

Routine systemic antibiotic prescription in the management of permanent avulsed teeth – should we stop?

LETTER TO THE EDITOR

The current accepted guidance for the management of avulsed teeth includes the routine prescription of systemic antibiotics.

Work by the authors (currently unpublished) assessed various guidelines on the management of avulsed teeth, namely the British Society of Paediatric Dentistry (BSPD) guidelines (1), American Academy of Pediatric Dentistry (AAPD) guidelines (2), International Association of Dental Traumatology (IADT) guidelines (3) and the Malaysian Ministry of Oral Health (MOH) guidelines (4), and they all recommend the prescription of antibiotics after an avulsion injury.

The guidelines do vary in their recommendations, with the BSPD and AAPD guidelines not specifying a particular antibiotic, the IADT guidelines recommending the use of Doxycycline three times a day for 7 days (or Penicillin V in children under the age of 12 years old) and the Malaysian guidelines recommending a Penicillin based antibiotic for 5 days. These recommendations have a poor evidence base.

Hinkfuss SE and Messer LB (5) concluded that the evidence for an association between prescribing systemic antibiotic therapy (SAT) and an increased likelihood of acceptable periodontal healing outcome is inconclusive and that the investigation of antibiotic use as defined in the clinical guidelines indicates there is inconclusive clinical evidence from studies of replanted avulsed human teeth to either contradict or support the guideline. Pending future research to the contrary, dentists are recommended to follow current guidelines in prescribing SAT when replanting avulsed teeth.

In the United Kingdom, the National Institute for Health and Clinical Excellence (NICE) has provided recommendations stopping the routine prescription of antibiotic prophylaxis in the prevention of infective endocarditis for at-risk cardiac patients undergoing dental procedures.(6) The guideline states that there is little evidence to support the practise of routinely providing antibiotics as a preventative measure to people at risk of infective endocarditis undergoing interventional procedures. The risks of adverse effects and antibiotic resistance developing outweigh the benefits of any prophylaxis.

Considering the weak evidence base in the prescription of systemic antibiotics for the management of

avulsed teeth on one hand and the potential of serious side effects and development of antibiotic resistance that can occur from antibiotic ingestion on the contrary, should we still be prescribing systemic antibiotics in the management of avulsed teeth?

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