

area was present on the right lateral margin of the tongue extending on to the ventral aspect of the tongue, mandibular alveolus and floor of the mouth (Figure 1). There was also candidosis affecting the tongue.

Initially, it was suspected that the ulceration and submental swelling could be due to a salivary gland lesion or neoplasia. On closer examination, the ulceration had the appearance of a chemical burn, with secondary infection.

The patient was treated initially with intravenous fluids, Co-amoxiclav, chlorhexidine mouthrinse and nystatin oral suspension. Although aspirin appeared to be the obvious causative agent, a thorough history from the relatives identified ferrous sulphate tablets as the likely cause. This was confirmed by the lesion resolving following cessation of ferrous sulphate tablets and substitution with supervised ferrous fumarate syrup.

## Discussion

Close questioning of the relatives revealed that the dispersible aspirin solution was administered before breakfast and was therefore unlikely to be retained in the

mouth long enough to cause this degree of burn.

However, the ferrous sulphate tablets were placed sublingually. As the patient's head was tilted to the right owing to ankylosis of the right shoulder, the tablets were placed in the right sublingual pouch and left to dissolve. Any tablet has the potential to cause oral ulceration if left in the mouth.<sup>1</sup>

Numerous cases have been described in which chemical burns to the oral mucosa have resulted from local application of aspirin<sup>2,3</sup> and otherwise innocuous materials including fresh fruit,<sup>4</sup> mouthwash,<sup>5</sup> dental restorative materials<sup>6</sup> and even denture-cleansing solutions.<sup>7</sup> One normally associates oral ulceration with iron deficiency anaemia,<sup>8</sup> but this case demonstrates that the treatment of iron deficiency anaemia can itself cause chemical burns to the oral mucosa when inappropriate topical usage of ferrous sulphate tablets is maintained.

## References

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## Cochrane Synopses

TL Outhouse, R Al-Alawi, Z Fedorowicz, JV Keenan. Tongue scraping for treating halitosis. *The Cochrane Database of Systematic Reviews* 2006, Issue 2. Art. No. CD005519. DOI: 10.1002/14651858.CD005519.pub2.

### 'Tongue scrapers or cleaners are slightly more effective than toothbrushes as a means of controlling halitosis in adults.'

This review, which included 2 trials (40 participants) found that, although the use of tongue scrapers was generally well accepted, the effects of tongue cleaning using scrapers or brushes appeared to be very short lived and there was some limited evidence of tongue trauma which occurred with prolonged use of one tongue scraper.'

IG Needleman, HV Worthington, E Giedrys-Leeper, RJ Tucker. Guided tissue regeneration for periodontal infra-bony defects. *The Cochrane Database of Systematic Reviews* 2006, Issue 2. Art. No. CD001724. DOI: 10.1002/14651858.CD001724.pub2.

### 'Current treatments for destructive periodontal (gum) disease are not able to restore damaged bone and connective tissue support for teeth.'

There are therefore limitations in treating patients with advanced disease. The surgical technique, guided tissue regeneration (GTR) may be able to achieve regeneration and therefore improve upon conventional surgical results. The results of

this review have shown some advantage to using GTR in infra-bony defects but with wide variations in the benefits achievable compared with conventional surgery. We were unable to identify conclusively factors responsible for this variability. Therefore, patients and health professionals need to consider the predictability of the technique compared with other methods of treatment before making final decisions on use. Adverse effects of treatment were generally minor and similar between groups although with an increased treatment time for GTR. We recommend further research to address the issue of variability and to identify which characteristics of the disease or the patient are more clearly associated with a beneficial outcome.'