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CASE REPORT

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USE OF Co_2 LASER IN SURGICAL MANAGEMENT OF RHINOPHYMA: A CASE REPORT

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ABSTRACT

INTRODUCTION

Rhinophyma is a cosmetic nasal disfiguring condition which occurs due to hypertrophy of the sebaceous glands. It is the end stage of acne rosacea and is confirmed by histology. Patients present with enlargement of usually the lower third skin of the nose which is painless and slowly progressive. Due to this disfiguring lesion the patient seek treatment as it causes psychosocial distress.

CASE REPORT

We present a case of 58 year old male patient who presented with hypertrophic lobulated skin lesion over the nose which was diagnosed as rhinophyma and treated surgically by CO2 laser ablation.

DISCUSSION

Rhinophyma is a cosmetic disfuring condition , surgical intervention is required for restoring the natural appearance of nose. Laser excision can be helpful as it prevents hypertropihic scars and delayed wound healing as seen in other surgical methods.

CONCLUSION

Rhinophyma can be successfully treated by surgical intervention by ablative CO2 laser therapy as it helps in preserving the contour of the nose and efficient hemostasis

Key words: Rhinophyma, CO2 Laser, Acne Rosacea

INTRODUCTION

Rhinophyma is a clinical condition in which there is hypertrophy of the sebaceous glands of the nose. It is considered to be the end stage of the acne rosacea [3, 4, 5]. Patients usually present with a slow growing, disfiguring enlargement of the nose, usually in the lower part. Confirmatory diagnosis is by histopathology, which shows sebaceous hyperplasia, connective tissue hyperplasia with signs of chronic inflammation. Treatment of rhinophyma included medical and surgical therapies with surgery being the standard management. In surgical management, the options include: debulking, removal by microdebrider, electro surgery, ablative carbon dioxide laser therapy.[1,2]

CASE DESCRIPTION

A 58 years old male patient presented with skin lesion on dorsum of the nose. The lesion was progressive in size and painless. The physical examination showed hypertrophied skin lobules covering the tip of the nose with deep pores (Figure 1 (a) & 1 (b))

Figure 1 : Preoperative view of rhinophyma

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There was no complain of nasal obstruction.

Patient was diagnosed as having rhinophyma in clinical examination and surgical management by CO2 laser [1,4] was planned.

Surgical excision was done under local anesthesia using 2% lignocaine. The hypertrophied skin lobules were removed layer by layer by the CO2 laser [1,2]. Hemostasis was achieved and dressing was done with neosporin ointment (Figure 3 :- immediate post op). The dressing was removed after two days and the wound was left exposed to heal by secondary intention. Patient was followed up weekly and there was re-epithialization by one month of the surgical procedure.(Figure 4 :- follow up)

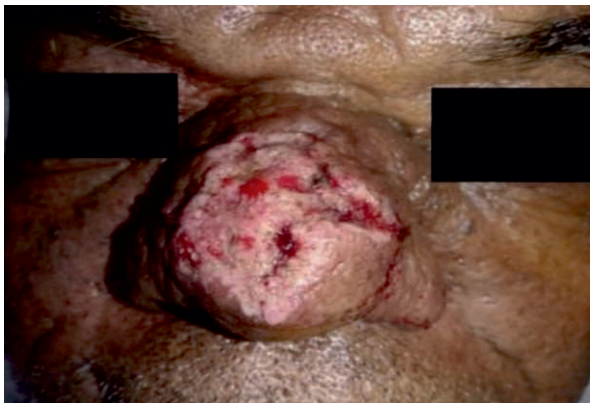

Figure 3 : Immediate post operative picture after Laser excision

Figure 4: After complete healing at 1 month of follow up

Post-operative histopathological report shows stratified squamous lining with many sebaceous glands and marked chronic inflammatory infiltrates in superficial dermis to deeper dermis and epidermis at places shows hyperkeratosis and keratin plugs which confirmed the lesion as Rhinophyma.

DISCUSSION

Rhinophyma is a slow growing skin lesion over the nose which occurs due hypertrophy of sebaceous glands. It is considered to be the end stage of the acne rosacea [3,4,5]. Most commonly seen in males in the age group of 50-70 years. The most common presentation being a disfiguring enlargement of the nose tip which is painless and slowly progressive in size. The extent of the tissue growth can help us in deciding the management. Although medical therapies are used in early stages of acne rosacea [4,6], surgical therapies are better for restoring the natural appearances of the nose. The CO2 laser therapies [1,2] are successful methods of treatment as it helps in subsequent tissue reduction with decreased blood supply to the hypertrophic tissue. However, over ablation should be prevented to avoid hypertrophic scar and delayed wound healing. The diagnosis is confirmed by histopathological report which shows sebaceous hyperplasia, connective hyperplasia with signs of chronic inflammation. It is important to obtain a histopathological evaluation because there may be underlying squamous cell carcinoma[9,10], basal cell carcinoma[9,10,11] that mimics rhinophyma.

CONCLUSION

Rhinophyma being a disfiguring nose skin lesion [1,3], can cause psychosocial distress to the patient and therefore it is important to treat it. Rhinophyma can be successfully treated by surgical intervention by ablative CO2 laser therapy [1,2] as it helps in preserving the contour of the nose and efficient hemostasis. Also, it can be done in a single sitting avoiding multiple proceedings.

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