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Rhinophyma – A Case Report

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ABSTRACT

Rhinophyma,also known as 'potato tumor' is a late development of Rosacea,occurring solely in men. Overgrowth of nasal tip , alar rim and columella results from progressive increase in connective tissue , sebaceous gland hyperplasia and chronic deep inflammation.Sometimes it can result in nasal obstruction due alar collapse due to mass effect.We report the case of a 42 years old male who presents with progressively increasing swelling for the past 29 years.He underwent excision using diathermy knife. He achieved complete healing of the wound and near normal cosmetic appearance of the nose during a two month follow up period.

KEYWORDS : Rhinophyma,Rosacea,Diathermy knife

CASE REPORT

A 42 years old male presented to ENT OPD with progressively increasing swelling over dorsum of the nose for the past 29 years,developed nasal obstruction since 15 days.Patient was a woodworker by occupation.On examination, swelling was found to be located on dorsum of nose,broad based,bosselated in appearance,soft in consistency, mobile over underlying nasal framework.On Anterior rhinoscopy,nasal cavity was reduced due collapse of lateral nasal wall.

Based on the longstanding and slowly progressive course of the disease and gross appearance, a diagnosis of rhinophyma was made.Patient underwent excision using diathermy knife of the mass followed by regular post operative dressings.No skin graft was used during the procedure. He achieved complete healing of the wound and near normal cosmetic appearance of the nose during a two month follow up period.

Fig. 1 – Preoperative photo of the patient

Fig. 2 – Perioperative course- exicision by diathermy knife

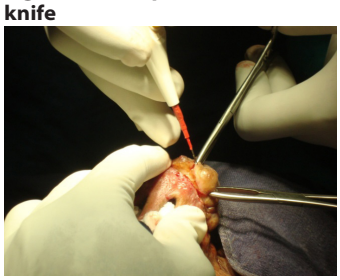

Fig. 3 – Photo of the specimen

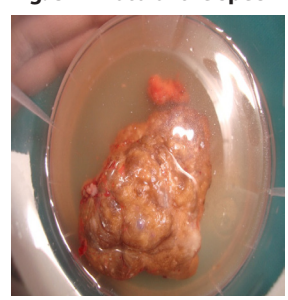

Fig. 4 – Postoperative photo of the patient

DISCUSSION

The word rhinophyma is derived from the Greek word "rhis" meaning nose and "phyma" meaning growth .This disease mainly occurs in men after 50 years.

The etiology of rhinophyma is unknown. There were incriminated several factors such as: the excess of steroid hormones (androgens)[1], the presence of a parasite (Demodex folicolorum)[1,3], and vitamin deficiency[2]. It is said that alcoholism was a trigger for Rhinophyma, because a lot of alcoholics have erytherma of the face, but alcoholism does not cause rhinophyma.

The cause of acne rosacea itself remains uncertain. In a series of 92 patients

studied at St John's Hospital for Diseases of the Skin, in London, Marks, (1968) failed

to demonstrate a definite causative factor. Long term exposure to sun or cold, inherent

personality, seborrhoeic diathesis, gastro-intestinal disease and primary disease of the

small vessels of the face were all excluded.[4]

With regard to rhinophyma, it has been suggested that an unknown factor may trigger off chronic vaso-dilation in the superficial cutaneous vascular plexus, which in turn gives rise to oedema, fibrosis and obstruction of the sebaceous glands (Fisher, 1970).[5]

Rhinophyma is a disease that typically afflicts white males between 40 and 60 years of age. It is more common in men than women, with the ratio of 12:1 generally reported. This condition is rarely found in blacks.

Rhinophyma is an inflammatory dermatological disorder of the skin characterized by benign

hypertrophy of the adnexal sebaceous structures.[6] However the aetiology is unknown, it is considered by many to the end stage of acne rosacea.[7]

Rhinophyma is characterized by an inflammatory process that begins with hyperaemic changes

associated with hypertrophy of the sebaceous glands,followed by telangiectasias. The glands become significantly enlarged and the ducts are dilated with sebum, keratotic debris, bacteria. Few reports in the literature suggest an association between rhinophyma and basal and squamous cell carcinoma. The nasal deformity of rhinophyma also may be associated with foul odour. Histologically, sebaceous gland hyperplasia associated with newly formed connective tissues and

vessels is prominent. The nasal cartilage and bone that function as the structural element are unaffected.

- There can be various morphological types of rhinophyma -
- ***Glandular type*** –massive increase in sebaceous glands resulting in a pitted, dented,distorted and asymmetrical surface.
- ***Fibrous***-diffusely enlarged and more symmetrical
- ***Fibroangiomatous*** - Ectatic surface veins
- ***Actinic form***-distorting nodular masses of elastic tissue.

Neither treatment is successful in end stage of rhinophyma, leaving surgery as the treatment of choice.This include primary sharp excision, electrocautery excision,dermabrasion, cryosurgery and surgery with the CO2, Argon or Nd:YAG lasers. Different surgical modalities have been proposed including total excision of the involved tissues, with either flap closure or grafting of the defect, and the partial excision of the

superficial hyperplasic tissues, allowing the basal skin appendages to reepithelialize.[8]

Total excision of the lesion with flap closure or grafting is applicable only when the lesion is small or skin cancer is present. With extensive rhinophyma, partial excision of the lesion with re-epitheliazation is the optimal method of management.

CONCLUSION- Amongst various surgical procedures available for treatment of rhinophyma ,excision using diathermy knife is a safe,effective and economical method and coupled with regular care of post operative wound can achieve excellent cosmetic and functional results without the need of a skin graft,resulting in the appearance of a nose,as in this case.

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