or Processing – A.K., F.K.; Analysis and/or Interpretation – A.K.; Literature Search – A.K.; Writing – A.K., F.K.; Critical Reviews – B.S.G., B.D.Y.E.

**Peer-review:** Externally peer-reviewed.

## References

1. Enzinger FM. Epithelioid sarcoma. A sarcoma simulating a granuloma or a carcinoma. *Cancer* 1970;26:1029–41. [[CrossRef](#)]
2. Armah HB, Parwani AV. Epithelioid sarcoma. *Arch Pathol Lab Med* 2009;133:814–9. [[CrossRef](#)]
3. Casanova M, Ferrari A, Collini P, Bisogno G, Alaggio R, Cecchetto G, et al. Epithelioid sarcoma in children and adolescents: A report from the Italian Soft Tissue Sarcoma Committee. *Cancer* 2006;106:708–17. [[CrossRef](#)]
4. Sobanko JF, Meijer L, Nigra TP. Epithelioid sarcoma: A review and update. *J Clin Aesthet Dermatol* 2009;2:49–54.
5. Czarnecka AM, Sobczuk P, Kostrzanowski M, Spalek M, Chojnacka M, Szumera-Cieckiewicz A, et al. Epithelioid sarcoma-From genetics to clinical practice. *Cancers (Basel)* 2020;12:2112. [[CrossRef](#)]
6. Thway K, Jones RL, Noujaim J, Fisher C. Epithelioid sarcoma: Diagnostic features and genetics. *Adv Anat Pathol* 2016;23:41–9. [[CrossRef](#)]
7. Alkatan HM, Chaudhry I, Al-Qahtani A. Epithelioid sarcoma of the orbit. *Ann Saudi Med* 2011;31:187–9. [[CrossRef](#)]
8. Kaya EA, Broadbent TJ, Thomas CJ, Wagner AE, Thatcher SH, Lamoreaux WT, et al. Primary epithelioid sarcoma of orbit: A case report and review of the literature. *Case Rep Oncol Med* 2018;2018:3989716. [[CrossRef](#)]
9. Jurdy LL, Blank LE, Bras J, Saeed P. Orbital epithelioid sarcoma: A case report. *Ophthalmic Plast Reconstr Surg* 2016;32:e47–8. [[CrossRef](#)]
10. White VA, Heathcote JG, Hurwitz JJ, Freeman JL, Rootman J. Epithelioid sarcoma of the orbit. *Ophthalmology* 1994;101:1680–7. [[CrossRef](#)]
11. Kiratli H, Shields CL, Shields JA, DePotter P. Metastatic tumours to the conjunctiva: Report of 10 cases. *Br J Ophthalmol* 1996;80:5–8. [[CrossRef](#)]