Treating papular nodular lesions of rosacea with a medium chemical peel

Peeling químico médio em lesões papulonodulares de rosácea

ABSTRACT
Rosacea is a prevalent chronic cutaneous disorder that often presents relapsing course and is challenging to treat. It is frequently necessary to use off-label treatments to achieve satisfactory results. We report the use of a single session of medium depth peel with Jessner's solution and 35% trichloroacetic acid in fifteen patients, which achieved good clinical outcomes and histopathological improvement. The use of medium-depth peels must, therefore, be considered a therapeutic option for the treatment of rosacea.

Keywords: rosacea; chemexfoliation; trichloroacetic acid; resorcinols; salicylic acid.

INTRODUCTION
Rosacea is a prevalent and polymorphous disorder that occurs more commonly in women. With varied clinical manifestations and chronic development, marked by remissions and recurrences, its incidence is underestimated.1 The etiopathogenesis of rosacea is uncertain. Genetic, environmental, vascular, and inflammatory factors in addition to microorganisms such as Demodex folliculorum and Helicobacter pylori have been implicated.2

Rosacea affects primarily the center of the face (cheeks, nose, chin, and middle forehead). The erythematotelangiectatic form (subtype 1 rosacea) is the most common, followed by the papulopustular form (subtype 2 rosacea). The latter is characterized by persistent erythema and papules or pustules in the central area of the face.2 In subtype 2 rosacea, besides topical therapy, it is usually necessary to administer systemic treatment. This combination, however, is often insufficient to provide satisfactory improvement for the patient.

Granulomatous rosacea, also known as lupoid rosacea, is a less common variant which is characterized by the presence of red-brownish papules or small nodules with erythematous and infiltrated bases, usually occurring on the lateral surface of the face and on the neck.3

The papulopustular subtype of rosacea is considered the easiest to treat.4 Many patients respond well to topical
collagen and the metabolism of fibroblasts and keratinocytes, and which acts as an antioxidant agent in solar elastosis.

METHODS
Fifteen female patients with papular-nodular lesions and refractory to the usual treatment for rosacea underwent a single session of medium depth peel with the application of Jessner’s solution followed by 35% TCA. Postoperatively and at follow-up, specific medications were not used for rosacea.

DISCUSSION
All patients who underwent a session of medium depth peel showed an improvement in papular-nodular lesions. However, no satisfactory response was obtained in the reduction of erythema and facial telangiectasias. The results obtained in two patients (A and B) are shown in Figures 1–4. The accentuated improvement in papular-nodular lesions is shown in Figures 1, 2, and 3. Histopathologically, patient A, suffering from granulomatous rosacea, showed a great reduction in...
inflammatory infiltrate (see Figure 4).

The mechanism through which medium depth chemical peels could promote an improvement in the papular-nodular lesions of rosacea is not yet well established. It is known that the peel produces an intense inflammatory response, with angiogenesis and fibrosis. Such neovascularization means that the peel is not recommended for the treatment of the erythematotelangiectatic subtype of rosacea, as it may result in the exacerbation of the clinical picture.

In the 15 patients treated with a medium depth chemical peel, the improvement was long lasting. Patient A did not experience the emergence of new papular-nodular lesions for 17 years, even without specific treatment for rosacea. Patient B remained free from lesions for 4 months. However, late follow-up did not take place.

**CONCLUSIONS**

There are a variety of topical and systemic therapeutic options for the treatment of rosacea, especially for the papulopustular subtype.5 Treatments provide only a control of its manifestation and symptoms, 6 with maintenance or repeat treatment often being necessary. Although they do not constitute a standard treatment, medium depth chemical peels are a good option when treating rosacea’s papular-nodular lesions, and can provide fast and longlasting results.

**REFERENCES**