

# Squamous Cell Carcinoma of the Bulbar Conjunctiva: Novel Insights on Dermoscopy

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Abbreviations: squamous cell carcinoma (SCC); non-cutaneous squamous cell carcinomas (ncSCC); squamous neoplasms of the ocular surface (OSSN).

Image Consent Statement: I have obtained informed written consent from the patients to include these images.

#### Introduction

Ocular surface squamous neoplasia (OSSN) encompasses abnormal lesions in the squamous epithelium of the conjunctiva, cornea, and limbus, ranging from mild dysplasia to squamous cell carcinoma (SCC) [1]. Diagnosis is confirmed histopathologically [1]. The preferred treatment involves excision using the Shields' no-touch technique with 4 mm margins, along with intraoperative cryotherapy using the double freeze-thaw method to minimize recurrence risk [1].

### **Case Presentation**

We present the case of a 70-year-old female with a rapidly growing pink-brown exophytic lesion on the perilimbal bulbar conjunctiva of her left eye, first noticed three months



Figure 1. A pink-brown exophytic growth on the perilimbal bulbar conjunctiva of the left eye of the patient.



Figure 2. A white-yellowish keratin mass with pigmented spots and hairpin vessels on the lesion. The periphery shows vessels of various calibers with a centripetal pattern.

prior [Fig. 1]. Videodermatoscopy revealed a white-yellowish keratin mass with pigmented spots, along with hairpin vessels and centripetal vessels of varying calibers at the lesion's periphery [Fig. 2]. Suspected OSSN was excised using the notouch technique. Histological analysis confirmed infiltrating SCC, with malignant squamous cells breaching the basement membrane and forming cord-like structures in the stroma. At the 6-month follow-up, there was no sign of recurrence, and staging exams, including a lymph node ultrasound, were negative. The incidence of non-cutaneous squamous cell carcinoma (ncSCC) in the orbital region is 0.68 per 1,000,000, with conjunctival SCC accounting for 74.5% of cases [1,2]. SCC usually starts in the conjunctival epithelium and remains confined for months. Rarely, untreated or poorly excised lesions may invade deeper eye or orbital tissues [3]. Due to its slower progression, conjunctival SCC generally has better survival rates than orbital SCC [2]. Descriptions of OSSN involving dermatoscopic examination are rare in the literature [4,5]. SCC is typically described as a whitish or gravish lesion with characteristic hairpin and glomerular vessels, often showing neoangiogenesis in and around the tumors, which is partially consistent with our findings [4,5]. In our case, the patient's age, rapid lesion progression, and size suggested malignancy. Dermatoscopy revealed a keratinizing tumor with a white-yellowish keratin mass and pigmented spots. The presence of hairpin vessels in a centripetal pattern, a previously unreported finding, further supported malignancy. The presence of pigment, typically absent in SCC, added uniqueness to this case. Finally, the use of the notouch technique in the excision is noteworthy. This method is particularly important in this anatomical region to avoid neoplastic cells seeding into a new area during the surgical procedure [1,3].

## Conclusion

Given the rarity of detailed dermatoscopic descriptions of OSSN in the literature, this case contributes valuable insights into the diagnostic and surgical management of such malignancies.

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