

a significantly lower, yet effective and fair level of regulation', 97.8% (n = 89) agreed, while only 2.2% of those who voted did not.

When asked if current regulatory demands and their associated risks have caused dentists 'to restrict the range of care I provide compared with that which I have been trained for and/or am capable of providing', 63.1% (n = 53) agreed, while 36.9% reported that the range of care they provide was unaffected. Had these circumstances made 'a higher number of referrals than I believe I would under a significantly lower, yet effective and fair level of regulation', 50% (n = 39) agreed, while 50% indicated their referral patterns were unaffected.

A fourth question sought to assess the extent to which those voting believed their clinical efficiency would increase under a significantly lower, yet effective and fair, level of regulation. Of those who voted, 10.8% believed that their clinical efficiency would increase by between 0% and <2.5%, 21.7% between 2.5% and <7.5%, 30.1% between 7.5% and <15%, while 37.3% (n = 31) believed it would be by more than 15%.

These responses suggest substantial health and defensive-dentistry costs associated with the current level of regulation over those which could otherwise be achieved. Their associated financial costs to patients are likely to be difficult to calculate accurately but are potentially substantial.

The data from the fourth question were used to try and gauge the full potential benefits to patients of a 'significantly lower, yet effective and fair level of regulation' (it is recognised that achievable gains would be lower). Using HSCIC<sup>3</sup> figures for 2014, it is estimated that approximately 4 million additional courses of NHS dental treatment could be provided or the resources allocated to increasing still further the quality of care and dental health education.

In the private dental care sector, it is estimated that the cost of care would reduce by 8.6%, an annual saving to patients of approximately £250 million. (With thanks to GDPUK members who voted.)

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1. National Patient Safety Agency. *Factors influencing dental practitioner performance: a literature review*. National Clinical Assessment Service, 2011.
2. Wright B, Baicker K. *Defensive medicine in Oregon: estimating prevalence and cost*. Available online at <http://www.oregon.gov/oha/OHPB/meetings/2012/2012-0124-liability.pdf> [accessed 11 May 2015].
3. Health & Social Care Information Centre. *NHS Dental Statistics for England – 2013-14*. Available online at <http://www.hscic.gov.uk/catalogue/PUB14738/nhs-dent-stat-eng-13-14-anx4-cot-ccg.csv> [accessed May 2015].

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## ORAL CANCER

### A new therapeutic agent

Sir, because mouth ulceration has a wide range of causes, treatment is most likely to be effective if based on the diagnosis. Aphthous ulceration is common but generally poorly responsive to antibiotics and antipyretics, and the range of agents trialled is testimony to their low efficacy.<sup>1</sup>

Some ulceration that clinically mimics aphthae is serious and the differential diagnosis in a patient with oral ulceration and systemic lesions, such as genital ulceration, accompanied by fever, skin rashes and arthritis includes the possibility of aphthous-like ulceration<sup>2</sup> such as seen in Behcet syndrome<sup>3</sup> or other auto-inflammatory diseases.<sup>2</sup> These are disorders of innate immunity characterised by an exaggerated inflammatory response in the absence of autoantibodies or any identifiable infection which manifest as recurring ulcers but closer scrutiny will reveal episodes of fever and systemic inflammation affecting other mucosae, skin and joints – and with raised inflammatory markers such as the erythrocyte

sedimentation rate.<sup>4</sup> These disorders may show dramatic responses to systemic anti-inflammatory agents such as corticosteroids, colchicine, thalidomide or biologics<sup>5</sup> but unfortunately adverse effects – some serious – are possible with these agents.

Now a new agent apremilast, currently used in psoriasis, has appeared to give some hope at least in Behcet syndrome<sup>6</sup> and has proved effective in treating oral ulcers, the cardinal manifestation of Behcet syndrome. Whether apremilast could be beneficial in aphthous ulceration is unclear as yet but this possible advance, appearing in the medical literature, should also be flagged up to the dental world. Apremilast specifically inhibits phosphodiesterase-4 inhibitor (PDE) that hydrolyses cyclic adenosine monophosphate (cAMP) within immune cells and thus modulates several inflammatory pathways and inhibits spontaneous production of tumor necrosis factor-alpha (TNF). Inhibition of PDE4 blocks hydrolysis of cAMP, thereby increasing levels of cAMP within cells of the immune system and CNS. Adverse effects may include weight loss and depression. More extensive evidence of efficacy in mouth ulceration is keenly awaited.

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1. Baccaglioni L, Lalla R V, Bruce A J *et al*. Urban legends: recurrent aphthous stomatitis. *Oral Dis* 2011; **17**: 755–770.
2. Scully C. Aphthous ulceration. *N Engl J Med* 2006; **355**: 41–48.
3. Case records of the Massachusetts General Hospital. (Case 7-2015.). *N Engl J Med* 2015; **372**: 864–872.
4. Scully C, Hodgson T, Lachmann H. Auto-inflammatory syndromes and oral health. *Oral Dis* 2008; **14**: 690–699.
5. Ter H N, Lachmann H, Ozen S *et al*. Treatment of autoinflammatory diseases: results from the Eurofever Registry and a literature review. *Ann Rheum Dis* 2013; **72**: 678–685.
6. Hatemi G, Melikoglu M, Tunc R *et al*. Apremilast for Behcet's syndrome – A phase 2, placebo-controlled study. *N Engl J Med* 2015; **372**: 1510–1518.

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