

A Safe, Modern Treatment of Rhinophyma: The 5-Step Technique

Daniel K. Chang, MD*; Ira L. Savetsky, MD†; Yash J. Avashia, MD†; Rod. J. Rohrich, MD*†

INTRODUCTION

Characterized by telangiectasias, sebaceous hyperplasia, and erythematous hypertrophied skin of the nose, rhinophyma is a deforming and debilitating condition. The term rhinophyma appropriately originates from the Greek *rhis* and *phyma*, meaning nose and growth.

First described in 1845 by Hebra, this condition is now understood as the final stage of acne rosacea. In 1851, von Langenbeck recognized the potential for treatment with partial excision and spontaneous re-epithelialization. Nevertheless, early treatment methods, up to the 1970s, often involved aggressive resection, which would lead to scarring or otherwise would require a reconstruction with skin grafts or even forehead flaps.^{1,2}

More recent treatment algorithms emphasize early medical management and the use of multiple treatment modalities for operative candidates.³⁻⁵ The senior author (R.J.R.) combines these multiple modalities in 5 steps to achieve safe, effective, and consistent results in the modern treatment of rhinophyma.

SURGICAL TECHNIQUE

Step 1: Dermabrasion

A fine motorized diamond burr is used for dermabrasion. Performing dermabrasion as the initial step helps create a rough surface on which dermaplaning can be more effectively performed. Dermabrasion can also be repeated after subsequent steps to smooth out any irregular contours. To avoid discrete treatment borders, dermabrasion should be feathered onto the adjacent skin of the cheeks and alar bases. (See Video 1 [online], which displays the 5-step technique for rhinophyma.)

Step 2: Dermaplaning

Dermaplaning is performed with a #10 blade scalpel held perpendicular to the skin surface and pushed parallel across the roughened dermal surface. This accomplishes controlled removal of tissue without direct excision and further prepares the dermal surface for debulking.

Step 3: Debulking

Sharp-curved scissors are used to excise residual prominent areas of thickened dermis. Debulking in layers with scissors is a safer alternative than tangential excision with a scalpel. The latter can produce inconsistent results with increased risk of full-thickness dermal injury, which can cause scarring and contraction. If there is any suspicion of malignancy, specimens should be sent for pathology.

Step 4: Electrocautery

Electrocautery is used for pinpoint coagulation as needed. A final sweep of electrocautery is performed before laser. The width of a standard Bovie blade is brushed parallel over the entire raw nasal surface for hemostasis.

Step 5: Laser

An Erbium-YAG laser provides the final step for microcontouring and sealing the wound. As with dermabrasion, the laser is also feathered over the cheek and perioral areas to soften treatment borders.

Postoperative care is kept simple and low maintenance for the patient. With these combined techniques, the final wound is a sealed, partial-thickness dermal injury with minimal drainage. All raw surfaces are covered generously with mupirocin ointment and a single layer of xeroform gauze. The xeroform is then left in place for 7 days and allowed to naturally peel away as it dries.

CONCLUSIONS

This 5-step technique combines multiple treatment modalities, complementing one another, to treat even the most severe cases of rhinophyma. Most importantly, this is accomplished in a safe and consistent manner with a quick recovery.

From the *Division of Plastic Surgery, Baylor College of Medicine, Houston, Tex.; and †Dallas Plastic Surgery Institute, Dallas, Tex. Received for publication October 18, 2019; accepted October 31, 2019.

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Daniel K. Chang, MD
Division of Plastic Surgery
Baylor College of Medicine
1977 Butler Blvd., Suite E6.100
Houston, TX 77030
E-mail: danielchangmd@gmail.com

REFERENCES

1. Fisher WJ. Rhinophyma: its surgical treatment. *Plast Reconstr Surg.* 1970;45:466–470.
2. Freeman BS. Reconstructive rhinoplasty for rhinophyma. *Plast Reconstr Surg.* 1970;46:265–270.
3. Curnier A, Sunil C. Triple approach to rhinophyma. *Ann Plast Surg.* 2002;49:211–214.
4. Rohrich RJ, Griffin JR, Adams WP Jr. Rhinophyma: review and update. *Plast Reconstr Surg.* 2002;110:860–869.
5. Sadick H, Goepel B, Bersch C, et al. Rhinophyma: diagnosis and treatment options for a disfiguring tumor of the nose. *Ann Plast Surg.* 2008;61:114–120.