

Dental Congress 2019 Intrusive luxation : From reflexion to decision : About two cases reports- M.Lferde, University Medical Center

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Luxation injuries are one of the most prevalent type traumatic dental injuries in primary dentition. The impact of these injuries may not only be limited to the primary teeth but may also have adverse effects on the developing succedaneous tooth bud resulting in various unfavorable consequences. This systematic review aims at compiling the evidence of available literature regarding luxation injuries to primary teeth, etiology, treatment modalities, outcomes and sequelae on permanent teeth. Methodology Search of PubMed, Google Scholar, and Cochrane Database of Systematic Reviews, SCOPUS and LILACS virtual health library was conducted for the literature published from January 1, 2007 to December 31, 2017. Two authors separately reviewed the literature and extracted the data from the included studies. Results After screening 224 articles, 13 articles fulfilled the inclusion criteria. Most common etiological factor for injury (up to 44.8%) is fall while walking or running. The unfavorable outcomes which are mostly associated with luxation injuries are pulp canal obliteration ranging from 8.6% to 43.3% and pulp necrosis 8.6%–78.9%. Sequelae on succedaneous teeth vary with a high incidence of white or yellow brown discoloration of enamel (78%) and enamel hypoplasia (7.8%–28.3%). Conclusion Fall is the most common cause and regular monitoring is recommended for most of the luxated teeth. Pulp canal obliteration, pulp necrosis and tooth loss due to trauma are prevalent complications observed following luxation. White or yellow brown discoloration of enamel and enamel hypoplasia are the most common undesirable se-

quelae to permanent teeth.

Intrusive luxation is one of the most severe forms of traumatic injuries in which the affected tooth is forced to displace deeper into the alveolus. As a consequence of this type of injury, maximum damage occurs to the pulp and all the supporting structures. Luxation injuries involve the displacement of the tooth from its normal position. They most commonly involve one or more maxillary incisors and may also involve root or crown fractures. ... With all luxation injuries, the following complications may occur: darkening of the tooth as a result of pulpal death.

Traumatic dental injuries (TDIs) occur most frequently in children and young adults. Older adults also suffer TDIs but at significantly lower rates than individuals in the younger cohorts. Luxation injuries are the most common TDIs in the primary dentition, whereas crown fractures are more commonly reported for the permanent teeth. Proper diagnosis, treatment planning and follow-up are very important to assure a favorable outcome. These updates of the International Association of Dental Traumatology's (IADT) Guidelines include a comprehensive review of the current dental literature using EMBASE, MEDLINE, PUBMED, Scopus and Cochrane Databases for Systematic Reviews searches from 1996-2019 and a search of the journal Dental Traumatology from 2000-2019. The goal of these guidelines is to provide information for the immediate or urgent care of TDIs. It is understood that some follow-up treatment may require secondary and tertiary interventions involv-

ing dental and medical specialists with experience in dental trauma. As with previous guidelines, the current working group included experienced investigators and clinicians from various dental specialties and general practice. The current revision represents the best evidence based on the available literature and expert opinions. In cases where the published data were not conclusive, recommendations were based on the consensus opinions of the working group. They were then reviewed and approved by the members of the IADT Board of Directors. It is understood that guidelines are to be applied using careful evaluation of the specific clinical circumstances, the clinician's judgment and the patient's characteristics, including the probability of compliance, finances, and a clear understanding of the immediate and long-term outcomes of the various treatment options versus non-treatment. The IADT does not, and cannot, guarantee favorable outcomes from adherence to the Guidelines. However, the IADT believes that their application can maximize the probability of favorable outcomes.

Introduction: Dental intrusion corresponds to the axial displacement of the tooth into the alveolar bone. Rather infrequent, it represents between 0.3 and 1.9% of traumas in permanent dentitions. It occurs mostly in children between the ages of 6 and 12 and generally affects only one tooth.

Case report: First case: The patient, B.K, was a 9 year old child that reported to the Rabat Dental Treatment and Consultation Center (DTCC) in emergency following a fall at home. After clinical and radiographic examination, the diagnosis of the intrusion of the two

immature central maxillary incisors was made. The management of the case consisted in the therapeutic abstention with regular follow-up. Spontaneous re-eruption of the teeth occurred 3 weeks after the trauma.

Second case: The patient Z.M, was a 14 year old teenager, who was sent to the DTCC of Rabat in emergency following a public road accident. After clinical and radiographic examination, the diagnosis of the intrusion of the upper right central incisor was made. The treatment consisted of a surgical repositioning of the tooth.

The clinical and radiological follow-up of the two clinical cases was spread over 18 months.

Discussion: Intrusive luxation is the most severe form of dental trauma. Axial shock usually causes considerable pulpal and periodontal complications. The treatment is complex since the prognosis is often unfavorable with inevitable complications. To date, no treatment has been found better than another. Besides, the incidence of pulp necrosis, all methods combined, varies from 45% to 96%.The therapeutic modalities depend on the age of the child, the stage of the root formation but also the importance of the vertical dislocation.

Conclusion: Intrusive luxation, although rare, is the most severe form of traumatic emergencies .Successful treatment requires rigorous clinical and radiographic examination that allows reasoned decision-making ranging from therapeutic abstention to active repositioning