

# Aphthous Stomatitis: Correlation with Intestinal Parasitosis

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Mohammad Iqbal Khadim ( Dentistry Department, Khyber Medical College, Peshawar. )

Aphthous stomatitis is a relatively common disease characterized by repeated episodes of ulceration on the mucous membrane of the oral cavity (Lehner, 1968). The ulcers may be single or multiple and appear anywhere on the oral mucosa except the hard palate; inside of the lip, cheek, tongue, floor of the mouth, soft palate and the gingiva being the common sites (Stanley, 1972).

The size of the ulcer is variable, ranging from 1 to 10 mm in diameter, the average being 2 to 3 mm. Larger ulcers are not uncommon and may be 2 to 3 cm in diameter. Most often the ulcers are round or oval in shape, have distinct borders and are flat or slightly depressed or even slightly elevated (Zegarelli et al., 1969). The outline of the ulcer depends on the site of origin-those appearing on flatter surfaces are round, while those in the labial and buccal sulci are more elongated (Stones, 1962).

The onset of the disease is common between the ages of 10 and 30 years (Shafer et al., 1974). Females are more often affected than males (Sircus et al., 1957) and the greatest incidence occurs during the winter and spring months (Bhaskar, 1977). The duration of ulceration is typically 10 to 14 days (Farmer, 1958), although secondary infection from oral bacteria or trauma may prolong healing and increase the discomfort experienced (Addy et al., 1974).

Aphthous stomatitis is a frustrating disease, because it may not be a single entity, but rather a clinical presentation which is common to or results from a variety of etiologic factors (Ross et al., 1958; Ship et al., 1961; Francis, 1970; Lehner, 1969; Dolby, 1968; Shklar and McCarthy, 1976). Occasionally the occurrence of the ulcer is related to the menstrual cycle (Pappworth, 1941) and sometimes has a familial tendency (Ship, 1972). The description of the case presented in this paper shows that the disease may be an oral manifestation of intestinal parasitosis.

## Case Report

On October 24, 1980, a 21 year old Dentistry student attended the Oral Diagnosis Unit of Khyber Medical College, Oral and Dental Hospital, Peshawar, for the evaluation of a painful lesion present on inside his lower lip, and which persisted for the last two weeks. The affected area was said to be tender to touch, swollen and sensitive to spicy food. The patient also gave the history of recurrent episodes of similar lesions occurring in the oral cavity at different sites, on different occasions, which healed spontaneously over a period of weeks.

Intraoral examination revealed a tender, shallow ulcer on the right labial mucosa opposite the right lower incisor teeth. The ulcer was approximately 2.5 mm in diameter and appeared to be well circumscribed having well defined but inflamed margins, and pseudomembranous grayish-white base. Because of the recurrent nature and the clinical behaviour of the ulcer, the lesion was diagnosed as aphthous stomatitis. To relieve pain, the patient was directed to apply and massage Bonjela gel well over the affected tissue three or four times a day before meals and at bed time (Khadim, 1980).

Oxytetracyclin, 250 mg four times a day for four days, was advised to combat secondary infection, and a hydrocortisone ointment was recommended for topical use. The lesion healed within 10 days.

However, on 26th November, the patient reported with similar lesion situated, this time, on the left lateral side of the tongue. The patient was again put on the same regimen, and this time the lesion healed within 5 days.

On December 3, the patient again presented with an ulcer on the floor of the mouth, opposite the lower central incisor teeth. Again the scheduled treatment was instituted and since there was accompanying gastrointestinal discomfort, the patient was referred to the Pathology Laboratory for stools and blood

tests. The Laboratory findings revealed the presence of cysts of *Entamoeba histolytica* and ova of *Ankylostoma duodenale*, in the stools, and an eosinophilic count of 8/cu.mm. of blood. In view of this situation, the patient was treated with Fasigyn (Tinidazole), 300 mg three times a day for 5 days, and Combantrine (Pyrantel Pamoate), 2 gm as a single oral dose. On subsequent check ups stools and blood did not reveal any abnormality and the oral lesions had subsided. Since then the patient has been kept under periodic observations and the lesions have not reappeared upto now.

## Discussion

The management of aphthous stomatitis frequently poses many problems to the clinician, particularly in those patients who suffer from regular and frequent attacks. Because the etiology of the disease is not fully understood (Addy et al., 1976), treatment is largely directed towards reducing the severity of ulceration, and where possible eliminating predisposing factors (Cooke, 1969).

The permanent healing of the ulcers, after treating the patient described in this case report, for the associated intestinal parasitosis, indicates that aphthous stomatitis may be an oral manifestation of intestinal parasitic infections. Since other gastrointestinal disorders (Crohn's disease, ulcerative colitis) that have ulcerogenic potential, has been shown to be associated with intraoral ulcerations (Truelone and Marris-Ouru, 1958; Kyle, 1972). It may not be surprising to have both aphthous stomatitis and intestinal parasitosis simultaneously. The findings in this case can be interpreted as an evidence of an immune basis for the disease (Francis, 1970), indicating a cross-reaction occurring between the antigen of the parasites and the oral mucosa itself. The immune pathogenesis is also supported by the rational use of corticosteroids in the treatment of this condition (Key, 1972).

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