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Case Report

LASER correction of malarphyma & a brief review of literature

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ABSTRACT

Introduction: We present a rare manifestation of phymatous change normally confined to the nose and anterior cheeks, which in our case had malar involvement and little in the way of nasal involvement. We have coined the term Malarphyma to describe this condition.

Malarphyma is a condition of the skin of the cheeks, which is related to the more commonly presented rhinophyma. It does not have a specific underlying aetiology but is possibly linked to chronic, severe rosacea. Malarphyma is progressive, with early clinical findings including enlarged pores, thickening of the fibrous tissue and hypertrophy of the sebaceous glands.

Both rhinophyma and malarphyma can lead to debilitating functional and psychosocial problems for patients affect by it.

Results: We describe for the first time in the literature the use of the CO_2 LASER for the management of malarphyma and review the literature pertaining to the use of LASER to treat rhinophyma and the associated malarphyma using a PRISMA 2009 checklist approach to identify eligible studies.

Discussion: The management of rhinophyma and associated conditions have developed over time. Medical treatment with oral antibiotics or isotretinoin is possible, but the successful treatment of established rhinophyma more commonly requires some form of surgical treatment. CO_2 LASER is recognised as the gold standard for soft tissue vaporization, with multiple reported favourable

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outcomes the treatment of rhinophyma, with excellent cosmetic results and patient satisfaction.

Conclusion: CO_2 LASER is an effective method of tissue ablation with an excellent safety profile, as proven throughout the medical literature over a number of years, but no single method that is free of complications and no well designed studies demonstrate significant benefits of one method over another.

We acknowledge that the outcome and complications associated with CO_2 LASER depends on the clinician's experience with LASER treatment, in the correctly selected patient.

Introduction

Malarphyma is a condition of the skin of the cheeks, which is related to the more commonly presented rhinophyma. It does not have a specific underlying aetiology but is possibly linked to chronic, severe rosacea. Rhinophyma is progressive, with early clinical findings including enlarged pores, thickening of the fibrous tissue and hypertrophy of the sebaceous glands. There is then a progression to single or multiple pink, bulbous, lobulated masses.[1]

Both rhinophyma and malarphyma can lead to debilitating functional and psychosocial problems for patients affect by it.

Surgical treatment of rhinophyma with Carbon Dioxide (CO_2) LASER has been well documented in medical literature, however all reported studies are confined to the nasal region only. There has been no reported use of CO_2 LASER for the treatment of malarphyma.

We present a case of bilateral malarphyma without rhinophyma successfully treated with CO_2 LASER and review the literature pertaining to the use of LASER to treat rhinophyma and the associated malarphyma.

Case

Our dermatology colleagues referred a 67-year old gentleman to our unit in September 2012 with malarphyma involving both cheeks but sparing his nose. The condition had begun in his late teenage years, but had only recently requested treatment for it due to the deteriorating cosmetic appearance. He also stated that his grandchildren were frightened by his appearance. Clinical examination demonstration advanced disease with multiple pink, bulbous, confluent lobulated masses involving bilateral malar and temporal regions. There was no significant rhinophyma (Figure 1).

The extent of skin involvement limited treatment options and topical therapies were thought to be of limited benefit. Other options for management included surgical excision and reconstruction as well as CO_2 LASER vaporization. LASER treatment with the CO_2 LASER has been the mainstay of Rhinophyma management within our unit for over a decade. This was however the first time that it was considered for use in malarphyma.

The options were discussed with the patient and photographic examples of previous Rhinophyma patients were used in the consent process.

The patient opted for a trial of CO_2 LASER with initial surgical debulking.

The patient underwent two treatments using CO_2 LASER (Lumenis Ultrapulse®), both under general anaesthetic. Standard sterile skin preparation was used along with pre procedure intravenous Co-Amoxiclav and local anaesthetic infiltration using 1% lidocaine with 1:200,000 adrenaline.

Pre LASER surgical debulking was undertaken in the first operation utilizing a 10 blade to tangentially shave the cutaneous component. CO_2 LASER vaporization and coagulation was then undertaken with a 2 mm collimated hand piece (Truespot ™) set to continuous wave at 14 watts. The