

# DEANXIT IN THE TREATMENT OF APHTHOUS ULCERATION

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## SYNOPSIS

The aetiology of recurrent aphthous ulceration is not known for certain. Emotional disturbances are thought to be important in the causation and exaggeration of aphthous ulcers. Fourteen patients suffering from aphthous ulcers, who have histories of emotional disturbances were treated either with Kenalog in Orabase alone or with additional two tablets of Deanxit daily. At the end of six weeks, patients treated in the latter manner showed marked improvements in their ulcers. There was no side effects from the drug with the dosage employed. Deanxit is highly recommended for those suffering from aphthous ulcerations with emotional disturbances.

## INTRODUCTION

Aphthous ulceration is a common affection of the oral mucosa with no definite aetiology. Recent findings have pointed to the role of auto-immunity as being the important aetiology factor (1, 2, 3, 4). Other factors like hormonal imbalance, infections by mycoplasma and streptococcal L-forms (5) and Viral infections (3) have all been incriminated but without real concrete evidence.

Ship et al (6) stressed the role of emotional stress in the causation of aphthous ulceration. It is known that the level of cortisol is usually raised in stress. Duodenal ulceration, ulcerative colitis and Crohn's disease are mucosal lesions that are known to be related to stress, and it should not be surprising if such a relationship also exists with oral aphthous ulceration. Harris (7) felt that patients with severe and frequent attacks of oral ulceration, have a demonstrable background of neurosis and show a marked improvement with sedation or antidepressant.

The relationship between aphthous ulceration to socioeconomic status was shown by the fact that middle and upper social class professional students appear to be much more often affected than individuals in lower social classes. Low social class dental students, without previous history of aphthous ulceration, have been shown to develop the condition before graduation and it has been postulated that this is related to changes in status associated with the acceptance of professional standards and responsibilities (8).

There is no satisfactory treatment for aphthous ulceration. Topical corticosteroid is widely used and affords relief in some patients, whilst oestrogen therapy seemed to be beneficial in some women. Azathioprine, an immunosuppressive agent, does not produce any benefit (9).

Should the claim by Ship et al (6) that stress is important in the causation of aphthous ulceration be true, then it may be possible that antidepressants, judiciously used, may prove to be beneficial. The aim of this paper is to present the findings of a double-blind clinical trial in which fourteen patients with histories of anxiety and emotional disturbances, suffering from

aphthous ulcerations were treated with either topical corticosteroid preparation alone or with an antidepressant (Deanxit) in addition.

## METHOD

Nine men and five women (aged between 19-30 years) with no other relevant medical conditions were studied by randomly dividing them into two equal groups. Each of the group A patient was instructed to apply topically a paste of Kenalog in Orabase onto their ulcers four times daily. Each of the group B patient was similarly instructed but with an additional consumption of one Deanxit tablet two times daily. The trial was carried out over a six-week period. Each patient was given an "ulcer day" chart on which they recorded daily the number of ulcers per day at the end of the second, fourth and sixth weeks were determined by dividing the number of ulcers recorded by each patient by 14.

All the fourteen participants admitted to having complaints of various forms of anxiety and emotional disturbances. Ulcer patients without this history were excluded from the trial.

## RESULTS

All the fourteen patients completed their charts satisfactorily. Table I and II show the mean number of ulcers observed in each patient per day in Group A and B respectively. Using the paired t-test, there was no significant difference between group A and Group B for the first four weeks ( $P = 0.05$ ). At the end of the sixth week, the difference between both groups was highly significant ( $P = 0.01$ ).

TABLE I  
GROUP A: THE MEAN NUMBER OF ULCERS PER DAY

Patients	Day 1 — 14	Day 15 — 28	Day 29 — 42
1	3.30	2.88	2.70
2	2.31	2.02	1.86
3	3.63	3.08	2.83
4	2.03	1.48	1.35
5	2.90	2.40	2.23
6	2.76	2.13	2.00
7	3.30	2.12	2.02
MEAN	2.89	2.30	2.14

TABLE II  
GROUP B: THE MEAN NUMBER OF ULCERS PER DAY

Patients	Day 1 — 14	Day 15 — 28	Day 29 — 42
1	2.10	2.00	0.91
2	2.72	2.47	1.23
3	3.12	2.81	1.40
4	3.77	3.50	1.61
5	2.95	2.57	1.10
6	2.60	2.28	1.03
7	3.23	2.80	1.25
MEAN	2.93	2.63	1.22

## DISCUSSION

Deanxit is a combination of two drugs, viz: 10 mg of melitracen and 0.5 mg of flupenthixol. The former is a bipolar thymoeleptic which normalizes initiative and elevates mood (10). The latter is a neuroleptic with anxiolytic and antidepressive properties. Deanxit act in two ways (11):-

(a) Antidepressive action: Manifests by suppression of impulse inhibition, activation of vital tone, normalisation of humour and the release of tension, and  
 b) Anxiolytic action: indicated in anxiety neurosis states where the visceral, functional and organic changes are typical. Patients with endogenous depression (10) regained hope to be cured and showed great readiness for treatment and those with anxiety neurosis responded very well with Deanxit (12).

In the treatment of oral ulcers, Deanxit takes more than four weeks before it could express its effects, and this explains the reason for the absence of noticeable difference between the two treatment regimes during the first four weeks of the trial. After the sixth week, its beneficial effect on the reduction of ulcers became very evident.

There is no single aetiology of RAU. Some RAU are caused by known factors whilst others are ill-understood. In the former cases, specific therapy will certainly lead to cure. No attempt is going to be made to discuss the various treatments of RAU, which include the maintenance of good oral hygiene, the uses of covering agents to coat ulcer surfaces, antiseptics, topical antibiotics, topical steroids (systemic steroids in special cases), topical anaesthetics, hormones and immunosuppressive drugs. Instead, emphasis was centered on the importance of underlying psychosomatic disorders in patients with such disorders. The findings of the present investigation support those of Ship (6) and Harris (7) who had earlier on stressed the existence of a relationship between RAU and emotional disturbances. However, the authors wish to impress upon readers two important factors: That not all patients with RAU have some form of emotional disturbances and not all emotionally disturbed patients develop RAU. Susceptibility to RAU is the decisive factor whether RAU will occur or otherwise in such patients.

With two tablets daily, patients in this series did not experience any side effect. Other investigators have reported restlessness, insomnia, nausea and skin eruptions in a couple of their patients. To avoid insomnia, it is recommended that the patient take the tablets before 4.00 p.m. Laboratory studies in clinical trials produced no toxic action (13). The authors have previously used other antidepressants but they seem-

ed to cause unfavourable side effects on patients. Due to its freedom from noticeable side effects, the authors now prefer Deanxit. It did not cause fatigue, and the melitracen component tended to prevent the occurrence of extrapyramidal side effects of flupenthixol.

Whilst the use of Deanxit is a very useful tool in the management of patients with RAU with established histories of emotional disturbances, it has no place in the treatment of RAU patients without such histories.

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