

AN UNUSUAL LARGE SIZED RHINOPHYMA (A case report)

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Summary

A case of rhinophyma of the lobulated type associated with rosacea is presented. The growth was big (15 x 10 cm) and showed dilated follicles and pits. It was removed surgically. The relevant literature is reviewed.

The term 'rhinophyma' is derived from the Greek word, *rhis* (nose) and *phyma* (growth). In this condition there is hypertrophy and hyperplasia of the pilosebaceous glands as well as the connective tissues of the tip of the nose. This in turn leads to marked cosmetic deformity and discomfort to the patient.

Rhinophyma is not a common disease. Most authors have reported the condition with single case reports. According to Odou and Odou¹, there are only about 103 proved cases of rhinophyma in the medical literature. The cause of the condition is not known. It occurs predominantly in males and seldom occurs before the age of 40. It is usually but not invariably associated with rosacea² and is more frequent when both rosacea and seborrhoea are present. During its early phase there is redness and irregular thickening of the skin of the nose. In the later phases the tip of the nose may become globular and eventually pendulous.

The paucity of reports on the subject in the medical literature has prompted us to report the present case.

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Case Report

A man, aged 40 years, was admitted to the E. N. T. ward of P. B. M. Associated Groups of Hospitals, Bikaner for treatment of a swelling on the nose, of 10 years' duration. At the age of 18 years, he developed some papular lesions on the face and chin, for which no treatment was taken. Initially these lesions used to recede and reappear at frequent intervals. But for about 10 years prior to hospitalisation, lesions had remained without remission. The bulbous portion of the nose showed gradual increase in size, during this period, the skin becoming purplish red and somewhat hard to touch. Numerous fissures and irregular nodules disfigured the natural contour. 3 years before admission the swelling increased rapidly and assumed a very large size. Patient complained of difficulty on breathing due to the obstruction of the nostrils by the large hanging mass. He had no gastrointestinal disturbances. He denied excessive consumption of tea or use of alcohol.

General physical examination did not reveal any significant abnormality.

The examination of the nose revealed a large lobulated, fissured, grotesque mass extending from the root of the nose to the tip of the nose and laterally

involving a part of the ala nasi. The mass was hanging downward from the tip of the nose reaching upto the upper lip (Fig 1). It measured 15 cm in transverse and 10 cms in vertical axis. The



Fig. 1 Clinical photograph : showing large sized rhinophyma (Front view)

tip of the nose was found to be depressed downwards and inwards by the growth, almost obliterating the vestibule of the nose (Figs 1 & 2). There were numerous pits and pustules over the swelling from which sebaceous material could be squeezed out. The skin over the mass was dark red in colour. No dilated blood vessels were seen. The rest of the nose had the same skin as that over the growth. The nasal mucosa appeared normal.

Examination of the face showed hypertrophied, thickened skin over the forehead, cheeks and chin (Figs 2 & 3). There were also pustules and number of pits from which sebum could be squeezed out.



Fig. 2 Clinical photograph : showing rhinophyma along with rosacea involving the face and chin (Lateral view)

Roentgen and laboratory investigations showed no abnormality. A provisional diagnosis of rhinophyma was made.

The patient was operated under general anaesthesia by endotracheal intubation. The tumour mass was excised by surgical dissection (Fig 4). The raw surface was covered by a full thickness skin graft. The entire dressing was opened on the 8th day. The result was satisfactory. Patient was discharged from the hospital on 10th post operative day.

Histopathological examination of the tissue (Fig 4) revealed hyperplasia of sebaceous glands and increase of fibrous connective tissue and blood vessels. At



Fig. 3 Clinical photograph : showing lobulated and pendulous rhinophyma with normal interior of the nose

places there were areas of inflammatory cellular infiltration (Fig 5).

Discussion

The ancient writings of Indian medicine indicate that rhinophyma existed in India more than 2,000 years ago, and was called "Nasa pitak", while Odou and Odou¹ mentioned that this condition did not exist in ancient time and no description has been available in the Bible. Hippocrates, the father of medicine, described the condition in 460 B. C. It has also been known to the early Arabians². Historically, the disease was first designated as 'rhinophyma' by Hebra in 1845³. The microscopic features were first described by Simon in 1851³ and by Virchow in 1854¹. Virchow was the first person to link rhinophyma with rosacea but a classic description of the microscopic features were written by Wende and Bentz in 1904⁴. Rhinophyma was first

operated upon in 1629 by Danial Sennert². Subsequently many workers have studied this condition, but there is still controversy regarding its etiology, pathogenesis and choice of treatment.

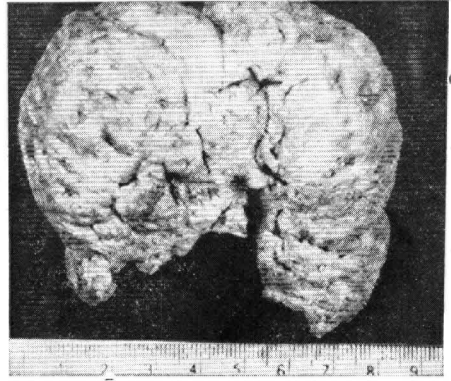


Fig. 4 Removed specimen : having characteristic pits and fissures over the rhinophymatous mass

Rhinophyma is a benign condition and it is considered to be a sequel to rosacea because there is similarity in their microscopic features. Rosacea is a chronic congestive disease of the nose and the fleshy areas of the face and its transformation into rhinophyma is an extremely slow process. Initially congestion, dilatation and proliferation of the superficial capillaries occur which is accompanied by varying degrees of pustulation and subcutaneous and subcuticular hypertrophy. Later on cartilages of the nose may be involved and destroyed as reported by Joseph¹⁻². In our case, the rhinophyma was a huge one. The cartilages were pushed aside but were otherwise normal.

Pathological lesions similar to rhinophyma have been described in the region of the chin as 'mentophyma'^{5,6} and in the ear as 'otophyma'⁷.

According to Odou and Odou¹, histologically the condition presents 2 forms:- (i) glandular form in which the pilosebaceous glands increase in size and

number and (ii) fibro telangiectatic form in which proliferation of connective tissues predominate. In the case presented, features of both forms were observed. Thus our case probably represents an intermediate variety. The rhinophymatous tissue may contain inflammatory cellular infiltration consequent to superimposed infection⁸. Such a picture was also evident in the present case (Fig 5).

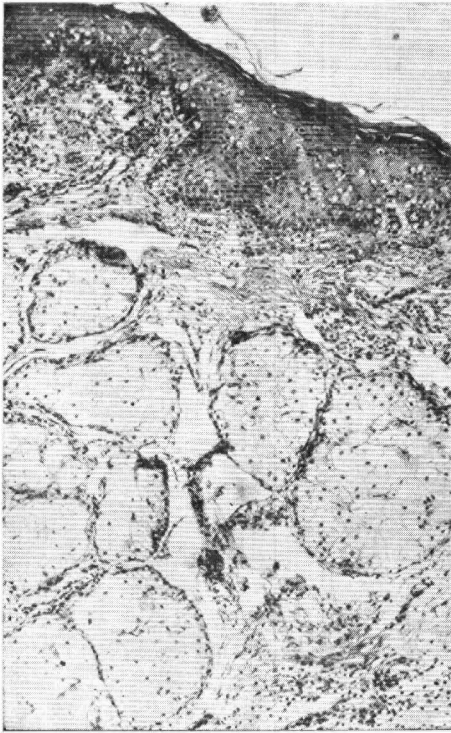


Fig. 5 Microphotograph: showing hyperplasia and hypertrophy of the sebaceous glands with increase in fibrous connective tissue (H & E \times 80)

The clinical picture of rhinophyma is well known. The main disability for the patient is cosmetic. If the lesion is very large nasal obstruction may result as in our case. A foul odour due to accumulation of sebum in between the lobules may be another complaint. Fishof⁹, classified the condition into two

varieties clinically. In one, the rhinophyma is of smooth hypertrophic bulbous type which is seeped by sebaceous secretion and covered by telangiectatic blood vessels giving it a dusky red or purple colour. The second type, which is less frequent, presents a multilobular tumour mass marked with fissures and occasionally modulation. It is firm in consistency and has no signs of inflammation. In the case presented, the mass was nodular bilobed and fissured representing thus features of the second clinical variety. The characteristic appearance of this grotesque mass has been described under various names e.g., Potato nose, Whisky nose, Hammer nose, Double nose, Strawberry nose, Rhinoblossum etc. A more extensive list of descriptive names for this disease is given by Odou and Odou¹ in their excellent paper. It is important to mention that the nasal rims and columella are not usually affected by this condition (Fig 3).

It has been suggested that the cellular hyperplasia associated with rhinophyma might preclude malignant degeneration. A retrospective study by Ackar and Helwig¹⁰ disclosed 14.9% (7 out of 47 patients) incidence of malignancy in patients with rhinophyma.

No treatment other than surgery is of any value though medical and conservative therapy may be helpful in the management of rosacea which is considered to be a precursor of rhinophyma.

In surgical procedure, the main goal is to completely remove the lesion and restore the nasal contour without exposing nasal cartilage and bone, and to avoid excessive bleeding. For achieving this, different procedures have been adopted by various workers and choice of the procedure remains controversial even at the present time. Surgical decortication i. e., excision of the soft tissue down to the cartilagenous base and permitting the surface to heal by

granulation was advocated by Lewis¹¹, and Erich¹². Electrosurgical decortication was advocated by Farina¹³ and Odou and Odou¹. Dermabrasion as a procedure for treatment has been suggested by Dickinson and Adamopolous¹⁴. Excision of rhinophyma and coverage of the defect with a thick split thickness skin graft was advocated by Mason and Allen¹⁵ and Smith¹⁶. The surgical shaving off of the excessive skin and tissue, trimming the nose to a suitable size, and then covering the defect with skin graft also had good results as obtained in the present case.

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