

Aphthous Stomatitis

The Failure of Local Hydrocortisone Therapy to Affect Healing Time

ARTHUR U. RIVIN, M.D., and
RICHARD THOMAS BARTON, M.D., Los Angeles

JUST AS IN OTHER DISEASES of varying or obscure cause, the treatment of aphthous ulcer has been empiric and sometimes haphazard. Among the medicaments proposed or currently in use are antibiotic lozenges, silver nitrate or other chemical cautery, antihistamine, vitamins and smallpox vaccination. Claims for varying degrees of success have been made, but the consensus seems to be that the healing time is not altered by treatment.

Because of the anti-inflammatory and antiallergic effects of hydrocortisone, it was decided to conduct a controlled study on the effects of local application of this material.

MATERIALS AND METHODS

Subjects were students who presented themselves at the Student Health Service, University of California, Los Angeles. A placebo ointment of petroleum jelly resembling Cortef® brand hydrocortisone (2.5 per cent) was used. Hydrocortisone was used in alternate cases. The two ointments were labeled A and B and the identity of each was unknown to the investigating physician.

After the diagnosis had been established, the student was instructed in the proper use of the ointment. A small amount of the material was placed at the center of a one and a half inch square pad of gauze and applied directly to the lesion. The part of the pad on which there was no ointment served to absorb saliva and prevent washing away of the ointment. The patient was instructed to apply the material in this fashion three times a day, to keep the pad in place a half hour, and to refrain from eating or drinking for a half hour after it was removed. The lesions were inspected by a physician every day or every other day.

Clinical data obtained included information as to age, sex, associated diseases, history of recurrent oral ulcers, allergic sensitivity, dietary indiscretions, dental disease, emotional factors and recent colds. The location, severity of the lesion, duration before treatment, duration after treatment, and subjective and objective evidence of improvement were recorded.

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• Many forms of therapy have been tried for aphthous stomatitis in the past without success. The effect of hydrocortisone was tested because of its anti-inflammatory and antiallergic action. Little benefit was derived from such therapy in a series of 26 patients as far as healing time was concerned but many were noticeably relieved of pain.

Twenty-six patients, 17 men and 9 women, were treated in a period of six months. Fourteen received hydrocortisone ointment and twelve were treated with placebos. Although the study was chiefly concerned with the treatment trial, the following incidental observations were of interest: There was no distinct relationship between the onset of ulcers in the mouth and the presence of any other disease or special dietary history. There was no apparent emotional relationship. Half of the patients had been subject to recurring oral ulcers. In three-fourths of the cases the lesions were located inside the lower lip near the alveolar gutter.

The average duration in days from the time of application of the medication to the time of healing was four and one-half in the hydrocortisone treated cases, and four and three-quarters in the placebo treated cases. The average duration in days from the time of application to the time of subjective relief from pain was two in the hydrocortisone treated and three in the placebo group. Average time in days from onset of the lesion to healing was nine and one-half in the hydrocortisone treated and ten in the placebo treated. Five of the hydrocortisone treated patients volunteered the information that they had immediate relief of pain after the first application. None of those who received the placebo spoke of relief of pain. No untoward effects were noted from the use of hydrocortisone ointment.

CONCLUSIONS

The application of hydrocortisone as a 2.5 per cent ointment directly to aphthous mouth ulcers did not affect the healing time. In a few cases there appeared to be more rapid relief of pain than was obtained with placebo medication.

1245 Glendon Avenue, Los Angeles 24.