

Letters to the Editor *Lettres à la rédaction*

Advanced dental local nerve block anesthesia – A comment

Dear Editor,

We are writing to express concerns with the article written by Dr. O'Morrow on "Advanced dental local nerve block anesthesia" published in the December issue of *The CVJ* (1).

Our primary concerns are the incorrect description of a key principle, the use of inappropriate references, the high number of inaccuracies, and imprecise language.

The description given of pre-emptive analgesia is incorrect. The currently accepted definition of pre-emptive analgesia was introduced by Kissin (2) and states that it "prevents the establishment of central sensitization caused by incisional and inflammatory injuries." The definition presented by the author is unrecognizable from this and appears to confuse potential benefits of analgesia with a defined concept. Furthermore, the ascribed characteristics are confusing and contradictory: it is first stated that it "prevents pain," immediately followed by "[it] reduces intra-operative pain." Other perceived benefits are not adequately explained ("reduces vagally mediated reflex bradycardia" and "reduces hypotension"), and the generalization that 6 to 8 hours of post-operative analgesia results from bupivacaine use is misleading, as this will vary considerably with technique of administration, ongoing levels of pain, and type of nociceptive insult.

There are at least two references cited which are non-peer reviewed opinion (3,4), the lowest class of evidence on which to base clinical decisions (5). Though we accept that high level evidence may not be readily available, the weakness of this approach is neatly illustrated when examining the source of inaccuracies within the article. These range from spelling mistakes identical to those in the referenced material ("Kollar" should be Koller, "Elevil" should be Elavil, "Sodium beta bisulfate" should be sodium metabisulfite), to the inaccurate extrapolation of information from humans to animals. Examples of which are the misquoted incidence of reactions to ester local anaesthetics ["1/3", referenced source states 1:100 (no reference given)], and the statement that purulent material at the injection site reduces efficacy of the local anesthetic. We cannot comment on contraindications to performing local anaesthetic blocks in human dentistry, but we would not recommend performing a local anesthetic block within an infected site or traversing one with a needle due to the risk of disseminating infected material.

For an article aimed at an educated audience, the use of layman's terms is widespread and results in a lack of clarity. For example, "miniscule" (is the author implying that the concentration is irrelevant?) and "major pain control" (versus minor pain control?).

Additionally, Figures 1 and 2 show palatine nerve blocks, not maxillary (as labelled). The needle positioning in Figures 3 and 4 is misleading and at odds with the accompanying descriptions.

This article serves as an advertisement for the benefits of peer review.

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5. Keene BW. Towards evidence-based veterinary medicine. *J Vet Intern Med* 2000;14:118–119.