



Figure 1. Inhibitory action of bisphosphonates on mevalonic path.

- Loose teeth;
- Foul discharge;
- Pain;
- Fistulae.

Lamina dura sclerosis or loss, and periodontal ligament space widening may be early manifestations.

Because BRONJ has a variety of appearances on imaging, the diagnosis cannot be made from imaging alone,

though periapical and panoramic radiographs serve for initial screening. CT and MRI provide a more comprehensive evaluation. Bone scans can show abnormal radionuclide uptake 10 to 14 days before bone mineral loss radiographic changes are seen on conventional films. Tetracycline bone fluorescence has recently been used to visualize margins of osteonecrosis

more precisely: fluorescence-guided bone resection might improve the surgical therapy of BRONJ. HBO may be a possible adjunctive therapy for BRONJ but has yet to be studied.

Surgical resection generally appears not to benefit patients with BRONJ, so this has led to the restricted use of aggressive surgery in symptomatic patients with advanced BRONJ.

## Abstract

### WOULD YOU HAVE PASSED THIS TEST?

Depth and Distance Perception of Dentists and Dental Students. Dimitrijevic T, Kahler B, Evans G, Collins M, Moule A. *Oper Dent* 2011; **36**: 467–477.

Anyone who has taught in a dental school, particularly in the phantom-head classroom, or who has worked with new graduates in vocational training, will be aware that, whilst some students find restorative dentistry relatively easy, some find cavity preparation extremely difficult. Good perceptual and visual skills are essential, not only for gathering information, but also for judging positions, distances and the size of objects and shapes. The authors of this paper suggest that depth and

distance perception tests should be recommended for anyone entering the profession. Their supporting research investigated the ability of qualified dentists and different year-groups of dental students to estimate and reproduce small depths and distances. Various depth and distance perception tests were undertaken involving both estimation and writing tasks. Stereopsis and visual acuity were also assessed. It was found that both depth and distance were consistently over-estimated, although this tended to decrease with experience. All the student groups contained individuals with perceptual problems and who exhibited a large average error for all assessments. These problems may manifest in several task-oriented clinical procedures, for example

measurements on periodontal probes or the selection of appropriate diameter burs. Students with these problems will probably find it difficult to interpret verbal and written preclinical instructions and to acquire the necessary manual skills.

It was disturbing to note that the 163 dental students and 20 experienced dentists who took part in the research were all volunteers, since those who knew that they had such problems, perhaps receiving low marks in their clinical assessments, may have chosen not to take part. Also of significant concern is the authors' suggestion that those with difficulties could be identified and problems remedied, *if possible*, early in their course.

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