## **CASE REPORT**

# **Rhinophyma: A Simple and Cost-effective Management**

Smitha Soubhagya Gangaraj, Anil Hanakere Thimaiah

#### **ABSTRACT**

Rhinophyma is a slowly progressive condition due to hypertrophy of the sebaceous glands of the tip of the nose, often seen in cases of long standing acne rosacea. There are many surgical methods which are followed. We present a case of rhinophyma which was treated by shaving with diathermy knife followed by regular postoperative dressings. No skin graft was used during the procedure and a complete healing with near normal cosmetic appearance was achieved.

Keywords: Rhinophyma, Nose deformities, Treatment outcome.

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#### INTRODUCTION

The word rhinophyma originates from the greek word 'rhis' for nose and 'phyma' for growth. It is also known as 'potato tumor' and is a late and rare development of rosacea, occurring almost solely in men between ages of 40 and 60 years. It is characterized by slowly progressive hypertrophy of the sebaceous glands and the connective tissue on the distal nose. Patients seek advice because of the unsightly appearance of the enlargement or obstruction in breathing and vision. We present a case of the above which was surgically managed by shaving using diathermy knife.

# **CASE REPORT**

A 42-year-old male patient presented with a progressively increasing swelling of the nose, for the past 29 years, associated with difficulty in nasal breathing for the past 3 months. On examination, features of large rhinophyma mass measuring about  $3 \times 5 \times 4$  cm was present on the dorsum of nose, broad based, bosselated in appearance and soft to firm in consistency (Fig. 1). Both the cavities of the vestibule were narrowed because of the mass effect of the tumor. Anterior rhinoscopic findings were normal. The patient underwent shaving of the mass up to the normal nasal contour using diathermy knife (Figs 2 and 3), followed by regular postoperative dressings using sofra-tulle over the raw area. A complete healing of the wound and near normal cosmetic appearance of the nose was achieved during a 2-month follow-up period (Fig. 4).



Fig. 1: Preoperative photograph of a patient with rhinophyma



Fig. 2: Intraoperative photograph

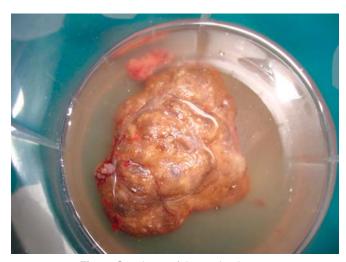


Fig. 3: Specimen of the excised mass



Fig. 4: Postoperative photograph after 2 months

#### DISCUSSION

Rhinophyma is a late and rare development of rosacea which arises almost solely in men between ages of 40 and 60 years. It typically affects the lower two-thirds of nose. Overgrowth of the nasal tip, alar rim and columella tissues results from a progressive increase in connective tissue, sebaceous gland hyperplasia and chronic deep inflammation. It may also involve the chin, glabella and eyelids. 1 Several etiological theories have been hypothesized but the pathogenesis is unknown.<sup>2</sup> Many forms of rhinophyma exist. Glandular type show massive increase in sebaceous glands resulting in a pitted, dented, distorted and asymmetrical surface. Fibrous type is diffusely enlarged and more symmetrical. Ectatic surface veins characterize the fibroangiomatous group and the actinic form is distinguished by nodular masses of elastic tissue.<sup>3</sup> Rhinophyma may lead to social stigmatization and patients seek advice because of the unsightly appearance of the enlargement or obstruction in breathing and vision. The treatment of rhinophyma is predominantly surgical. Medical therapy has no effect except in very early stages where topical tretinoin can be used.<sup>4</sup> Different surgical procedures have been described: Total excision with skin transplantation or flapping of the defect, partial excision and healing by secondary intention, dermal abrasion, dermal shaving, laser ablation, cryosurgery, electrocautery, etc. <sup>1,5-8</sup> Potential complications with all surgical techniques include scarring, honey combing, asymmetry and perforation of the nasal cartilage. 9 Care should be taken to preserve follicular epidermal islets from the more deeply situated layers of the skin. The follicular epithelium left behind is the point of departure for re-epithelialization of the wound surface. If decortication is too deep, injuries to the perichondrium or the nasal cartilage may arise leading to cosmetically unattractive scar formation and necessitate plastic surgery. In our case, the tumor was managed with shaving using diathermy knife. No skin graft was used during the procedure and a complete healing with near normal cosmetic appearance was achieved. We conclude that this is a safe, effective and economical method and coupled with regular care of postoperative wound we can achieve excellent cosmetic and functional results without the need of a skin graft.

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