

## MANAGEMENT OF CONJUNCTIVAL MELANOMA

Conjunctival melanoma's are rare but are locally invasive and metastatic disease is seen in 25% of cases. The melanoma can arise denovo (5%), from preexistent primary acquired melanosis (75%) and from nevus (20%). Hence it is very important to identify and treat pre-malignant conditions before invasive melanoma develops. Conjunctival melanoma is a locally aggressive tumor and recurrence rates are as high as 50% over 10 years and hence close monitoring postoperatively is critical.

### Diagnostic Pearls

- Any pigment should be monitored closely and photodocumentation should be obtained
- The suspicious features that warrant intervention include change in pigmentation, nodularity, change in size, the presence of prominent feeder vessels and unusual location (caruncle, tarsal and forniceal conjunctiva)
- Primary acquired melanosis and conjunctival melanoma can be amelanotic and melanoma should be in the differential of non-pigmented conjunctival lesions
- Never perform incisional biopsy for diagnosis as it leads to further tumor dissemination

### Management Highlights

- Excision with wide margins with the no-touch technique should be performed along with absolute alcohol to the base and the corneal epithelium and cryotherapy to the margins.
- In cases of wide excision either conjunctival autograft or amniotic membrane graft can be considered (Figure 1)
- If surgical margins are positive topical chemotherapy like Mitomycin C can be considered
- Post operatively patients have to be monitored very closely for recurrent pigment and the treatment should be initiated at the early appearance of pigment
- Sentinel lymph node biopsy should be considered for positive margins or for very large conjunctival melanomas
- Immunotherapy is still under investigation but could be promising in future (Figure 2)

At University of Louisville, we perform excisional biopsy with alcohol epithielectomy and cryotherapy. Following surgery, either observation, sentinel lymph node biopsy or topical chemotherapy is considered based on the pathology report. Immunotherapy when required is administered in collaboration with systemic melanoma specialists at the James Graham Brown Cancer Center.

### Figure Legends

Figure 1 - Diffuse primary acquired melanosis (arrow pointing to margins) with invasive melanoma treated with excisional biopsy, cryotherapy and amniotic membrane transplantation with good surgical outcome.

Figure 2 - Large conjunctival melanoma (arrow) treated with systemic immunotherapy with Pembrolizumab in view of monocular status with good outcome. The residual pigment (arrow) after 6 months was excised and the patient is local recurrence and metastasis free for 18 months.

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Figure 1

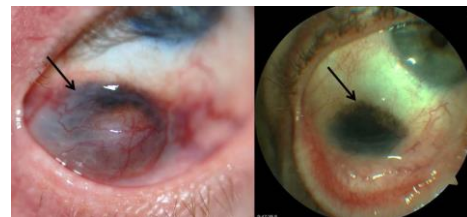


Figure 2

To schedule an appointment at the Kentucky Lions Eye Center, please call 502-588-0588.

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Eye Specialists of Louisville/University of Louisville Ophthalmology has been a center of excellence for clinical eye care, treating a broad range of eye disorders from pediatric eye diseases to age-related macular degeneration. As the largest multi-specialty team of ophthalmologists in Louisville, we are at the forefront of leading-edge treatments and research in subspecialties including Retina, Uveitis, Glaucoma, Oculoplastics, Pediatrics, Cornea, Neuro-Ophthalmology and Low Vision.

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Louisville, KY 40202  
Referring Physician Line  
(502) 588-0588

**The Springs Medical Center**  
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Louisville, KY 40205  
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(502) 588-0588

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