Rhinophyma: a surgical treatment option

Rinofíma: opção cirúrgica como tratamento

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ABSTRACT

Introduction: Rhinophyma is a condition involving chronic inflammation of the nose and is characterized by progressive hypertrophy and hyperplasia of sebaceous glands and connective tissue. Rhinophyma leads to an appearance of nasal elephantiasis, which is caused by the congestion of dermis vessels. Its etiology is mostly associated with alcohol abuse. Rhinophyma is considered by some researchers to be an advanced stage of acne rosacea. Here, we report a case of rhinophyma that was surgically treated with decortication and electrocoagulation at the Plastic Surgery Service of the University Hospital of the Federal University of Santa Catarina.

Methods: A review of medical and photographic records of a case of rhinophyma was conducted. Results: The patient was underwent surgical treatment with favorable outcomes. Conclusion: There are several treatments for rhinophyma, with decortication and electrocoagulation being an excellent therapeutic option.

Keywords: Rhinophyma; Surgical reconstructive procedures; Nasal diseases; Nose.

Resumo

Introdução: Rinofíma é uma inflamação crônica dos tecidos do nariz, caracterizada por hipertrofia e hiperplasia progressivas das glândulas sebáceas e do tecido conjuntivo. Determina um aspecto de elefantíase nasal, secundária à congestão dos vasos derme. Sua etiologia está associada, na maioria dos casos, ao uso abusivo de álcool. É considerada por alguns autores como sendo um estágio avançado de acne rosácea. O artigo tem como objetivo relatar um caso de rinofíma, tratado cirurgicamente no Serviço de Cirurgia Plástica do Hospital Universitário da Universidade Federal de Santa Catarina com decorticação e eletrocoagulação. Método: Foi realizado revisão de prontuário e registro fotográfico de um caso de rinofíma. Resultados: Paciente foi submetido a tratamento cirúrgico com evolução favorável. Conclusão: Existem diversos tratamentos para rinofíma, sendo que a decorticação e a eletrocoagulação constituem uma excelente opção terapêutica.

Descritores: Rinofíma; Procedimentos cirúrgicos reconstrutivos; Doenças nasais; Nariz.

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INTRODUCTION

Rhinophyma is a condition involving chronic inflammation of the nose and is characterized by abnormal coloration and texture, vascularization impairment, irregular exophytic growth, and telangiectasias. It features progressive hypertrophy and hyperplasia of sebaceous glands and nasal subjunctive tissue, which are caused by the congestion of dermis vessels. These alterations can culminate in a complete deformation of the nose.

Although usually asymptomatic, it can lead to a mechanical compression of nasal structures, in addition to significant emotional impairment. This result in the appearance of elephantiasis. Historically, it was associated with various other names, such as hyperplastic acne, “cauliflower” nose, “potato” nose, or “drinker” nose. In 1845, Hebrea used a terminology derived from the Greek rhino (nose) and phyma (growth), which resulted in rhinophyma becoming the universally accepted name.

Its etiology is not fully understood. Some authors associate this disease with an advanced stage of centrofacial acne rosacea, and they consider it an uncommon subtype (3.7%). However, other authors believe that rhinophyma is a different disease, since, unlike rosacea, it prevails in men and can manifest without typical acne.

There is evidence of associated genetic factors. Cases of twins, uncles, or grandparents of patients affected have been described. Previously, several risk factors have been described, including alcohol abuse and sunlight exposure. It is also described in association with condiments, caffeine, hot foods, and other factors causing facial redness.

The diagnosis is mostly clinical and should be differentiated from acne vulgaris, seborrheic dermatitis, lupus erythematosus, mycosis fungoides, sarcoidosis, and cutaneous tuberculosis. Drug treatment, particularly for advanced cases, seems to provide less satisfactory results than does surgical treatment. The literature describes some surgical options, all of which seek to remove sebaceous glands and to promote the recovery of nasal contour.

OBJECTIVE

In this report, we describe a case of rhinophyma that was surgically treated at the Plastic Surgery Service of HU/UFSC (University Hospital, connected to the Federal University of Santa Catarina), Florianópolis, SC, with decortication and electrocoagulation.

CASE REPORT

A 63-year-old male patient sought medical attention at the Plastic Surgery Service of HU/UFSC, with complaints of progressive nasal volume associated with deformity and difficulty in breathing that had worsened over the preceding 10 years. A significant history of sun exposure was described in his medical records, along with notes that he did not consume alcohol or smoke. He also did not present with other pathologies.

Upon physical examination, a significant increase in nasal volume, telangiectasias, erythema, cutaneous thickening, nodules, and dilated pilosebaceous pores were observed. An impaired chin area and ear lobes were also detected, as shown in figure 1. For these reasons, we suspected rhinophyma. Clinical treatment for this suspected condition was never performed. We observed lowering of the external nasal valve, with no changes in inspiration.
In considering the etiology of rhinophyma related to acne rosacea, we suggest classifying the subtype according to the degree of impairment. Acne rosacea is a form of chronic inflammation without a permanent cure. In the early stages, combination therapy offers better results when compared to monotherapy. Conversely, for advanced cases, such as rhinophyma, patients are advised to undergo surgical treatment, which results in the removal of sebaceous, hypertrophic, and hyperplastic glands; re-establishes nasal contour; and possibly resolves respiratory difficulty caused by the mechanical compression of the nose.

Several surgical techniques have been described in the literature, including graft excision or skin flap application; excision with healing by second intention; CO2 or argon laser ablation; cryosurgery, electrosurgery; and dermabrasion. There is no consensus regarding the best surgical treatment option. However, certain techniques are more beneficial, such as those that remove potentially associated tumors when opting for resection. Several authors do not recommend local flaps, which is an aggressive treatment for an otherwise benign pathology. However, in some severe cases, such as exceptional conduct, partial skin grafting is recommended.

The complications resulting from treatment, regardless of the therapeutic option, include unsightly scars, asymmetry, and dyschromia. Among these complications, perforation is considered to be the most serious. In addition, the risk of relapse should be considered. In the case reported herein, we chose surgical resection followed by electrocoagulation, without intercurrences.

CONCLUSION

As a stigmatizing disease that presents with deformity and malignant potential, rhinophyma should be considered during medical evaluation. Surgical resection is one of the available therapeutic options that can have promising results. In our clinic, the patient presented herein experienced a satisfactory evolution regarding aesthetic and functional aspects following resection and electrocoagulation. We consider this technique to be a simple, efficient, and safe procedure.

COLLABORATIONS

ICL Analysis and/or interpretation of data; statistical analyses; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.
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DOB  Analysis and/or interpretation of data; statistical analyses; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

DFVA  Analysis and/or interpretation of data; statistical analyses; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

GPW  Analysis and/or interpretation of data; statistical analyses; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

AKDA  Analysis and/or interpretation of data; statistical analyses; final approval of the manuscript; conception and design of the study; completion of surgeries and/or experiments; writing the manuscript or critical review of its contents.

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