

PERFORATION OF THE PALATE IN SECONDARY SYPHILIS

K Pavithran

A middle-aged woman with secondary syphilis-diagnosed clinically and serologically - was prescribed oral tetracycline. She did not complete the course of treatment. Recurrent mucosal erosions in the mouth she developed subsequently as manifestation of relapsing secondary syphilis were wrongly diagnosed as 'aphthous stomatitis' and were treated with betamethasone gargling. The erosions progressed to ulcerations and finally resulted in perforation of the soft palate.

Key Words : Secondary syphilis, Perforation of the palate, Corticosteroid

Introduction

Common diseases that cause perforation of the palate are tuberculosis, leprosy, and syphilis.^{1,2} In syphilis it develops in its late stage due to occurrence of gumma of the palate. Here we report perforation of the palate developing in secondary syphilis. It resulted most probably from topical treatment of syphilitic mucosal erosions of the palate with corticosteroid.

Case Report

A 42-year-old widow with history of sexual intercourses with different partners during the last 10 years was seen in January 1991 for generalised, asymptomatic macular, papular, and papulosquamous lesions on the trunk and limbs, fleshy-looking, moist, grayish-white, rounded, plaques at the mucocutaneous junctions of the vulva and multiple erosions and 'mucous patches' on the cheek mucosa associated with epitrochlear, inguinal and posterior cervical lymphadenopathy. A clinical diagnosis of secondary syphilis was made which was supported by dark-field microscopic demonstration of *Treponema*

pallidum from the genital lesions and a reactive blood VDRL test (1 : 64). Being allergic to penicillin, she was prescribed oral tetracycline 500 mg q i d for 15 days. She did not turn up for follow-up, but in October 1991, she developed nasal regurgitation of food and hence attended the ENT section.

History, this time, revealed that since the skin and mucosal lesions had healed by the eighth day of tetracycline therapy, she discontinued treatment. But after that she had recurrent erosions in the mouth which were treated in a local hospital with betamethasone gargling thrice daily (after dissolving one tablet (0.5 mg) of betamethasone in 30 ml. of water), with a clinical diagnosis of aphthous stomatitis. One of the larger erosions on the soft palate evolved into an ulcer that finally perforated, resulting in nasal regurgitation of liquid food. Examination revealed an irregular, 3 x 2 cm. sized, painless ulcer in the soft palate. There was no induration of the base but the floor showed a circular perforation of 1 cm diameter at its centre. Three fleshy-looking, greyish-white plaques were seen on the labia majora. There were no lesions elsewhere or associated lymphadenopathy. *Treponemata* were demonstrated from the genital lesions by D F microscopy. Routine laboratory tests on blood, and urinalysis were normal. Blood VDRL was reactive 1 : 128. X-ray of the chest was normal. Mantoux test was

From the Department of Dermato Venereology, Medical College Hospital, Kottayam - 686 008, India.

Address correspondence to : Dr K Pavithran, Professor of Skin & V.D., Medical College Hospital, Vandanam, Alappuzha - 688 005

negative. Histological study of the biopsy specimen from the palatal ulcer revealed an ulcerated area with inflammatory cells consisting predominantly of lymphocytes and plasma cells located around the arteries, the endothelial cells of which were hypertrophied. There was no caseation or 'granuloma' formation. The patient was treated in the ward with tetracycline 500 mg. q i d for 15 days. The genital and oral lesions healed completely but left a tiny perforation on the soft palate. There was no recurrence of the lesions and her blood VDRL titre had fallen to 1 : 4, when seen after 6 months.

Comments

Our patient was initially diagnosed clinically as a case of secondary syphilis, which was supported by positive D F microscopy and a reactive blood VDRL test. Our patient, being allergic to penicillin, was prescribed oral tetracycline. But she did not complete the course of treatment. Recurrent mucosal erosions in the mouth she developed subsequently, were most probably the manifestation of relapsing secondary syphilis. These were wrongly diagnosed as 'aphthous stomatitis' and treated with betamethasone gargling.

Perforation of the palate occurs following development of gumma in late stage of syphilis. Positive serology (VDRL test) made the ENT surgeon suspect gumma in our patient. But presence of condylomata lata with positive D F microscopy suggested that our patient had secondary syphilis. Exact mechanism of perforation of the palate in this

patient is not known. There were no features of gross secondary bacterial infection of the palatal ulcers. Systemic corticosteroids are well-known to cause exacerbation and silent perforation of peptic ulcer.³

Steroid interferes with the healing of the ulcers by its anti-fibroblastic activity. Perforation of the syphilitic chancre on the shaft of penis following topical triamcinolone has been reported.⁴ Steroids whether topical or systemic are detrimental in infectious diseases such as leprosy and syphilis in the absence of specific antibacterial therapy. Corticosteroid-induced exacerbation of the plantar ulcers in leprosy, necessitating amputation of the limb has also been reported.⁵ This report emphasizes the need for considering syphilis also in the differential diagnosis of recurrent oral erosions and ulcers and also warns against use of corticosteroid in the absence of a definitive diagnosis.

References

1. Bedi BMS, Kakar PK, Sood VP. Study on the perforation of palate. *Ind J Dermatol Venereol* 1969; 35: 297.
2. Sarojini PA, Basheer AM, Gopalkrishnan TV, et al. Perforation of the hard palate due to tuberculosis. *Ind J Dermatol Venereol Leprol* 1978; 44: 114-5.
3. Fenster LF. The ulcrogenic potential of glucocorticoids and possible prophylactic measures. *Med Clin N Amer* 1973; 57: 1289-94.
4. Paithran K. Perforating syphilitic chancre. *Ind J Dermatol Venereol Leprol* 1987; 53: 352-4.
5. Anderson JG. Corticosteroid-induced activation of chronic ulceration in leprosy. *Lepr Rev* 1988; 59: 185-6.