



ACNE, ROSACEA, AND RELATED DISORDERS (INCLUDING HIDRADENITIS SUPPURATIVA)

TREATMENT OF RHINOPHYMA WITH FRACTIONAL CARBON DIOXIDE LASER

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BACKGROUND: Rhinophyma (Greek “nose growth”) is a benign skin deformity characterized by tumorous growth leading to a large, bulbous, and erythematous appearing nose. It is considered to be one characteristic of advanced stage IV rosacea. Only a minority of patients with rosacea progress to develop rhinophyma. The exact cause of Rhinophyma is not known but there is unregulated superficial vasodilation. The extravasation leads to chronic edema of the dermal interstitium with a sequela of local inflammation, fibrosis, and dermal and sebaceous gland hyperplasia. Over time, this leads to the characteristic bright red to purplish telangiectasias and irregular, lobulated thickening of the skin of the nose. Multiple treatment modalities exist for rhinophyma. Topical antibiotics along with oral antibiotics and oral retinoids form the first line of therapy. Dermabrasion, cryotherapy with liquid nitrogen, surgical excision has been tried for treating rhinophyma.

OBSERVATION: The papules and nodules in rhinophyma once formed rarely subside despite the medical treatment. A combination of erbium and fractional carbon dioxide laser has been used to treat the nodules in rhinophyma and to restore the normal anatomy of the nose. Nine patients with rhinophyma were treated with erbium and fractional carbon dioxide laser. When the papules were treated with only erbium laser with 1200mj energy the papules reappeared after four weeks post laser. But when it was combined with fractional carbon dioxide laser with the density of 15% and energy of 30mj post erbium laser in the same sitting the papules and nodules were ablated efficiently. It didnot reccur at 1 year follow up after the laser.

KEY MESSAGE: Various modalities of treatment have been tried for controlling rhinophyma but the fractional carbon dioxide laser has been used sequentially after erbium laser have been found to be beneficial.

