

Knowledge, attitude, and practice survey on management of dental traumatic injuries among dental practitioners

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ABSTRACT

Dental trauma occurs frequently in children and young adults; the emergency care and primary management of such conditions have a significant impact on the vitality and survival of the tooth. As most of the emergency treatment is provided by general dental practitioners, it is important for them to have an adequate level of awareness about the management of traumatic dental injuries. The objective of this survey was assess the level of awareness and current state of knowledge, attitude, and practice (KAP) of management of dental traumatic injuries among general dental practitioners. The aim of this survey was to assess the KAP of management of dental traumatic injuries among general dental practitioners. A questionnaire containing 20 questions of which 7 questions were knowledge-based, 7 questions on attitude, and 6 questions on practical management of dental traumatic injuries were sent to 200 dental practitioners as online forms. 154 responses were recorded. The results suggested that about 90% of general practitioners had a good knowledge, attitude toward management of dental traumatic injuries. However, their practical application was relatively less. Based on this survey it was clear that majority of the general dental practitioners in Chennai had good knowledge, attitude and clinical practice toward management of traumatic dental injuries.

Keywords: Avulsion, dental trauma, knowledge, attitude, practice survey, management of trauma

Introduction

Trauma to oral region occurs commonly accounting for about 5%, of which crown fractures, luxation injuries and avulsion is most frequently encountered.^[1] It is known that majority of dental injuries occur in children aged between 8 and 11 years. The prevalence of dental injuries is 60% out of which over 48% involve maxillary teeth.^[1,2] The emergency care and primary management of such conditions have a significant impact on the vitality and survival of the tooth.

General dental practitioners have the responsibility to diagnose, and either treat the traumatized tooth or refer the patient to a specialist if in case of complicated conditions. Therefore, it is of prime importance for the general practitioners to have well-grounded knowledge about the various presentations of dental traumatic injuries, the clinical techniques to diagnose it and proper management of such conditions.^[3]

Assessment includes a thorough medical and dental history, clinical and radiographic examination, and palpation, percussion, sensitivity, and mobility evaluation.^[4]

This survey assessed the level of awareness and state of knowledge, attitude and practice of management of dental traumatic injuries among general dental practitioners in Chennai.

Materials and Methods

This survey was conducted in the month of December 2016. A questionnaire containing 20 questions of which 7 questions were knowledge-based, 7 questions on attitude, and 6 questions on practical management were designed specifically on dental traumatic injuries and sent to 200 general dental practitioners in Chennai as online forms. Each response was recorded as individual online forms. Of the 200 forms sent through the mail and other means of virtual communication 154 responses were recorded.

Results

Diagnosis of dental trauma

The prime factor responsible for successful management of dental traumatic injury is accurate diagnosis and prompts treatment accordingly.^[3,5-7] It is essential for a general dental practitioner to

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have sound knowledge and skills to diagnose the condition properly as the treatment plan differs for different traumatic conditions. In this survey, a considerable number of questions were asked regarding diagnosis of different traumatic conditions. 59% of the general dental practitioners were aware of the AAE guidelines⁸¹ for radiographs for a traumatized tooth. 57% were rightly mindful that pulp sensibility tests are not reliable for an immediately traumatized tooth.

Management of avulsion

Avulsion of permanent teeth is the most serious of all dental injuries. The prognosis depends on the measures taken at the place of accident and the extraoral dry time.^{19,101} Replantation was the treatment of choice for 90.3% of dentists. 82.5% preferred hanks balanced salt solution as an ideal transport medium for avulsed tooth. Around 72% were aware of the complication of replantation.

Management of open apex

Management of traumatized teeth with conditions such as resorption and immature apex becomes tricky. Factors such as size of pulp exposure and duration of exposure are important for deciding the treatment plan.¹¹¹⁻¹⁴¹ For questions asked on the treatment of open apex with pinpoint pulp exposure and <24 h duration, 61% answered direct pulp capping to be the treatment of choice. Moreover, 51.3% answered to do pulpotomy for open apex with large pulp exposure, with duration more than 24 h.

Discussion

General dental practitioners in Chennai have a sound knowledge on overall diagnosis and management of dental traumatic injuries. The reason could be the knowledge gained during their undergraduate program and also the awareness and information available through internet. However, the application of the acquired knowledge and the protocols to be followed during complex procedures like replantation, advances in diagnosis such as cone-beam computed tomography remains obscure.¹¹⁵¹ This may be possibly due to the lack of exposure to varied clinical cases and lack of guidance and practice in this aspect. Creating awareness by means of CDE programs and demos and workshop on practical management of dental traumatic injuries will be useful.

Conclusion

Based on this survey it is clear that majority of the general dental practitioners in Chennai, have a good knowledge, attitude toward

management of traumatic dental injuries. However, their clinical application and approach in managing dental traumatic injuries needs to be explored and improved.

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