

Rhinophyma: Big Problem, Simple Solution

Ole Martin Rørdam and Kjetil K. S. Guldbakke

Department of Dermatology, St Olav's Hospital, Olav Kyrres Gate 17, NO-7006 Trondheim, Norway. E-mail: kjetil.guldbakke@stolav.no
Accepted June 11, 2010.

Several surgical procedures have been described for patients with rhinophyma. Rhinophyma affects a small proportion of patients with phymatous rosacea. The word rhinophyma originates from the Greek word "rhis" for nose and "phyma" for growth. The condition is characterized by slow progressive hypertrophy of the sebaceous glands and connective tissue on the distal nose. Other common cutaneous findings include erythema, telangiectasia and a widened pore diameter. Tumour-like nodules, with risk of nasal obstruction and sleep apnoea, may occur in the advanced stages. Rhinophyma may be localized or generalized on the nose, but typically affects the lower two-thirds. Men between the ages of 45–60 years are at highest risk. Several aetiological theories have been hypothesized, but the pathogenesis is unknown (1, 2). Rhinophyma may lead to social stigmatization, as illustrated by common synonyms, such as "potato" and "whiskey" nose. We describe here our experience using electrocautery with a wire loop to treat rhinophyma.

METHODS

Three male patients, aged 62, 79 and 86 years, were recruited from August 2008 to October 2009. They all had moderate to large rhinophyma (Fig. 1). Previous empirical therapy included topical antibiotics, steroids and retinoids, as well as systemic antibiotics, cryotherapy and pulsed dye laser had been without effect. Surgery was performed at our outpatient department. The surgical procedure was as follows:

- the surgical area was sterilized with chlorhexidine;
- the nose was then anaesthetized by injection of a ring block using lidocaine with adrenaline (10 mg/ml + 5 µg/ml). Local anaesthesia was also injected into the lateral nasal wall and under the columella. A total of 10 ml of local anaesthetic was used, and full anaesthesia was achieved within 10 min.



Fig. 1. Patient 1, preoperatively.

- surgery was performed using an electrocautery monopolar unit with a wire loop at 80 W "cut/coagulate mode". The equipment used was a "Martin ME 81" (Gebruder Martin, Germany). A 3/8-inch wire loop was used to delaminate the rhinophyma in thin layers down to normal-appearing skin, taking care to ensure symmetry and remodelling of the nasal contour. Loop passages have to be short and rapid to avoid excessive tissue heating. One should stay above the lowest part of the pilosebaceous unit to reduce the risk of scarring.
- bleeding spots were carefully electrocoagulated using monopolar electrocautery (Fig. 2).
- a thick layer of chloramphenicol ointment and non-adherent dressing was applied to the treated surface.

The whole procedure required approximately 30–45 min. All patients were instructed to use chloramphenicol ointment twice daily for 10–14 days postoperatively. Photographs were taken before, during and after surgery as an objective measure of cosmetic result.

RESULTS

Patients were followed with regular outpatient controls for 3 months after surgery. Cutaneous re-epithelialization was noted 14 days postoperatively in all three cases. Residual erythema lasted 4–8 weeks. No significant pain was reported in the postoperative period. None of the patients developed wound infection, scarring or pigmentary disturbances. The cosmetic result assessed by the patient and surgeon was evaluated as very good in all cases (Fig. 3).

DISCUSSION

Rhinophyma often goes untreated and may lead to social stigma. Medical therapy generally has disap-



Fig. 2. Bleeding spot postoperatively.



Fig. 3. Patient 1, 6 weeks postoperatively.

pointing results, except for in the very early stages of phymatous change. Topical metronidazole and systemic antibiotics are alternatives for patients with clinical signs of active inflammation. Topical tretinoin can also be used with some effect. A few case reports of success with isotretinoin have been published. No medical therapy to date has been shown to induce regression or prevent the development of rhinophyma (2).

Surgery is considered to be the gold standard of therapy for moderate-to-large rhinophyma. Surgery aims to remove the hypertrophied sebaceous glands, with subsequent normalization of nasal contour. A wide range of surgical and laser techniques have been described in the literature, including: (i) total excision with skin transplantation or flapping of the defect (3); (ii) partial excision healing by secondary intention (4); (iii) CO₂ laser ablation (5); (iv) cryosurgery (6); and (v) electro-surgery (7). There is no consensus on which therapeutic modality is preferable. Potential complications with all

surgical techniques include scarring, "honeycombing", asymmetry and perforation of the nasal cartilage.

Therapeutic options for patients with rhinophyma are limited and of variable quality. Several surgical techniques have been described, all with advantages and disadvantages. We describe here our experience using electro-surgery in three patients with moderate-to-large rhinophyma. The greatest advantage of electro-surgery is good haemostasis, which is a common problem with standard surgical techniques.

In conclusion, electro-surgery using a wire loop is a fast, low-cost and relatively pain-free surgical procedure with good haemostasis. In our experience the operation has few complications, rapid healing time and gives a good cosmetic result. We consider electro-surgery a good alternative in a laser era.

REFERENCES

1. Aloï F, Tomasini C, Soro E, Pippione M. The clinicopathologic spectrum of rhinophyma. *J Am Acad Dermatol* 2000; 42: 468–472.
2. Sadick H, Goepel B, Bersch C, Goessler U, Hoermann K, Riedel F. Rhinophyma: diagnosis and treatment options for a disfiguring tumor of the nose. *Ann Plastic Surg* 2008; 61: 114–120.
3. Kose R, Okur MI, Guldur ME. Giant rhinophyma in a bronchial asthma patient treated by excision and full thickness skin grafting. *Dermatol Online J* 2008; 14: 9.
4. Zide MF. Surgical removal of rhinophyma. *J Oral Maxillo-facial Surg* 2008; 66: 2168–2177.
5. Madan V, Ferguson JE, August J. Carbon dioxide laser treatment of rhinophyma: a review of 124 patients. *Br J Dermatol* 2009; 161: 814–818.
6. Kempiaik SJ, Lee PW, Pelle MT. Rhinophyma treated with cryosurgery. *Dermatol Surg* 2009; 35: 543–545.
7. Rex J, Ribera M, Bielsa I, Paradelo C, Ferrandiz C. Surgical management of rhinophyma: report of eight patients treated with electrosection. *Dermatol Surg* 2002; 28: 347–349.