

Objectives

- Describe rhinophyma and its pathophysiology.
- Describe a case of rhinophyma and available treatment options.
- Emphasize the usefulness of sharp excision and electrocautery dermabrasion in treatment.

Introduction

- What is rhinophyma?
- Due to long-standing, chronic acne rosacea
- Chronic inflammation and release of vasoactive substances (substance P)
- Hypertrophy and hyperplasia of sebaceous glands¹
- Underlying pathophysiology remains unclear

Case Presentation

- 79-year-old male
- Referred for evaluation of a lesion to the nose
- Growth over 10 years, recurrent infections, and resulting embarrassment (Figure 1A, Figure 1B)
- Diagnosed with rhinophyma
- Left-sided alar mass

Case Presentation Continued

- Loop electrocautery dermabrasion was performed to excise diseased area.
- Alar mass was excised with a #15 blade followed by loop electrocautery for contouring (Figure 2A, Figure 2B).
- Significant sebaceous material was encountered.
- Final pathology was consistent with an epidermal inclusion cyst.
- Mild hypopigmentation at three months post-operation (Figure 3A, Figure 3B) and was satisfied with the results.



Figure 1. Pre-operative images. (A) Anterior-posterior and (B) oblique views of the nose, demonstrating significant rhinophyma and left-sided alar mass.



Figure 3. Post-operative images. (A) Anterior view of the nose, demonstrating well-healed tissue with mild scarring and pigment changes. (B) Oblique view of the nose, demonstrating a well-healed left ala following the excision of rhinophyma.



Figure 2. Intra-operative images. (A) Anterior view of the nose post-loop electrocautery dermabrasion. (B) Oblique view of the nose post-sharp excision of left alar mass and subsequent contouring with loop electrocautery dermabrasion.

Discussion

- Surgical methods (sharp excision, electrocautery dermabrasion, CO2 laser).²
- Advantages of sharp excision (margins, lack of thermal damage, cost)
- Advantages of electrocautery dermabrasion (quick, hemostasis)
- Disadvantages

Conclusion

- Rhinophyma is a disease of the sebaceous glands that can result in significant disfigurement.
- Surgical intervention with sharp excision and loop electrocautery provides an excellent treatment option.
- Patients must be counseled on the risks of wound healing and pigment change complications.
- Moist wound for optimized healing

References

1. Wilkin J, Dahl M, Detmar M, Drake L, Feinstein A, Odom R, Powell F. Standard classification of rosacea: Report of the National Rosacea Society Expert Committee on the Classification and Staging of Rosacea. *J Am Acad Dermatol.* 2002 Apr;46(4):584-7.
2. Benyo S, Saadi RA, Walen S, Lighthall JG. A Systematic Review of Surgical Techniques for Management of Severe Rhinophyma. *Craniomaxillofac Trauma Reconstr.* 2021 Dec;14(4):299-307.