

Evaluation of treated traumatic dental injuries at 6 months follow up in a group of children

S. S. Kalubowila^{*}, A.H.M. Shazli, V. Vijayakumaran and E.M.U.C.K Herath

*Department of Community Dental Health, Faculty of Dental Sciences,
University of Peradeniya, Sri Lanka
^{*}samudikalubowila@gmail.com*

Traumatic dental injuries of the permanent dentition are common among children all over the world, leading to significant health and social problems. Management of traumatized teeth is challenging, as this requires accurate diagnosis, prompt treatment planning and pertinent clinical skills. Long term follow-up is essential since complications can arise even several years following treatment. The objective of this study is to evaluate treatment outcome at the six month review appointment in a group of children treated at the Division of Paedodontics, following trauma to the permanent dentition.

A retrospective study was conducted at the Division of Paedodontics, Dental Hospital –Peradeniya, with the use of clinical records of patients who had undergone traumatic dental injuries during the year 2013 to 2016 time period. The sample consisted of 104 patients involving 188 traumatized teeth, but out of those patients, the turnover at the 6 months follow-up visit was only 23% (24 patients, 52 teeth). Data analysis was done with the use of SPSS 17.0 statistical software.

Out of the total 52 teeth, 38.5% had open apices and 78.8% were vital, even though 65% of them were delayed presentations. Uncomplicated crown fractures (25) were treated with composite build-ups, among which 96.42% gave a vital response at the 6 months review visit. Calcium hydroxide pulpectomies were carried out on 4 teeth with complicated crown fractures as those children presented late with non-vital teeth. Out of the 9 luxated teeth (concussion-4 & subluxation-5), 8 teeth gave vital responses on the initial visit and all these teeth remained vital at the 6 months review visit. Splinting was done only for 1 tooth with subluxation, while antibiotics were prescribed to most of the children with periodontal injuries. Compared to the management of teeth with single injuries, the management of teeth with multiple injuries was complicated and they showed poor prognosis.

The results of this study indicated a statistically significant low turnover ($p < 0.5$) for the review appointment at six months, even though long term follow-up is mandatory. Hence, public awareness on prevention, quest for immediate treatment and necessity for long term follow-up following dental trauma should be emphasized and promoted.