we have raised questions on its use in the two cases reported by that article.

Although such a subject is of great interest for both clinicians and child dentists, the results should be cautiously viewed because there are doubts as to whether the diagnostic methods were reliable and efficient as well as whether the clinical procedures and treatment proposed were adequate.

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ankylosis would occur (2). The intent of the case report was not to determine whether ankylosis would occur but when ankylosis would occur.

Our paper states that the community-based endodontist who was providing care for the patient described in case 2 anticipated that a normal periodontal ligament would be established in 3 months to 1 year and that he intended to obturate the canals with gutta-percha at that time. This information was provided to highlight misconceptions about the potential for reversal of ankylosis that are widely held within the dental community. As to the use of the Periotest® for dental trauma,

As to the use of the Periotest<sup>®</sup> for dental trauma, we refer the authors of the above letter to our earlier publication that assessed the efficacy of Periotest<sup>®</sup> diagnosis of post-traumatic ankylosis (1).

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# Response to Development of Ankylosis in permanent incisors following delayed replantation and severe intrusion

An objective measurement technique requires that measurements are produced independently of the individual performing the measurement. By this definition, the Miller Index is not an objective measure of tooth mobility as the assessor provides both the physical stimulus to the tooth and assessment of the magnitude of tooth movement that is produced. The Periotest<sup>®</sup> is an objective measure of tooth mobility but a weak method for diagnosis of ankylosis (1).

In the first case presented the avulsed central incisors were replanted after a delay of approximately 180 min by a dentist in the community. The patient then presented to our hospital clinic for follow-up and additional treatment. As extraoral time is the most significant predictive factor for ankylosis after replantation, it was anticipated that

# Use of hydroxyapatite in tooth replantation radiographically followed up for 14 years

Dear Editor,

The article 'Use of hydroxyapatite in tooth replantation radiographically followed up for 14 years: a case report' by Baldissera et al., which was published in your journal (1), has caused concern amongst us. We know that *Dental Traumatology* has a strong clinical character, and the presentation of the method described in that paper could be mistakenly taken by careless readers. Ethical aspects are, in contrast to the opinion of the authors, of extreme importance and must be taken into account even when it is 'not the focus of the report'.

The authors justify the use of hydroxyapatite because it is a 'biocompatible, osteoconductive material primarily used for bone reconstruction', which does not endorse its use for pulpectomies of

## **Letters to the Editor**

permanent teeth. Moreover, according to the authors, there are no references in the literature on the use of hydroxyapatite in the cases of external root resorption, except as a pulp-capping agent.

One of the studies cited to justify the use of hydroxyapatite (2), in fact, warned against its use for pulpectomies after comparison with calcium hydroxide. Another one (3) just suggests that tetracalcium phosphate-based cement has biocompatibility, which might indicate good potential for its use as a direct pulp-capping agent. Both studies had been carried out after the year 1990, when the treatment in question was instituted, and only rat teeth had been used.

We have found a study by Teodorovic and Martinovic (4) in which hydroxyapatite was successfully used in endodontic therapy; however, it is quite recent and therefore should not be assumed as a reference.

Also without references, the use of lincomicin together with hydroxyapatite was not addressed. The authors do not cite the dosage used in their study, nor discuss its potential for damaging the periapical soft tissues. We still lack some important information on the case report, such as type of trauma suffered, tooth retention time,

and the solution used for irrigating the root canals.

Once such facts are presented, we recommend that the article should be cautiously read as it shows a single case that, despite the success, does not corroborate the research findings obtained according to scientific norms.

Daniel Ibrahim Brito Marcelo de Castro Costa Laura Guimarães Primo

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