

## **An evaluation of awareness and practices regarding management of avulsed teeth among Paediatricians in a district of north India**

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### **Abstract:**

**Objective:** To evaluate the awareness and practices regarding management of avulsed teeth among paediatricians in a district of north India.

**Methods:** A multiple choice questionnaire comprising of 10 items was formulated to assess the knowledge, attitude and practices of medical professionals regarding first aid and management of "tooth loss" (Avulsion). The study involved a sample of 314 medical doctors who were either attached to the institutes or into private practice in the district of Lucknow, UP, India. Questionnaires were electronically mailed to 400 participants followed by a reminder email after fifteen days. If did not respond after 30 days, they were excluded from the study. The results are presented in percentages.

**Results:** About one third (34.7%) of the participants had experienced children visiting to them with tooth avulsion. A large number of 62.7% participants stated that it would be wise to seek an immediate consultation with the dentist on the contrary to a small 15% who believed consultation was not required. Out of those participants who had witnessed patients reporting in their practice with avulsed tooth, 48.6% of them referred such patients to dentists immediately without intervening however, a small number of participants (17.4%) opted to place the tooth back into the socket and refer patients to dentists.

**Conclusion:** A small percentage of practising about the avulsion teeth by the practitioners in this study indicates a serious problem for dental health. There is a need an educational campaign regarding this.

**Key words:** Avulsed teeth, Awareness, Paediatricians

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### **I. Introduction**

Children may experience injuries ranging from simple enamel fracture to complicated maxillofacial trauma. Epidemiological data clearly demonstrate that maxillary central and lateral incisors are the most frequently avulsed primary teeth with an incidence of between 7-12%.<sup>1-4</sup> Consequently, paediatricians and also dentists who treat a significant number of children under 4 years of age are likely to encounter a child with an avulsed maxillary incisor and also the first to actually provide primary treatment. In order to provide adequate treatment for dental trauma the medical professionals need to know the basics of managing such conditions. Not many studies have been carried out to assess the awareness and knowledge of medical professional in assessment and providing primary care to children with trauma resulting in avulsion.

The present study was conducted to evaluate the awareness and practices regarding management of avulsed teeth among paediatricians in a district of north India.

### **II. Materials And Methods**

A multiple choice questionnaire comprising of 10 items was formulated to assess the knowledge, attitude and practices of medical professionals regarding first aid and management of "tooth loss" (Avulsion). The study involved a sample of 314 medical doctors who were either attached to the institutes or into private practice in the district of Lucknow, UP, India. Questionnaires were electronically mailed to 400 participants followed by a reminder email after fifteen days. If did not respond after 30 days, they were excluded from the study. The results are presented in percentages.

### **III. Results**

A total of 314 physicians agreed to participate and replied the completely filled questionnaires. About one third (34.7%) of the participants had experienced children visiting to them with tooth avulsion. A large number of 62.7% participants stated that it would be wise to seek an immediate consultation with the dentist on the contrary to a small 15% who believed consultation was not required. However, others would either wait for

30 minutes (7.6%), wait for few hours (1.3%) or until the next day (3.5%). About one tenth (9.9%) stated they would either prescribe analgesics and antibiotics or control bleeding and take care of lacerations, if any (Table-1).

Out of those participants who had witnessed patients reporting in their practice with avulsed tooth, 48.6% of them referred such patients to dentists immediately without intervening however, a small number of participants (17.4%) opted to place the tooth back into the socket and refer patients to dentists. However, 19.3% provided first aid to patients but discarded the tooth at the same time and the rest 14.7% would administer tetanus toxoid to traumatised children invariably (Table-2).

#### **IV. Discussion**

Tooth avulsion constitutes an emergency for children and adolescents and therefore necessitates management approaches ensuring survival of the avulsed tooth/teeth. Re-implantation of the avulsed tooth may be a promising treatment modality to increase the life of the tooth and reduce the economics of treatment manifold. Since physicians and paediatricians are the primary care providers for children in many situations, it is imperative for them to have knowledge about first hand management of dental trauma. In the present study, a substantial (34.7%) of the participants had witnessed patients coming to them with the chief complaint of “tooth loss” or “fallen off” tooth yet somehow it never occurred to most of them to either seek required dental advice or attend educative programmes for the same. What could be largely appreciated was that almost all realized the importance of conserving time in such cases and referring patient for prompt evaluation by dentist in this study. According to Heithersay<sup>5</sup>, the value of immediate replacement and treatment of the tooth should be a priority. Time is a critical factor in successful re-plantation. The avulsed tooth should be washed and replaced immediately. But, few 17.4% of the participants in this study were confident and readily practised placing the tooth back into the socket. Previous studies by Krishnaraj<sup>6</sup> and Holan and Shmueli<sup>7</sup> had reported that only 5.5% and 4% respectively have tried re-implantation.

McCann et al.<sup>8</sup> found that physicians and medical undergraduates in the United Kingdom were inadequately educated about oral lesions, indicating serious deficiencies in diagnostic awareness. The existing health education system should provide more courses on dental and dentofacial trauma management for physicians and medical residents. Although the dentist will provide a definitive treatment to follow, it becomes essential that the medical professionals gather and possess basic knowledge of the primary management of tooth avulsion.

#### **V. Conclusion**

A small percentage of practising about the avulsion teeth by the practitioners in this study indicates a serious problem for dental health. There is a need an educational campaign regarding this.

#### **Acknowledgement**

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#### **Conflict of interest**

None

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None

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**Table-1: Attitude of participants towards the patients with avulsion teeth**

Attitude*	No. (n=314)	%
Experienced in visiting children to them with avulsion tooth	109	34.7
Wised to seek an immediate consultation with the dentist	197	62.7
Consultation not required.	47	15.0
wait for 30 mins	24	7.6
Wait for few hours	4	1.3
Wait for next day	11	3.5
Prescribed analgesics and antibiotics	31	9.9

\*Multiple response

**Table-2: Practice of participants towards the patients with avulsion teeth among experienced participants**

Practice	No. (n=109)	%
Referred child immediately	53	48.6
Placed the tooth back into the socket and refer patients to dentists.	19	17.4
Provided first aid to patients but discarded the tooth at the same time	21	19.3
Administer tetanus toxoid to traumatised children invariably	16	14.7