

These are painful, rounded, shallow ulcers in the mouth.

It is common for them to recur (Recurrent Aphthous Stomatitis: RAS) at 1-4 monthly intervals.

Around 10-20% of the general UK population have recurrent mouth ulcers, whilst certain groups may have a higher prevalence.

Symptoms usually begin in childhood, and frequency and severity of attacks tend to decrease with age.

Minor ulcers are less than a centimetre in size and tend to resolve within 5-10 days.

Causes: this remains unclear, although there do seem to be associated factors including local trauma (excessive toothbrushing, banging the mouth etc.), deficiency of vitamin B12, folate, zinc and iron. Ulcers are more common during times of anxiety. There may also be hormonal factors and stopping smoking might provoke an attack.

Conditions, which are associated with mouth ulcers, include Crohn's disease, Behcet's disease, Coeliac disease, Ulcerative Colitis, pemphigus/pemphigoid.

They may also be seen as part of an adverse drug reaction (erythema multiforme) or as a sign of a food allergy.

### Treatment:

- Firstly, precipitating factors need to be avoided: dental work to reduce sharp edges of teeth or correct an overbite which might cause the inside of the cheek (buccal mucosa) to be bitten; changing to a softer toothbrush, avoidance of acidic or hard foods for a trial period. It may be helpful to keep an ulcer diary for up to 3 months. Dietary factors may well be complex and might necessitate an elimination diet, which should only be undertaken under strict medical supervision.

- Correction of vitamin deficiencies: B12, folate, zinc and iron has been found effective in up to 60% of patients with an identified deficiency.

- Treatments are palliative (relieve symptoms) rather than curative:  
Chlorhexidine mouthwash (0.05 or 0.2% aqueous): is safe and effective: the number of ulcer-free days is increased but recurrence is not prevented. It can be used for up to 1 month, but it must be noted that this mouthwash may stain the teeth. Antiseptic mouthwashes may help to prevent secondary infection.

- Topical steroid preparations commenced as soon as the area starts to become sore (i.e. before the ulcer becomes established, otherwise they will be ineffective) help to reduce the duration and severity of symptoms. Hydrocortisone sodium succinate 2.5mg as a slowly soluble pellet, 0.1% triamcinolone acetonide in a carboxymethyl cellulose paste are effective and do not cause systemic effects (in other parts of the body) A betamethasone spray may also be used or betamethasone phosphate tablets: but are not licensed and are highly potent and cause effects in other parts of the body (adrenal gland suppression). Short-term systemic steroid therapy may be necessary for major RAS.

- Local anaesthetic agents such as Anbesol or Bonjela (over-the -counter preparations) can be effective but only have a short duration of action. Anaesthetic sprays may also be available.

- Topical antibiotics such as tetracycline are not thought to be clinically effective.

- Other preparations such as topical thalidomide and topical sodium cromoglycate are effective but not recommended by the Department of Health.