

Treatment of Periocular Malignancy by Interdisciplinary Approach

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INTRODUCTION

In 1941 Frederick Mohs described a unique technique for removing cutaneous cancer involving microscopically guided histographic surgery.¹ This has since been modified to eliminate the chemical fixation and to perform intraoperative microscopic assessment of peripheral and deep surgical margins with a fresh tissue technique.² Originally, healing occurred by secondary intent granulation, but unacceptable functional and cosmetic results, especially in the periorbital region, have necessitated a cooperative approach involving an oculoplastic surgeon for the reconstruction.

For the past 10 years, this cooperative approach has been the evolving algorithm for patient care at Ochsner Medical Center. Mohs micrographic surgery is performed by the Mohs surgeon in the Dermatology Department, after which the defect is bandaged and the patient is sent to the Ophthalmology Department (or to the outpatient surgery center if a large reconstruction is anticipated).

Surgical Technique

A variety of reconstruction techniques are utilized: pedicle flap, advancement flap, and rhomboid flap. Of these, the rhomboid flap technique is the most versatile and the most frequently utilized (Figure 1). First described by Limberg in 1946 and later modified by Teske and colleagues,³ the flap design is triangular extending from the defect margin, ideally with the base of the triangle parallel to the orbicularis fibers to avoid vertical tension and secondary ectropion. The final closure is rhomboid in appearance.

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The specific technique depends on the size and location of the defect and on redundancy and elasticity of the surrounding skin. The goal is to maintain or restore normal eyelid function with a satisfactory cosmetic appearance.

CASE 1

A 72-year-old male with a 4-year history of biopsy proven basal cell carcinoma underwent Mohs microsurgery in the Dermatology Department and was referred for closure of the left medial canthal defect (Figure 2). Closure was accomplished utilizing a rhomboid flap (Figures 3 and 4) with a good result.

CASE 2

A 73-year-old male with a long-standing growth involving the left lateral canthus underwent Mohs microsurgery for basal cell carcinoma in the Dermatology Department and was referred for the closure of the defect (Figures 5 and 6). This was closed with 2 rhomboid flaps, one superior and one inferior (Figure 7) with a good result (Figure 8).

CONCLUSION

Mohs technique provides a 99% cure rate of basal cell carcinoma and 94% for squamous cell carcinoma.

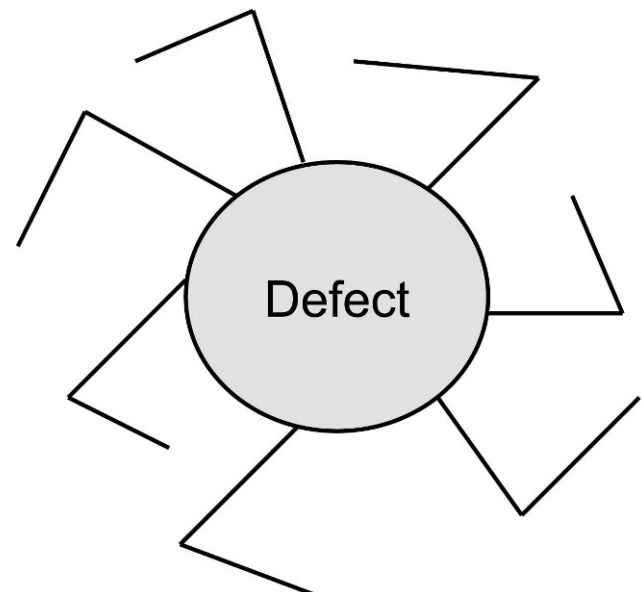


Figure 1. Modified rhomboid transposition flap.



Figure 2. Medical canthal defect following Mohs lesion (3 stages).

ma⁴ and is the “gold standard” for these dermatologic malignancies. Defects in the periocular region can be closed by the oculoplastic surgeon with excellent cosmetic and functional results.

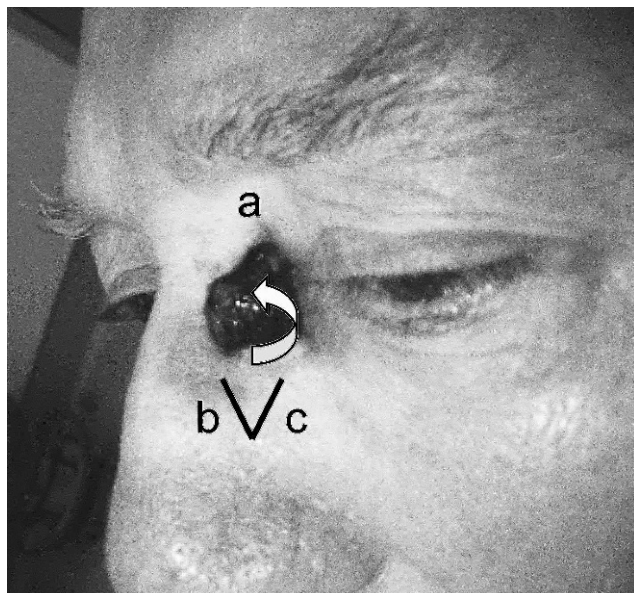


Figure 3. Rhomboid rotation flap utilized for closure.



Figure 4. One week postoperative.



Figure 5. Preoperative lesion at lateral canthus.



Figure 6. Defect following Mohs excision (4 stages).



Figure 7. One week postoperative.



Figure 8. One month postoperative.

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