

established bone metastases – for management of pain and prevention of pathological fracture. The 2016 statement included recommendations that the use of these highly effective anti-resorptive medications be used in both pre- and post-menopausal women and, crucially, for the prevention of cancer treatment induced bone loss (CBITL) as well as prevention of bone metastases. It is particularly noteworthy that the recommendations mean a significant number of patients will receive anti-resorptive medication concomitantly with systemic chemotherapy.

This sea change of indications for anti-resorptives will produce a large number of young patients who are at relatively high risk of developing MRONJ. Dr Tanna and co-authors correctly assert that education of primary care practitioners is important for effective management of patients who have taken anti-resorptive medications. We would like to suggest that communication and coordination between specialist oncology services, patients and primary care dentists is also of paramount importance in order to minimise adverse effects on this group of patients.

*C. McKechnie, A. McKechnie, by email*

1. Tanna N, Steel C, Stagnell S, Bailey E. Awareness of medication related osteonecrosis of the jaws (MRONJ) amongst general dental practitioners. *Br Dent J* 2017; **222**: 121–125.
2. NICE. 6-year surveillance 2015 - Early and locally advanced breast cancer. 2013. NICE guideline CG80. 2015 Available at: <https://pathways.nice.org.uk/pathways/early-and-locally-advanced-breast-cancer#path=view%3A/pathways/early-and-locally-advanced-breast-cancer/adjuvant-therapy-for-early-and-locally-advanced-breast-cancer.xml&content=view-node%3Anodes-assessment-and-treatment-of-bone-loss> (accessed 20 February 2017).
3. Hadji P, Coleman R E, Wilson C *et al*. Adjuvant bisphosphonates in early breast cancer: consensus guidance for clinical practice from a European Panel. *Ann Oncol* 2016; **27**: 379–390.

DOI: 10.1038/sj.bdj.2017.337

## Water fluoridation

### There is no evidence

Sir, Drs Connett<sup>1</sup> and Osmunson<sup>2</sup> continue to bang their anti-fluoridation drum. Most recently they claim that fluoride is a neurotoxin with the implication that this will lead to neurological defects and reduced IQ in children. They often cite studies in rats and a few studies in China of children in rural areas exposed to high levels of fluoride naturally present in water which in some cases is further contaminated by arsenic. A study more relevant to community water fluoridation (CWF) was recently published by Broadbent *et al.*<sup>3</sup> They followed up almost

1,000 subjects in New Zealand for over 38 years. Their findings do not support the assertion that fluoride in the context of CWF is neurotoxic or linked to reduced IQ.

Recent reviews of human studies commissioned jointly by the Royal Society of New Zealand and the Prime Minister's Chief Science Advisor<sup>4</sup> and a second by the Australian Health and Medical Research Council<sup>5</sup> are quite clear: there is no evidence linking community water fluoridation with neurological defects or reduced IQ. Professionals need to look at these reports and decide whom they prefer to trust.

*J. F. Beal, Leeds  
M. Lennon, Cheshire*

1. Connett P. Is fluoride chemophobia? *Br Dent J* 2017; **222**: 323–324.
2. Osmunson W. Like a knee in the gut. *Br Dent J* 2017; **222**: 324.
3. Broadbent J M, Thomson W M, Ramrakha S *et al*. Community water fluoridation and intelligence: prospective study in New Zealand. *Am J Public Health* 2015; **105**: 72–76.
4. Royal Society of New Zealand and the Office of the Prime Minister's Chief Science Advisor. Health effects of water fluoridation: A review of the scientific evidence. August 2014. Available at: <http://royalsociety.org.nz/expert-advice/papers/yr2014/health-effects-of-water-fluoridation/> (accessed March 2017).
5. Australian Government National Health and Medical Research Council. Draft Information Paper: Effects of water fluoridation on dental and other health outcomes. September 2016.

DOI: 10.1038/sj.bdj.2017.338

### Endorsed effectiveness

Sir, I note the recent letters to the editor from the Fluoride Action Network (FAN) purporting to show the dangers of water fluoridation.<sup>1,2</sup> Unfortunately, FAN has a long history of twisting the evidence base on fluoridation until it squeals. In 2002 the Irish Forum on Fluoridation described FAN Director Dr Paul Connett's submission as '...[failing] to conform to any generally accepted principles for assembling, evaluating and interpreting medical research. There is no explicit statement of the questions being addressed; no systematic search for pertinent research; no use of a *priori* selection criteria to separate relevant from irrelevant research; no critical appraisal of studies to determine their validity and no integration of evidence based on sources of evidence, research design, direction and magnitude of clinical outcomes, coherence and precision. No conclusions can or should be drawn from this poor quality document.'

Similarly, FAN's recent detailed submission to the US Environmental Protection Agency (EPA) alleging that fluoridated drinking water was neurotoxic was debunked in great

detail, with the EPA describing its far-fetched claims as scientifically indefensible.

High quality systematic reviews continue to endorse the effectiveness and safety of water fluoridation.

*M. Foley, Director of Research and Advocacy,  
Metro North Oral Health Services*

1. Connett P. Is fluoride chemophobia? *Br Dent J* 2017; **222**: 323–324.
2. Osmunson W. Like a knee in the gut. *Br Dent J* 2017; **222**: 324.

DOI: 10.1038/sj.bdj.2017.339

## Orthodontics

### Link with obesity

Sir, the excellent study done by Professor Martyn Cobourne and colleagues shows that obesity can affect the oral tissues and this can have effects on orthodontic tooth movement in adolescents.<sup>1</sup> A recent study has mentioned that the probability of meeting the global obesity target is almost impossible.<sup>2</sup> By 2025 global obesity prevalence in men and women will reach 18% and 21% respectively.

Adolescents and adults with an increased BMI may need a longer duration of treatment, with more appointments due to less co-operation and tooth movement.<sup>3</sup> Due to the increase in global obesity more adolescents and adults may require orthodontic treatment and this will add to the economic burden in both developed and developing countries.

*Mahantayya V. Math, Yashoda R. Kattimani,  
Navi Mumbai, Maharashtra State, India*

1. Saloom H F, Papageorgiou S N, Carpenter G H, Cobourne M T. Impact of obesity on orthodontic tooth movement in adolescents. *J Dent Res* 2017; **22034516688448**.
2. NCD Risk Factor Collaboration (NCD-RisC), Trends in adult body-mass index in 200 countries from 1975 to 2014: A pooled analysis of 1698 population-based measurement studies with 19.2 million participants. *Lancet* 2016; **387**: 1377–1396.
3. Von Bremen J, Lorenz N, Ruf S. Impact of body mass index on oral health during orthodontic treatment: an explorative pilot study. *Eur J Orthod* 2016; **38**: 386–392.

DOI: 10.1038/sj.bdj.2017.340

## Fitness to practise

### A question of reputation

Sir, we would like to respond to A. C. L. Holden's critique<sup>1</sup> of our recent paper.<sup>2</sup> We welcome debate on the issue of regulatory scope but we disagree with the characterisation of our position. We do believe behaviour outside the clinic can have a bearing upon professional practice. Our