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These short summaries are taken from a range of other evidence-based journals and publications

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Treatments for recurrent aphthous ulceration

Clinical Evidence Issue 4 Dec. 2000; p 746–752

Porter S, Scully C. Oral Health. Aphthous ulcers: recurrent.

This review in the oral health section of *Clinical Evidence* looks at the treatments available for recurrent aphthous ulcers (RAU). The prevalence of RAU may be 5–10% in some groups of children, but the causes of the ulcers remain unknown. Associations with haematinic deficiency, infections, gluten-sensitive enteropathy, food sensitivities and psychological stress have rarely been confirmed. Similar ulcers are seen in Behçet's syndrome.

Eighty per cent of RAU sufferers develop a few ulcers of less than 1 cm in diameter which heal within 5–14 days without scarring (minor aphthous ulceration). Typically episodes recur after an interval of 1–4 months. One in 10 sufferers, however, have the more severe form (major aphthous ulceration) with lesions larger than 1 cm. These may recur after a shorter interval and can cause scarring. A similar proportion (1 in 10) with such recurrent ulceration may have multiple minute ulcers (herpetiform ulceration).

Carefully structured reviews of the literature carried out for clinical evidence have identified randomised controlled trials (RCTs) showing that chlorhexidine is likely to be beneficial to patients, with reductions in severity and duration, but no effect on recurrence rates. Nine small RCTs found no consistent effect of topical corticosteroids on the incidence of new ulcers compared with control preparations. Evidence that topical corticosteroids may reduce duration of ulcers and hasten pain relief without causing notable local or systemic adverse effects is weak. RCTs also provide no evidence of benefit from hexidine mouthwash or from a proprietary antiseptic mouthwash compared with controls.

Antibiotics for acute maxillary sinusitis

Cochrane Review. The Cochrane Library 2000; issue 3.

Williams Jr JW, Aguilar C, Makela M, Cornell J, Holleman DR, Chiquette E, Simel DL. Antibiotics for acute maxillary sinusitis. Cochrane Review. In the Cochrane Library. Oxford: Update Software.

This Cochrane Review compared antibiotic treatment and controls, or compared the effect of treatment with antibiotics from different classes for treatment of acute maxillary sinusitis, in 32 randomised-controlled trials that met the selection criteria. Only five trials described adequate allocation and concealment procedures; 10 were double-blind.

Compared with controls penicillin improved clinical cures [relative risk (RR), 1.72; 95% confidence intervals (CI), 1.00–2.96]. Treatment with amoxicillin, however, did not significantly improve cure rates (RR, 2.06; 95% CI, 0.65–6.53), although there was significant variability between studies. Radiographic outcomes were improved by antibiotic treatment. Comparisons between classes of antibiotics showed no significant differences:

- newer non-penicillins versus penicillins (RR for cure, 1.07; 95% CI, 0.99–1.17);
- newer non-penicillins versus amoxicillin–clavulanate (RR for cure, 1.01; 95% CI; 0.97–1.04).

Compared with amoxicillin–clavulanate, dropouts due to adverse effects were significantly lower for cephalosporin antibiotics. Relapse rates within 1 month of successful therapy were 5%.

Overall the authors concluded that for acute maxillary sinusitis, confirmed radiographically or by aspiration, current evidence is limited but supports the use of penicillin or amoxicillin for 7–14 days. Clinicians should weigh the moderate benefits of antibiotic treatment against the potential for adverse effects.

HRT and tooth loss

Electronic Bandolier (<http://www.jr2.ox.ac.uk/bandolier/band83/b83-4.html>) 2001; 83:4

Allen IE, Monroe M, Connelly J, Cintron R, Ross SD. Effect of postmenopausal hormone replacement therapy on dental outcomes: systematic reviews of the literature and pharmacoeconomic analysis. *Managed Care Interface* 2000; 13:93–99.

This systematic review pulls together several links in the chain of evidence linking tooth loss and hormone replacement

therapy (HRT), and the economic effects. The review used only English-language papers identified with Medline, other databases and manual searches, for the period 1980–1998. Any study looking at postmenopausal women that had a minimum of 10 patients per study arm and a duration of at least 3 months was eligible for inclusion.

Twenty studies were included, in which 47% of postmenopausal women (mean age, 67 years) used dentures. In women with a history of HRT use this fell to 27%, but the figure rose to 69% in those who had not used HRT: women with a history of HRT use had more teeth than those who had not used HRT. An economic analysis suggested that the use of HRT saves about £71 per year on average in dental treatment for each woman considered.

The evidence from the studies identified is limited, indirect (no randomised trials with this as the main outcome) and has different outcomes. By pulling together evidence from different sources and by simple analysis, however, the conclusion that HRT use prevents costs elsewhere begins to be supported.

Burning mouth syndrome

Clinical Evidence Issue 4 Dec. 2000; p 753–757

Buchanan J, Zakrzewska J. Burning Mouth Syndrome.

This review in *Clinical Evidence* covers burning mouth syndrome, which has previously been described by the terms glossodynia, glossopyrosis, stomatodynia, stomatopyrosis,

sore tongue and oral dysaesthesia. Burning mouth syndrome is a psychogenic or idiopathic burning discomfort or pain that affects people who have clinically-normal oral mucosa and in whom a medical or dental cause has been excluded.

Studies of people who have symptoms of burning mouth syndrome are often unreliable because burning mouth syndrome (ie. idiopathic disease) is not distinguished from other conditions, such as vitamin B deficiency. Consequently, incidence and prevalence vary according to diagnostic criteria. Reported prevalence in the general population varies from 0.7% to 15%. This mainly relates to the symptom of burning mouth rather than to burning mouth syndrome as defined above. Most studies suggest that burning mouth syndrome mainly affects women, particularly after the menopause, when its prevalence may increase to 18–33% of women.

The cause of the syndrome is unknown and the reviewers found no good aetiological studies. Possible causal factors are hormonal disturbances associated with the menopause, and psychogenic factors such as anxiety, depression, stress, life events, personality disorders and phobia of cancer. In addition, local and systemic factors such as infections, allergies, ill-fitting dentures or hypersensitivity reactions, and hormone and vitamin deficiencies, may cause the symptom of a burning mouth and should be excluded before diagnosing burning mouth syndrome.

The review found insufficient evidence about the effects of any treatment (hormone replacement therapy in postmenopausal women, vitamin B replacement or supplementation, antidepressants, benzydamine hydrochloride) for people who have burning mouth syndrome. However one small randomised controlled trial found that cognitive behavioural therapy reduced symptom intensity.