

## **RHINOPHYMA TREATED WITH LOW DOSE ORAL ISOTRETINOIN: A CASE REPORT**

**\*Dr. Vijay Karan Singh, <sup>1</sup>Dr. Priyanka Thakur and <sup>2</sup>Dr. Gunjan Sharma**

India.



**\*Corresponding Author: Dr. Vijay Karan Singh**

India.

Article Received on 17/07/2024

Article Revised on 07/08/2024

Article Accepted on 28/08/2024

### **ABSTRACT**

Rhinophyma is an advanced stage of rosacea which affects the soft tissues of the nose and resulting in distortion of the nasal architecture, causes airway obstruction, and defacement of the nasal aesthetics. It is associated with significant psychosocial morbidity. The condition is managed with medical as well as surgical modalities. We present the case report of a patient who presented with rhinophyma who was medically well managed with oral isotretinoin.

### **PATIENT BACKGROUND**

A 55 year old male presented with painless reddish raised lesion over the nose along with enlargement of nose for the past 3 months. On examination, there were erythematous papulo-pustular lesions present over the dorsum over the nose extending up to cheek area. Upper one third area of nose was also increased in size. The skin pores over the nose were prominent and upon palpation (gentle squeezing) exuded a yellow cheesy material. Clinically it was diagnosed as rhinophyma. According to Clark et al patient was labelled as grade 4

(i.e. Generalized involvement of the nose, including the nasal bridge and nasofacial sulci).<sup>[1]</sup> The severity was assessed using Rhinophyma Severity Scale (RHIS), according to which, patient was graded as 3 (which means strong skin thickening, small lobules).<sup>[2]</sup> Patient was administered oral isotretinoin in the dose of 0.5 mg/kg once daily for the duration of 4 months followed by alternate day for next 4 months. There was remarkable improvement as the lesions regressed and size of nose returned to the normal size.



**Clinical pictures- Initial & After completion of Treatment**

### **DISCUSSION**

Rhinophyma is the worsened late stage of rosacea. The term was first described by von Hebra in 1845, which is

derived from Greek word “rhis”, which means nose, and “phyma”, denotes growth.<sup>[3]</sup> It is benign and gradually progressive nodular thickening of the nose, distinguished

by chronic edema, hypervascularity, hypertrophy of connective tissues and sebaceous glands, and fibrosis.<sup>[4]</sup> It usually affects the lower two-thirds of the nose including the nasal tip, nasal ala and distal dorsum of the nose. It results in a progressive disruption of the nasal architecture, airway obstruction, and disfigurement of nasal aesthetic units. Rhinophyma may cause significant psychosocial morbidity.<sup>[5]</sup> It can be managed with both medical and surgical treatment modalities with varying results. Nowadays, surgical excision remain the mainstay of its treatment, but isotretinoin still holds the potential of reducing rhinophyma. Oral isotretinoin has also been shown to decrease nasal volume in rhinophyma that is sebaceous in type in the prefibrotic stage.<sup>[6,7,8]</sup> This success is likely related to the ability of oral isotretinoin to markedly reduce sebaceous gland size. To our knowledge, only a few cases of successful pharmacological treatment of rhinophyma exists. Our patient was put on low dose isotretinoin therapy for the duration of 8 months. After eight months of isotretinoin treatment, an excellent overall improvement was noted, papules & pustules were completely cured and the normal contour of the nose was restored. It should be noted that our patient's response to pharmacological treatment without a need for surgical intervention, was surprisingly sufficient. No recurrence of any symptoms of rosacea was noticed in the 8-month follow-up.

## REFERENCES

1. Clark DP, Hanke CW. Electrosurgical treatment of rhinophyma. *J Am Acad Dermatol*, 1990; 22(5): 831-837.
2. Wetzig T, Averbek M, Simon JC, Kendler M. New rhinophyma severity index and mid-term results following shave excision of rhinophyma. *Dermatology*, 2013; 227(1): 31-36.
3. von Hebra F. Versuch einer auf pathologische Anatomie gegründeten Einteilung der Hautkrankheiten *Z. Gesellschaft Ärzte Wien*, 1845; 2: 211.
4. Wilkin J, Dahl M, Detmar M, et al. Standard grading system for rosacea: report of the National Rosacea Society Expert Committee on the classification and staging of rosacea. *J Am Acad Dermatol*, 2004; 50(6): 907-912.
5. Smith AE. Correction of advanced rhinophyma by means of plastic reconstructive surgery: A new technique. *Am J Surgery*, 1958; 96(6): 792-801.
6. Pelle MT, Crawford GH, James WD. Rosacea: II. Therapy. *J Am Acad Dermatol*, 2004; 51(4): 499-512.
7. Schmidt JB, Gebhart W, Raff M, Spona J. 13-cis-Retinoic acid in rosacea. Clinical and laboratory findings. *Acta Derm Venereol*, 1984; 64: 15-21.
8. Irvine C, Kumar P, Marks R. Isotretinoin in the treatment of rosacea and rhinophyma. In *Acne and related disorders: proceedings of an international symposium*. London: Martin Dunitz, 1988; 301-305.