

RHINOPHYMA TREATED BY SURGERY – CASE PRESENTATION

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Abstract

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Rhinophyma is a clinical manifestation of rosacea, found mostly on men aged 30 to 50 years and usually accompanied by other forms of rosacea. Nose shape is deformed, changing the face beyond recognition and is associated with important negative stigma. Rosacea can be treated combining surgery and laser therapy, respectively mild-to-moderate cases of rhinophyma can be treated with CO₂ laser surgery, while more severe cases are treated with a combination of surgery and laser. We present a patient with rhinophyma, which neglected the disease, and was treated by surgical removal, and we also discuss the clinical and therapeutical aspects of rhinophyma.

Introduction

Rosacea is a chronic inflammatory cutaneous disorder with periods of exacerbations and remissions, that manifests as facial flushing, persistent erythema, telangiectasia, papules, and pustules; it typically involves the central facial region (cheeks, forehead, chin, and nose), and there are four rosacea sub-types: erythematotelangiectatic, papulopustular, phymatous, and ocular (1-4).

The severity of each subtype is graded as 1 (mild), 2 (moderate), or 3 (severe) (2). The effects of rosacea on the quality of life include depression, a decreased sense of body image and self-esteem, sexual and relationship difficulties and a general reduction in quality of life (5).

Pathogenesis is unclear, with neurovascular changes, stimulation by various microbes, abnormal function of the innate immunity in the skin (6), respectively vascular abnormalities, dermal matrix degeneration, environmental factors, microorganisms (7). In a very recent review (8), rosacea has been linked with genetic factors, triggering factors (ultraviolet radiation, Demodex colonization, microbial stimuli, heat and stress), abnormalities in immunity (both innate and adaptive) and neurovascular dysregulation.

The treatment begins with the consultation (history/type and severity of rosacea/trigger/associ-

ated conditions/contraindication for laser), the assessment of patient concerns and expectations and it is based on skin care (gentle cleansing, moisturizing, photoprotection), individualized diet, local and general treatment, laser and surgery (9). In a situation when rosacea is accompanied by the appearance of rhinophyma, the treatment should be conducted by a team - dermatologist and surgeon (10).

Case presentation

We present a patient (male, 47 years old) with rosacea and rhinophyma, rosacea in evolution for eight years, and the rhinophyma started six years ago. The patient connects the onset of rosacea with aldehyde vapors intoxication at work. According to the patient, the family has no other cases of rosacea. The patient went inconsistently to the dermatologist, did not use sun protection, did not respect the diet and was treated with short courses of antibiotic therapy, topical anti-inflammatory preparations and vitamins.

Other manifestations of rosacea, respectively pustules, papules, erythema and dilated vessels were previously seen by a dermatologist, and the dermatologist recommended surgery removal of rhinophyma.

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Before surgery laboratory blood parameters were within physiological norms, comorbidities were not identified and the test for Demodex was negative. The clinical examination revealed asymmetrically face due to the increase and deformation of the back and the tip of the nose, the skin is moderately hyperemic, covered with numerous pink papules, telangiectasia, and the openings of the sebaceous glands are easy visible. Soft tissues of the face were painless on palpation, and the most pronounced symptoms were expressed in the frontal, cheeks and chin areas (Figure 1). The patient underwent surgical removal of rhinophyma with electric cautery under anesthesia, with removal of the excess soft tissue to visually unaltered ducts and the reduction form of the nose, as close to the original (according to the photo of the patient) (Figure 2).

The postoperative period passed without complications and the patient was discharged from the surgical hospital on the 7th postoperative day under the supervision of a surgeon and a dermatologist with the recommendations of anti-inflammatory and sunscreen topical preparations, dietary recommendations and recommendations on life-style (Figure 3).

Eight months after the operation the patient (Figure 4) was examined by dermatologist and surgeon, and the conclusions were: face is symmetrical, the shape and size of the nose coincides with the postoperative result, the skin of the nose has physiological color, the openings of the sebaceous glands are not enlarged. The skin of the frontal, cheek and chin areas was hyperemic, covered with papules-pustular elements (exacerbation was explained by the non compliance of the



Figure 1. Clinical aspect at presentation



Figure 3. Immediate post-surgery result



Figure 2. Clinical aspect before surgery



Figure 4. Patient 8 months after surgery

patient - did not respect the recommendations about sun protection and diet).

The patient was satisfied with the outcome of the treatment, with considerable improvement of the shape of the nose, and psychological well-being. Patient received recommendations for lifestyle and nutrition, and for regular surveillance by a dermatologist.

Conclusion

Rhinophyma is a severe, most difficult to treat manifestation of rosacea. The impact of disease on patients' quality of life is huge (negative impact on self esteem and difficulties in professional and so-

cial life). Treatment options include CO₂ laser and surgery, and earlier treatment initiation leads to better outcomes.

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Patient informed consent obtained.

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