

CASE REPORT

Unilateral steroid induced acne on the paralyzed side of the face

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ABSTRACT

Bell's palsy is a sudden paralysis of the facial nerve, usually unilateral, affecting one side of the face resulting in an inability to contract the facial muscles on the affected side. It is not an uncommon condition with an annual incidence of 20-40 cases per 100,000 populations.^{1,2} The cornerstone of pharmaceutical treatment for idiopathic Bell's palsy is systemic steroids.^{3,4} One of the main dermatologic side effects of steroids is steroid induced acne, which present as bilateral monomorphic papules and pustules on acne prone sites like, face, chest, back and shoulders.⁵ In this article we describe a patient with Bell's palsy who was treated with systemic steroid and presented with unilateral steroid induced acne on the paralyzed side.

CASE REPORT

25 years old female presented to our clinic one year ago with facial lesions mainly on the left side of the face for 2 months. She gave a past medical history of Bell's palsy on the left side of the face since 4 months for which she was on 30mg of prednisone for 6 weeks. She was not on physiotherapy or any topical medications. Her past medical history was unremarkable. On examination she had multiple, erythematous, monomorphiic papules on the left side of the face with only few lesions on the right side. We put her on topical clindamycin 1% twice a day and adapalene 0.1% once at bedtime. Patient did not followup in the clinic, and came after one year, when we noticed significant scarring on the paralyzed side. Fig. 1. There was only minimal scarring on the non paralyzed side. Fig. 2



Fig. 1 Marked scarring on the paralyzed side of the face.



Fig. 2 Only minimal scarring on the non paralyzed side.

DISCUSSION

Bell's palsy is an annoying cosmetic problem. Although it might recover spontaneously yet about

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30% of cases might end up with facial disfigurement and psychological trauma.⁶ Steroids have been used for years to treat Bell's palsy resulting in significant improvement,^{7,8,9} Steroids are not without complications. Topical steroids result in skin atrophy, telangiectasia, hypopigmentation and if applied to acne prone areas might induce acne.^{10,11} Systemic steroids might induce acne on the face and the trunk. Usually the patient presents with crops of dense inflamed papules or pustules in the same developmental age (Monomorphic), symmetrically distributed.^{12,13} Our patient presented with unilateral distribution of monomorphic inflammatory papules on the same side of the Bell's palsy. Medline search revealed only a single report of a similar case from Japan by Tagami H. (1983).¹⁴ It is not known why these lesions were concentrated on the paralyzed side. It might be related to the more apprehension of the patient of the paralyzed side, which makes the patient touch, rub or even scratch the paralyzed side resulting in a form of acne excoriee.^{15,16,17} In our patient we noticed more scarring on the paralyzed side as well. More cases and further studies are needed to throw more light and explain this phenomenon.

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