Recurrent Aphthous Stomatitis

What are the aims of this leaflet?

This leaflet has been written to help you understand more about Recurrent Aphthous Stomatitis (RAS). It tells you what it is, what causes it, what can be done about it and where you can find out more about it.

What is recurrent aphthous stomatitis (RAS)?

RAS consists of recurrent bouts of one or more painful, round or oval shaped ulcers. Most aphthous ulcers last for 10-14 days. It is a common mouth condition affecting up to 20% of the population at any given time.

The severity and frequency of RAS tends to decrease with age.

RAS is classified into three types:

• Minor
• Major
• Herpetiform

Minor ulcers are the most common type affecting the majority (80%) of people who suffer from mouth ulcers. Minor ulcers occur in crops of about 1 to 5 at a given time and are usually 10mm or less in diameter. These usually appear inside the lips and cheeks, on the tongue and sometimes the floor of the mouth. The ulcers tend to last between 10-14 days and heal without scarring.

Major ulcers are less common and affect 10-15% of patients with RAS. Major ulcers tend to be larger and typically greater than 10mm in diameter. They can occur singly or 2-3 can appear at a time anywhere in the mouth. If the soft palate is involved, swallowing can be difficult. The ulcers may last up to 3 months and some of the larger ulcers leave a scar when healed.

Herpetiform ulcers are the least common type affecting 5-10% of cases. The ulcers are small (1-2mm in diameter) and can occur in clusters of more than 20 at a time which can merge to give larger ulcers. They tend to occur in the front of the mouth particularly under the tongue and on the edges of the tongue. These tend to heal within two weeks without scarring. Despite their name, they are not caused by a herpes virus.
What causes recurrent aphthous stomatitis?

The cause is unknown but there is likely to be an immunological factor involved. There are a number of underlying or precipitating factors which include anaemia, vitamin deficiencies, stress and trauma from sharp teeth, dental braces/ fillings or a tooth brush. Some people who give up smoking develop recurrent mouth ulcers and the reason for this is unclear. Occasionally, RAS can be part of a more widespread disease affecting other parts of the body (e.g. Behçet’s disease). Recurrent mouth ulcers are not thought to be infectious.

Is recurrent aphthous stomatitis hereditary?

Nearly half the people who suffer from mouth ulcers have a close relative with the same problem.

What does recurrent aphthous stomatitis look like?

Recurrent aphthous stomatitis consists of round or oval shaped ulcers with an area of surrounding redness. The base of an ulcer is typically grey/yellow in colour. Size varies according to the type of ulcer and this may range from a few millimetres in diameter to greater than one centimetre.

What are the symptoms of recurrent aphthous stomatitis?

The main complaint is pain. This can be made worse by hot, salty, spicy or hard/abrasive food. Eating and drinking can therefore become difficult. Depending on the site of ulcers, speech can also be affected. The ulcers occur in recurrent bouts, heal and reoccur with varying time intervals. A few people are never free from ulcers.

How is recurrent aphthous stomatitis diagnosed?

The history and clinical appearance of the ulcers are usually sufficient to confirm the diagnosis of RAS. Blood tests are often arranged to check for any underlying cause. A biopsy is occasionally required to rule out other causes of mouth ulceration.

Can recurrent aphthous stomatitis be cured?

There is currently no cure for RAS unless an underlying cause is found and corrected. Treatment aims to relieve the painful symptoms associated with RAS. The frequency and severity of RAS tends to decrease with age.
How can recurrent aphthous stomatitis be treated?

Treatment for RAS aims to relieve discomfort, prevent or reduce secondary infection and encourage healing.

- **Topical corticosteroids** are the main treatment for RAS. They can be applied locally to the mouth and are effective for most patients. These are available as mouthwashes, sprays, and small dissolvable pellets.
- **Anaesthetic (analgesic) mouthwashes, sprays or ‘over-the-counter’ sugar free throat lozenges** can be used if your mouth becomes sore and are particularly helpful if used before meals.
- **Use of an antiseptic** alcohol-free mouthwash, spray or gel (e.g. chlorhexidine gluconate) may be recommended to help reduce any secondary infection and control plaque levels on teeth if tooth-brushing is difficult or uncomfortable.
- **Tetracycline mouthwashes** may be of value for some types of RAS.
- **Covering agents** work by forming a mechanical barrier against secondary infection and further mechanical irritation. These are available as pastes and soluble pellets for application to ulcers.
- **Severe cases of RAS may require treatment with a short course of systemic corticosteroids (i.e. taken in tablet form). Long-term treatment with this medication is not recommended because of the potential side effects.**
- **Other types of oral (systemic) therapy are reserved for severe cases of RAS (especially the major type) and various drugs have been used as management options to suppress the ulcers by altering the body’s immune system.** These can be associated with a number of side effects which should be discussed with your specialist. Regular blood tests are required when taking most of these medicines, particularly during the early stages of treatment.

What can I do?

Spicy, acidic, salty or hard/abrasive foods (e.g. toast and crisps) should be avoided if these make your mouth sore. To avoid nutritional deficiencies, ensure that you eat a varied diet. It is important to have a high standard of oral hygiene. Visit your dentist for routine care and for help with sharp teeth or broken fillings that may trigger your mouth ulcers. Additives in toothpastes, such as sodium lauryl sulphate, may aggravate your ulcers.

Any single ulcer that persists for longer than 3 weeks despite treatment should be examined by your dentist (or doctor) who may wish to refer you for a specialist opinion and possible biopsy.

Where can I get more information about recurrent aphthous stomatitis?

Web links:
www.dermnetnz.org/site-age-specific/aphthae.html
www.mayoclinic.com/health/canker-sore/DS00354

We would like to acknowledge the British Society for Oral Medicine who published the original version of this leaflet.
Further Information

If you require any further information or advice you can contact the department:

Oral Medicine Department
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Higher Cambridge Street
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Tel: (0161) 393 7732. The department is open Monday to Friday, 9.00 am to 5.00 pm.