

Abstracts from other journals

M. G. Oliva, D. J. Kenny, S. Ratnapalan.

Nontraumatic dental complaints in a pediatric emergency department. *Pediatric Emerg Care* 24:757-60.

This is a retrospective case note review (audit) of 247 children attending a 'walk in' emergency department, for reasons other than trauma, at Toronto Children's Hospital during 2005. These children comprised only 0.5% of all attendees to this service and half were of pre-school age. The majority attended during normal office hours and noticeably (31%) during vacations. Over half of the children (53%) complained of pain, primarily attributable to dental caries; another 26% had facial swellings; 29% were deemed to have a serious infection and 17 children, this led to a hospital admission. Interestingly, 90% of the subjects were discharged on antibiotics; largely seen by non-dentists so perhaps this is not surprising, but the risk of allergy and increasing bacterial resistance should not be overlooked. For half of the children it was recommended that they should attend the hospital dental clinic the next day. However, their compliance with this advice was not reported but this would be of interest.

In Canada, Emergency Department attendances are free but dental visits are charged. This study did not seek to identify specific reasons for attendance at an Emergency Department in favour of a dental clinic but suggests it may be the young age of these children. The author's state that 29% of children had seen a community dentist beforehand but the details of this attendance were not reported. The readers are informed that part the remit of the community dental service in Canada is to provide dental care for eligible children who do not have health insurance and the authors also suggest that this type of emergency only attendance is costly, particularly in the light of the lengthy waiting times for treatment in the hospital.

F. R. Moura-Leite, M. L. Ramos-Jorge, et al.

Prevalence, intensity and impact of dental pain in 5-year-old preschool children. *Oral Health Prevent Dent* 2008; 6: 295-301.

This was cross sectional study of 549 Brazilian preschool children; care was taken to ensure adequate sample size and that the demographics and cultural discrepancies in the population as a whole were properly reflected. Data recorded was a parental questionnaire, a dental examination by calibrated examiners and a child-reported visual analogue pain (intensity) scale. 25% of parents reported that their child had ever previously complained of dental pain, and 10% in the previous 2 months. This pain had caused the child to cry in 17% of respondents. Pain was reported in 2/3rds of the most socially deprived children and eating mainly triggered this. The majority of children had difficulty eating and 60% further reported that the toothache hampered daily activities. Children reported pain as 'intense' but this has to be treated with caution as the scale has only been validated in 8 year olds. In the 2 months prior to reporting, pain was mainly attributed to: root remnants, fistula and pulpitis. Interestingly, almost a ¼ of the children whose first permanent molars were erupting (n=13) reported pain in the previous 2 months.

This is a well researched and written paper that shows not only the extent and impact of dental pain on families but also confirms that whilst caries is doubtless the commonest disease experienced in children, treatment provision is poor.

Versloot J., Veerkamp J. S., Hoogstraten J.

Pain behaviour and distress in children during two sequential dental visits: comparing a computerised anaesthesia delivery system and a traditional syringe. *Brit Dent J* 2008;505:1-5.

This randomised controlled trial compared pain on injection over sequential treatment visits between the traditional technique and the 'Wand'. Also an aim was to present the results in respect to the level of dental anxiety. 127 subjects completed the study (mean age 6.4 years, SD±1.7, range 4-11 yrs), 87 were considered to be highly anxious and 53 to have low anxiety; based on CFFS scores of 32 and above. The Wand injections were either (i) intraligamentary, (ii) palatal or (iii) buccal- anterior middle superior alveolar. The traditional injections were i) inferior dental block, (ii) palatal or (iii) buccal-anterior middle superior alveolar. Subjects' pain (based on observation of pain related behaviour) and distress (based on Modified Venham Scale) reactions were recorded on video and scored by 2 blinded/calibrated observers over 15 secs intervals during the injection only. The subjects were also invited to self-report on the pain using a visual rating scale augmented by facial images to aid comprehension. The operators selected the tooth on which to carry out treatment before being given the computerised random allocation of the injection method but the actual treatment performed, e.g. restoration or extraction isn't reported.

The key findings were: (1) Wand injections took almost three times longer than the traditional method to administer; (2) the level of anxiety was a significant factor for pain, irrespective of analgesic technique and this was a consistent finding across all 3 measurements employed, but only at the first treatment visit; (3) irrespective of pain measure, there was no difference between the local anaesthetic techniques; (4) the low anxious subjects reported more pain at the second treatment visit.

This is an interesting and thought-provoking paper. Ideas for future studies are explored and the limitations of variation in injection site and volume are adequately discussed, though these would be difficult to control completely in any clinical study. The more anxious children may have less coping behaviours at injection and the low anxious subjects may have become sensitised to the injection leading to higher reporting of pain and distress at the next visit. Therefore, the authors suggest that children should be encouraged to expect realistic amounts of pain.

Pinto A, Balasubramaniam R, Avara-Parastatidis M.

Neuropathic orofacial pain in children and adolescents. *Pediatr Den* 2008;30 : 510-15)

This paper presents an overview of pain of non-dental origin that may present in children and adolescents. Whilst the authors readily report that neuropathic orofacial pain is rare in our paediatric patients, this paper provides a useful reference and might assist in cases where pulpitis and periodontitis have been ruled out. Differential diagnoses, special investigations and treatments are briefly outlined. The objective of this paper is to increase awareness and provide information to paediatric dentists since we may be involved in the management of these rare cases; it does this simply and concisely.