Surgical Management of Rhinophyma: How We Do It

Narinder Singh1, Lisa Greeney2, David Roberts3

1 University of Sydney and ENT Dept, Westmead Hospital, Sydney, Australia (2, 3) King’s College and ENT Dept, Guy’s and St Thomas’ NHS Foundation Trust, London, UK

ABSTRACT
Background: Rhinophyma can lead to gross disfigurement in its sufferers. Surgery is the main modality of treatment, but traditional techniques have been compromised by excessive haemorrhage, scarring, poor cosmesis and a complicated post-operative course.

Objectives: To describe the method for treating Rhinophyma employed at our institutions.

Methods: Gross debulking is performed with a scalpel. Fine contouring utilises a disposable consumer razor. A ‘pancake’ dressing of multiple layers of haemostatic agent and fibrin sealant is used.

Results: All patients (n=7) undergoing surgery at one institution over a 5 year period had a satisfactory outcome (mean improvement in 1-10 VAS of 7.5 ± 0.7) with no major complications.

Conclusions: We describe a technique that is relatively simple, low cost, easy to learn, has a short operative time, requires minimal postoperative care and provides a satisfactory cosmetic outcome with minimal complications.

INTRODUCTION
Rhinophyma is an unsightly, bulbous overgrowth of the nose, occasionally seen in Caucasian men in the 5th to 7th decade. In its most severe form, scarring with prominent pits and fissures may occur. Typically, the bony and cartilaginous framework of the nose remains unaffected. However, nasal airway obstruction by nodular growths is a recognised, but uncommon finding.1,2 Rhinophyma responds poorly to medical management. Surgery is the main modality for control of disfiguring lesions. Surgery requires a four step approach:

1) Debunking of gross nodules and tissue
2) Fine contouring
3) Haemostasis
4) Postoperative care

Sharp dissection techniques have traditionally been compromised by excessive haemorrhage.3 Alternative methods, including electrocautery and CO2 laser vapourisation improve haemostasis but often result in scarring and poor cosmesis.4 Traditionally, the postoperative course has been complicated by ooze, infection and frequent dressing changes.5

We describe a relatively simple combined-modality technique that addresses each of the four steps of rhinophyma surgery. The method allows accurate delineation of tissues whilst maintaining reduced operative times, good haemostasis and an uncomplicated postoperative course, together with satisfactory cosmetic results.

METHODS
General anaesthesia is administered along with local anaesthetic infiltration (1% lignocaine with adrenaline 1:100 000). A number 10 scalpel is used tangentially to primarily debulk tissues. Subsequent fine contouring is achieved using a standard retail disposable, plastic-handled safety razor (Blunt, Shelton, Connecticut, USA) distingected preoperatively with 2% chlorhexidine. The razor is used with repeated, rapid, brush-like strokes tangentially across the surface of the nose. A key concept is to leave small islands of epithelium from where new tissue will regenerate. The postoperative dressing is critical to the outcome. Multiple layers of Surgical Iodine, Johnson & Johnson, New Brunswick, NJ, USA) are placed over the nose, with each layer soaked with Fibrin tissue sealant (Tisselle, Baxter, USA) after placement. The dressing achieves rapid haemostasis without subsequent scarring. The dressing detaches spontaneously after 2.3 weeks. No further dressing is required and healing is complete in 2.3 months.

This technique was used for all rhinophyma patients requesting surgery over a 5 year period at one institution (Guy’s and St Thomas’ NHS Foundation Trust) with all procedures carried out by the senior author (DR). Cosmetic outcomes were measured by an independent senior facial plastic surgeon assessment of pre and postoperative photographs using a visual-analogue scale (VAS). Formal consent was sought for use of photographic and other material for publication from the patients involved and exemption from full ethics review was granted by the National Research Ethics Service, National Patient Safety Agency UK.

RESULTS
There were seven patients in total, one female and six male. Average age was 52 (range 34-62). Average duration of surgery was 40 min. There were no significant postoperative complications. One patient experienced mild paraesthesia postoperatively and one patient had mild postoperative bleeding which resolved spontaneously without intervention. No patients returned to theatre or required subsequent revision surgery. The mean improvement in cosmetic appearance of standardized pre and postoperative photographs (on a 1-10 VAS) judged by an independent surgeon was 7.5 ± 0.7 (pre-surgery mean score 1, post-surgery mean 8.5). See Fig 2 (pre-operative) and Fig 4 (6 months post-operative) for sample photographs.

DISCUSSION
The ideal technique for the surgical management of rhinophyma is yet to be found. The low incidence of the condition limits the valid comparison of techniques through randomised controlled trials.

CONCLUSION
We describe a method that is relatively simple, low cost, easy to learn, has a short operative time, requires minimal postoperative care and provides a satisfactory cosmetic outcome with minimal complications.

REFERENCES

Correspondence:
narinder.singh@swahs.health.nsw.gov.au