CLINICAL PRACTICE GUIDELINES

MANAGEMENT OF AVULSED
PERMANENT ANTERIOR TEETH IN CHILDREN

ORAL HEALTH DIVISION MINISTRY OF HEALTH MALAYSIA

2002
FOREWORD

The clinical practice guidelines on 'Management of Avulsed Permanent Anterior Teeth in Children' was prepared by a committee of paediatric dental specialists from the public and private sectors, dental officers and dental nurses in the Ministry of Health Malaysia. It is to be used as a source of reference to assist relevant personnel in the management of avulsed permanent anterior teeth in children.

Accidents at home, school or playground due to common childhood activities can result in traumatic injuries to the teeth. One such injury is avulsion or total displacement of the tooth out of its socket. This is a very traumatic and frightening experience for the child, parents or bystanders. Traumatic dental injuries usually imply wound-healing processes in the periodontium, the pulp and sometimes associated soft tissue. The outcome of these various processes determines the final healing result. Recent advances in the understanding of wound healing related to dental trauma, tooth and bone transplantation and implantation have opened up new treatment avenues which for the first time makes it possible to restore even the most traumatised dentition. The correct and timely management of these cases can increase the success of treatment.

Successful replantation of avulsed anterior permanent teeth can delay or negate the need for prosthetic or complex and expensive restorative procedures. Several studies have shown that teeth can function for 20 years or more after replantation, and a number of cases have been reported where replanted teeth have been functional for 20 to 40 years with a normal periodontium. Such reports demonstrate that replanted teeth, under certain conditions, can maintain their integrity and function. It is hoped that the availability of these guidelines will create a greater awareness among health care providers of the appropriate and timely management of avulsed permanent anterior teeth in children.

Datin Dr. Rohani bt. Ramli

Director of Oral Health,

Ministry of Health Malaysia.
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**KEYWORDS**

*Avulsion*

*Permanent anterior teeth*

*Transportation media*

*Extra-alveolar period*

*Replantation*
INTRODUCTION

PREVALENCE AND AETIOLOGY

It is reported that up to 30% of children have been exposed to accidental injuries to the teeth by the age of 15 years.

About 0.5% - 16% of all accidental injury to the teeth involve avulsion or total displacement of the tooth out of its socket.¹ ²

Upper anterior permanent central incisors are the teeth most frequently avulsed.

Avulsion injury is most frequently seen in children between the ages of 7 – 9 years. The periodontal ligament surrounding the erupting teeth is loosely structured and the alveolus is elastic at these ages. These factors offer only a minimal resistance to an extrusive force.

The common causes of injury are falls, collisions, and accidents during common childhood activities such as contact sports, cycling, swimming, fights, etc.

PATHOPHYSIOLOGY

Extrusive forces impinging on the teeth, when severe enough, can cause a tooth to be displaced out of its socket.

For this to happen, the periodontal ligament would have ruptured with remnants remaining on the cementum of the root of the tooth and the inner walls of the alveolar socket.

The vessels entering the pulp through the apical foramen would also have been severed with cessation of blood supply to the pulp.

The extent of injury sustained by the periodontal ligament and the pulp, and the subsequent healing of these tissues will depend on the extra-alveolar period i.e. the time the tooth remains out of its socket and the handling of the tooth.

PULPAL REACTIONS

A number of animal studies have shown that the pulp can be completely revascularised in immature avulsed teeth. Several factors influence the pulpal reaction such as the width of the apical foramen, the extra-alveolar period and the storage medium.³ ⁴

The chances of revascularisation are highest when the apical foramen width is large, the extra-alveolar time is short and the tooth is stored wet.

The absence of bacterial contamination is considered an essential requirement for complete revascularisation.

It should be appreciated that studies on pulpal reactions are usually carried out on animal models as these studies cannot be carried out in human models as this will involve the removal of sound teeth for histological purposes.
PERIODONTAL LIGAMENT REACTIONS

Four types of healing modalities have been described depending on the severity of injury sustained by the periodontal ligament: 5.6.

(i) Healing with normal periodontal ligament

Complete regeneration of the periodontal ligament along the root surface usually takes about 7 – 14 days. This will only occur if the periodontal ligament cells remain vital.

(ii) Healing with surface resorption

Histologically, areas of localised resorption on the root surface are seen. Subsequently, these areas become repaired with normal cemental tissue.

Clinically, the tooth is asymptomatic and has a normal percussion tone.

(iii) Healing with replacement resorption

Histologically, fusion of bone and root surface is observed. Clinically, the tooth is not mobile. It may become infra-occluded over time and give a high percussion tone.

This occurs when there is failure of regeneration of the periodontal ligament.

(iv) Healing with inflammatory resorption

Histologically, it is characterised by areas of resorption in bone and the adjacent root surface. This may progress till the tooth becomes mobile and extruded.

Clinically, the percussion tone is dull. The patient may present with pain

Note: More than one type of reaction may be present at any one time.

NEED FOR CLINICAL PRACTICE GUIDELINES

Accidents at home, school or playground due to common childhood activities can result in avulsion of permanent anterior teeth. This is a very traumatic and frightening experience for the child, parent or bystanders. The mishap can occur at anytime and place.

The correct management of these cases at the site of incident can increase the success of treatment. It is felt that at the present time, there is a lack of knowledge among parents, children themselves, teachers and health care professionals on the management of this problem.

It is hoped that with the availability of these guidelines greater awareness among health care workers can be created for the appropriate and timely management of avulsed permanent anterior teeth in children.

The permanent anterior teeth play a very important role in the overall functional and aesthetic development of a child’s face and as such every endeavor should be made to prevent premature accidental loss of these teeth.
The successful replantation of avulsed anterior permanent teeth can delay or negate the need for prosthetic or complex and expensive restorative procedures. An alternative treatment to preserve the arch integrity is the orthodontic realignment of teeth to close the space resulting from the avulsion followed by complex restorative work. However this treatment is time consuming and costly.

DEVELOPMENT OF THE CLINICAL PRACTICE GUIDELINES

An extensive review of the relevant literature and recommendations based on the clinical experience of individuals experienced in the management of such injuries formed the basis of development of the guidelines. Wherever possible the guidelines have been tailored to suit local needs.

It should be noted that the literature on the topic consisted of:

- clinical trials
- animal studies
- case reports
- opinion articles

Many recommendations are based on studies using animal models. As such the guidelines should not be seen as conclusive but serve as a guide, at best, for the management of such cases.

Prior to the development of the final draft, the Clinical Practice Guidelines was extensively reviewed by the relevant dental specialists in the Ministry of Health and University Malaya as well as general dental practitioners and selected members of the dental associations.

The final judgement will lie in the hands and experience of the clinician. It should be appreciated that in studying a subject such as avulsed teeth, clinical trials are not possible to perform. Animal models may be useful but not totally conclusive when applied to human subjects.

The Clinical Practice Guideline Development Group will attempt to review this guideline within 2 years after its first publication.

A simplified version of this guideline has also been developed and attempts will be made to disseminate it widely to the public.

IMPORTANCE OF REPLANTATION

Although in many cases a replanted tooth survives only a matter of years, during this period it serves as a natural space maintainer whilst growth occurs and also enables alveolar height to be preserved. This greatly simplifies future prosthetic rehabilitation by means of bridge or implant placement in the event of failure of the replanted central incisor.

Moreover it is generally recommended that implants should not be placed in children who are still actively growing. This means that children are not suitable for implants until they are at least 16
years of age. However, if a traumatised incisor is lost at an early age there may also be insufficient alveolar bone at the age of 16 years to support an implant. This, therefore, highlights the value of replanting teeth even if long term prognosis is poor. If a tooth can be maintained until the child reaches 16 years, alveolar bone is preserved and placing an implant becomes a serious option.

In children with anterior crowding some authorities advocate closure of the lost incisor space by orthodontic means. Although an initial consideration for space closure may appear to be the treatment of choice, the modification of adjacent teeth to simulate the missing incisor is often of concern. There are, however, many problems arising from disguising the lateral incisor and modifying the canine and premolar teeth.

Therefore, in most cases replantation of an avulsed tooth is considered the best treatment.1,2

CONTRAINDICATIONS FOR REPLANTATION

In the following instances a clinician may judge that replantation is better not to be attempted:

1. The avulsed tooth has extensive caries and evidence of advanced periodontal disease.
2. Dry or inappropriate storage.
3. The alveolar socket has major comminutions or fracture.
4. The patient is not co-operative.

In a few cases replantation is clearly not appropriate. These cases are as follows:

a. Where other injuries are severe and require preferential emergency treatment or intensive care, for example a child with concomitant severe head injury or polytrauma which requires more urgent attention.

b. When there is compromised medical history. Avulsed teeth should not be replanted in cases where doing so would place the patient at risk. For example, patients with heart lesions who are at risk of developing bacteraemia or patients with depressed immunity as in acute lymphoblastic leukemia who are at risk from infections. It may be possible in some cases to safely replant teeth in such individuals but this should only be carried out in liaison with the physician in charge of their medical care.7

c. When the immature permanent tooth has a short root with wide open apex and there is prolonged dry extra-alveolar time. If the dry extra-alveolar time is long then replacement resorption is inevitable. As replacement resorption occurs at a higher rate in a young person and these teeth already have a short root, the prognosis is very poor. In most of these cases replantation is not warranted.
EMERGENCY MANAGEMENT

AT THE SITE OF INJURY

Advice to VICTIM, PARENT, TEACHER, BYSTANDER

The philosophy for the treatment of avulsed teeth is to replant the tooth immediately or as quickly as possible after avulsion.

Time is the critical factor.

Ø Pick the tooth by its crown. Do not handle the root.
Ø Check to see if the root surface is clean.
Ø If dirt is present on the root, rinse gently with cold fresh milk, saline or tap water in order of preference. Do not scrub dirt off the root.
Ø Place the tooth the right way round into its socket.
Ø Get the child to bite on a clean, folded handkerchief to keep the tooth in place.
Ø Go to the nearest dental clinic as soon as possible.

TRANSPORTATION

If, for any reason, it is not possible to replant the tooth at the site of accident, store the tooth in a suitable medium to be transported to the dental clinic. The best transport medium is the tooth socket itself.

Ø Never transport the tooth dry
Ø Do not transport in tap water.
Ø Transport media are
  1. Fresh or UHT milk (cold). Not condensed or powdered milk.
  2. Physiological saline (0.9% sodium chloride). Do not attempt to make your own saline solution.
  3. Saliva. Get the child to spit into a clean container. Ensure tooth is kept moist at all times.
  4. In the event that the above media are unavailable, the tooth should be placed in a clean plastic bag for transportation.
5. The tooth may also be placed in the buccal sulcus. However this is not recommended for fear of accidental swallowing or aspiration.

Ø Go to the nearest dental clinic or hospital emergency service as soon as possible.

Many studies have recommended various types of storage media. For example, pH balanced cell preserving solutions such as Hank's Solution / Emergency Tooth Preserving System, Emdogain\(^1\) and Viaspan\(^1\) have been recommended. However these media are not widely available locally at the present time. Of late, chicken egg white\(^1\) has been suggested as a possible storage medium. The critical factor of transportation is to keep the tooth moist at all times.

**AT THE DENTAL CLINIC/EMERGENCY DEPARTMENT**

Management by DENTAL SURGEON, MEDICAL OFFICER, MEDICAL ASSISTANT, STAFF/DENTAL NURSES

Ø Place the tooth in physiological saline.

**History**

Ø Obtain and record accident history.

Ø Obtain medical history.

**Examination**

Ø Rule out presence of other injuries i.e. head and neck injuries.

Ø Examine for presence of soft tissue lacerations, bone fractures.

**Investigations**

Ø Obtain dental periapical radiograph for baseline records.

The above procedures should be carried out quickly but thoroughly so that precious time is not wasted. The aim is to replant the tooth as soon as possible, where appropriate.

**REPLANTATION**

Ø Administer local anesthesia

Ø Gently irrigate socket with normal saline.

Ø Avoid scrapping or curettage within the socket.

Ø Handle the tooth by its crown only.

Ø If the root is contaminated, run physiological saline over the tooth. If dirt is stubborn, gently dab with gauze soaked in saline.
Ø Seat the tooth back gently into its socket using light finger pressure. Do not use excessive force to try to seat back into socket.

Ø Instruct child to bite on a piece of gauze.

Ø If socket walls are fractured, and unable to replant tooth, reposition bone gently using a blunt instrument.

**SPLINTING**

Ø Splint teeth to adjacent teeth using semi rigid method. May use direct resin (composite or acrylic) splint or soft wire (gauge 0.5-0.7) together with composite or acrylic resin.

Ø Splint teeth for 7 – 10 days. If alveolar bone is fractured, splint for 3 weeks.

Ø Take a periapical dental radiograph to ascertain position of replanted tooth and as baseline information.

Ø Give home care advise during splinting such as:

  - Avoid biting on splinted teeth
  - Take soft diet
  - Maintain good oral hygiene.

**MEDICATIONS**

Ø Check Tetanus immunisation status. Arrange to give ATT booster if necessary.

Ø Prescribe oral antibiotics for 5 days, preferably penicillin based.

Ø Prescribe 0.2% or 0.1% chlorhexidine gluconate mouthwash twice daily for 1 week.

Ø Prescribe the appropriate analgesic, if necessary.
FOLLOW UP

TOOTH WITH CLOSED APEX

C 12,13,21,22,23,24,25,26

ONE WEEK

Ø Check for clinical signs and symptoms of infection*
Ø Commence root canal treatment.
  i. Extirpate pulp.
  ii. Carry out mechanical preparation of canal.
  iii Dress canal with calcium hydroxide paste taking care not to overfill
Ø Seal access cavity with suitable intermediate restorative materials such as IRM,GIC etc.
Ø Take radiograph to check for adequacy of fill.
Ø Remove splint if tooth is fairly firm. If not, review weekly until firm.

ONE MONTH

Ø Check for clinical signs and symptoms of infection*
Ø Take periapical dental radiographs.
Ø Change calcium hydroxide paste, if signs and symptoms of infection present or radiograph shows inadequate filling of the canal.

THREE MONTHS

Ø Check for clinical signs and symptoms of infection*
Ø Take periapical dental radiographs.
Ø Change calcium hydroxide intra-canal dressing if necessary.
Ø Review 6-monthly to change intra-canal dressing. If after 2 years, there is no evidence of pathology, seal canal with gutta percha followed by restoration of the tooth.

TOOTH WITH OPEN APEX

ONE WEEK

Ø Check for clinical signs and symptoms of infection.*
Ø Check for pulp vitality.
Ø Remove splint.

Ø When signs and symptoms arise institute apexification procedures

MONTHLY FOR 3 MONTHS

A. If previously tooth vital.
   Ø Check for clinical signs and symptoms of infection.*
   Ø Check for pulp vitality.
   Ø Take periapical dental radiographs.

B. If apexification has been instituted.
   Ø Check signs and symptoms of infection.*
   Ø Take periapical dental radiographs.
   Ø Change calcium hydroxide if necessary

THREE MONTHLY FOR 6 MONTHS

A. If previously tooth vital.
   Ø Check for clinical signs and symptoms of infection.*
   Ø Check for pulp vitality.
   Ø Take periapical dental radiographs.

B. If apexification has been institute.
   Ø Check signs and symptoms of infection.*
   Ø Take periapical dental radiographs.
   Ø Change calcium hydroxide if necessary.

SIX MONTHLY

A. If previously tooth vital.
   Ø Check for clinical signs and symptoms of infection.*
Ø Check for pulp vitality.

Ø Take periapical dental radiographs.

Ø When signs and symptoms arise institute apexification procedures.

**B. If apexification has been institute.**

Ø Check signs and symptoms of infection.*

Ø Take periapical dental radiographs.

Ø Change calcium hydroxide if necessary.

The objective of apexification procedures is to achieve either continued root growth or formation of a calcified apical barrier. This may be assessed radiographically or clinically at each review visit. If calcium hydroxide change is necessary use Glass Ionomer Cement (GIC) or Poly-F cement to seal access cavity in between visits. Once apical closure is achieved, seal canal with gutta percha and restore tooth.

After completion of root canal treatment the tooth should be reviewed yearly for five years to ensure that no signs or symptoms of infection are present.*

* Clinical signs and symptoms include:

  i. pain/ tenderness

  ii. swelling/ sinus

  iii. mobility

  iv. tooth discoloration.

**ADDITIONAL CONSIDERATIONS**

The outcome of treatment depends on the physiological condition of the periodontal ligament cells and pulp tissue at the time of replantation. All endeavours should be made to ensure that these cells are not compromised or injured further at the time of replantation.

Immediate replantation gives better prognosis. However, in the event of prolonged extra-alveolar period with dry storage where PDL cells are not expected to be viable, attempts should still be made to replant but pre-replantation conditioning of the tooth is required. Immediate referrals / consultation to a Paediatric Dental Specialist is highly recommended.
ALGORITHM

Avulsed Tooth

Immediate replantation on the spot         immediate replantation not possible

Store in appropriate storage medium

Should the tooth be replanted

No                                          Yes

replace with space maintainer/close space orthodontically

i  Semi-rigid splint for a week
   ii  Base line radiograph
   iii  Home care advice
   iv  Medications

Is Apex closed

No                                          Yes

1 week                  1 week

i  Remove splint
   ii  Check sign/symptom

i  Remove splint-tooth firm

ii  Commence RCT
   iii  Dress canal with Ca(OH)
1 month

i Take periapical radiograph

ii Check sign/symptoms

1 month

i Check sign/symptoms

ii Change Ca(OH)\(_2\) if regd

3 months

i Check sign/symptoms

ii To take periapical radiograph

iii Start RCT when S/S arise

3 months

i reviews 6 monthly intervals till 2 yrs

ii Change Ca(OH)\(_2\) if necessary

iii if no pathological changes

obturate the canal
<table>
<thead>
<tr>
<th>APICAL MATURITY</th>
<th>TOOTH CONDITION</th>
<th>EXTRA ALVEOLAR PERIOD</th>
<th>MANAGEMENT</th>
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<tr>
<td>Open apex</td>
<td>Dry</td>
<td>&lt; 30 mins</td>
<td>Replant tooth immediately and splint. Monitor vitality and institute apexification if tooth non vital</td>
</tr>
<tr>
<td>Open apex</td>
<td>Dry</td>
<td>30mins - 1 hour or more</td>
<td>Replant tooth and splint. Institute apexification procedures</td>
</tr>
<tr>
<td>Open apex</td>
<td>Moist</td>
<td>&lt;1 hour</td>
<td>Replant tooth immediately and splint. Institute apexification procedure when necessary.</td>
</tr>
<tr>
<td>Open apex</td>
<td>Moist</td>
<td>&gt; 1 hour</td>
<td>Replant tooth and splint. Institute apexification procedure when necessary.</td>
</tr>
<tr>
<td>Closed apex</td>
<td>Dry</td>
<td>&lt; 30 mins.</td>
<td>Replant tooth immediately. Splint and monitor for vitality. Institute RCT if tooth becomes non-vital.</td>
</tr>
<tr>
<td>Closed apex</td>
<td>Dry</td>
<td>30 mins-1 hour</td>
<td>Replant tooth and splint. Institute RCT.</td>
</tr>
<tr>
<td>Closed apex</td>
<td>Dry</td>
<td>&gt; 1 hour</td>
<td>Institute prereplantation conditioning. Replant tooth and Splint. Institute RCT.</td>
</tr>
<tr>
<td>Closed apex</td>
<td>Moist</td>
<td>&lt; 1 hour</td>
<td>Replant tooth and splint Institute RCT.</td>
</tr>
<tr>
<td>Closed apex</td>
<td>Moist</td>
<td>&gt; 1 hour</td>
<td>Replant tooth and splint. Institute RCT.</td>
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REFERENCES


APPENDIX 1

KEY TO EVIDENCE STATEMENTS AND GRADES OF RECOMMENDATIONS

The definitions of the types of evidence and the grading of recommendations used in this guideline originate from the US Agency for Healthcare Policy and Research and Quality and are set out in the following tables.

STATEMENTS OF EVIDENCE

Ia Evidence obtained from meta-analysis of randomised controlled trials

Ib Evidence obtained from at least one randomised controlled trial.

IIa Evidence obtained from at least one well-designed controlled study without randomisation.

IIb Evidence obtained from at least one other type of well-designed quasi-experimental study.

III Evidence obtained from well-designed non-experimental descriptive studies, such as comparative studies, correlation studies and case studies.

IV Evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities.

GRADES OF RECOMMENDATIONS

A Requires at least one randomised controlled trial as part of a body of literature of overall good quality and consistency addressing the specific recommendation. (Evidence levels Ia, Ib)

B Requires the availability of well conducted clinical studies but no randomised clinical trials on the topic of recommendation. (Evidence levels IIa, IIb, III)

C Requires evidence obtained from expert committee reports or opinions and/or clinical experiences of respected authorities. Indicates an absence of directly applicable clinical studies of good quality. (Evidence level IV)
GLOSSARY

Alveolus - The tooth bearing portion of the jaw bones.

Apexification - Induction of apical closure.

Apical foramen - The opening at the tip of the root through which the nerves and blood vessels pass through.

Avulsion - Total displacement of the tooth out of the socket.

Bridge - A dental prosthesis replacing missing teeth. Involves preparation of adjacent teeth.

Caries - Tooth decay

Cementum - The outermost layer of the root.

Closed apex - Apical foramen < 1 mm.

Crown - That portion of the tooth which is visible in the mouth.

Extraalveolar period - Time the tooth is out of its socket.

Extirpate pulp - Removal of pulp tissue.

Open apex - Apical foramen > 1 mm.

Periodontal ligament - Connective tissue which attaches the root to the alveolar bone.

Periodontal disease - Diseases of the supporting structures of the tooth.

Pulp - The connective tissue in the central portion of the tooth.

Replantation - The procedure of placing the avulsed tooth back into its socket.

Root - That portion of the tooth that is embedded in the alveolar bone.

Sinus orifice - An opening for discharging pus.

Splint - An appliance to stabilise/immobilise teeth.

Storage medium - Solution in which the avulsed tooth is stored prior to replantation.
MANAGING THE AVULSED PERMANENT ANTERIOR TEETH IN CHILDREN

Tooth injuries are common occurrences in children. An avulsed tooth is one that is completely knocked out of its socket. Children especially between the ages of 7-9 years are more prone to avulsion of the upper front permanent teeth; this may be the result of falls, collisions, sports activities or motor vehicle accidents.

Tooth avulsion can be extremely traumatic and frightening to the child, parent, teacher and even the by-stander. Quick and appropriate actions at the site of the accident can result in the tooth being 'saved' for a considerable period of time. It can prevent early loss of the tooth during the important growth and development period of the child.

The Oral Health Division, Ministry of Health, Malaysia has produced a Clinical Practice Guideline (CPG) for the management of the avulsed permanent anterior teeth in children. The Guideline was developed by an expert panel comprising paediatric dental specialists from the Ministry of Health, University of Malaya as well as the private sector. Other relevant dental specialists were also involved in the formulation of this Guideline.

This simplified version of the Guideline is aimed at everyone (child, parent, teacher and by-stander) who has to deal with such a situation where a permanent tooth is knocked out. Your timely and appropriate action can help increase the eventual success and outcome in saving the affected tooth.

DO'S

Ø Hold the tooth by its crown

Ø If the tooth is clean, gently push it back the right way round into its socket

Ø If debris is present, gently rinse with running water

Ø Once the tooth is in place, get the victim to gently bite on a clean handkerchief to hold the tooth in place

Ø Go to a dentist immediately to seek treatment. REMEMBER THE SOONER THE TOOTH IS MANAGED THE HIGHER THE SUCCESS OF TREATMENT.

DON'TS

Ø Never touch or handle the root portion of the tooth

Ø Never scrub the tooth

Ø Never try to clean it in disinfectant (soap, bleach, Dettol)

Ø Never wrap the tooth in a handkerchief or tissue paper

Ø Never waste time in seeing a dentist for treatment

IF FOR SOME REASON IT IS NOT POSSIBLE TO PUT TOOTH BACK IN PLACE
Ø Holding tooth by its crown, place it in a clean container of cold milk (fresh or UHT) or saliva, or in a clean plastic bag to keep the tooth moist.

Ø Get to a dentist as quickly as possible.

PENGENDALIAN GIGI KEKAL HADAPAN YANG TERTANGGAL DARI Soket


Gigi teravulsi merupakan satu pengalaman buruk dan menakutkan bagi kanak-kanak, ibubapa, guru dan orang awam yang berada di tempat kejadian. Langkah-langkah yang cepat dan sesuai di tempat kejadian berupaya ‘menyelamatkan’ gigi tersebut. Ia berkemungkinan mencegah kehilangan awal gigi semasa tempoh penting tumbuhan dan perkembangan kanak-kanak yang terlibat.

Bahagian Kesihatan Pergigian, Kementerian Kesihatan Malaysia telah mengeluarkan satu Panduan Klinikal untuk pengendalian gigi kekal hadapan yang teravulsi di kalangan kanak-kanak. Panduan ini telah disediakan oleh satu panel pakar merangkumi pakar-pakar pergigian pediatrik di Kementerian Kesihatan Malaysia, Universiti Malaya dan sektor swasta. Pakar-pakar pergigian dari disiplin lain yang berkaitan juga telah turut terlibat dalam penyediaan Panduan ini.

Panduan ringkas ini disediakan untuk kegunaan semua termasuk kanak-kanak, ibubapa, guru dan orang awam, yang mungkin mengalami situasi di mana gigi kekal hadapan teravulsi. Tindakan pantas dan bersesuaian dapat menyelamat dan mengekalkan gigi tersebut.
TINDAKAN YANG PERLU

Ø Memegang gigi pada bahagian korona
Ø Jika gigi itu bersih, masukkananya dengan perlahan ke kedudukan asal
Ø Jika terdapat kekotoran, bilas gigi dengan air mengalir
Ø Bila gigi telah berada di kedudukan asal (soket), arahkan kanak-kanak berkenaan menggigit sapu tangan atau kain lembut supaya gigi tidak terganjak
Ø Bawa kanak-kanak berjumpa Doktor Gigi dengan segera untuk rawatan selanjutnya.

PERINGATAN: TINDAKAN YANG CEPAT MENJAMIN KEJAYAAN.

JANGAN LAKUKAN

Ø Jangan memegang bahagian akar gigi
Ø Jangan memberus permukaan gigi dan akarnya
Ø Tidak perlu menggunakan apa-apa bahan cucian
Ø Jangan membalut gigi tersebut dengan kertas tisu atau sapu tangan
Ø Jangan berlengah-lengah untuk mendapat rawatan segera

SEKIRANYA GIGI TERSEBUT TIDAK DAPAT DIMASUKKAN KE KEDUDUKAN ASALNYA DENGAN SEGERA:

Ø Pegang gigi pada bahagian korona dan masukkannya ke dalam bekas bersih berisi susu sejuk (susu segar atau susu UHT) atau air liur sendiri, ataupun masukkan ke dalam beg plastik bersih supaya gigi tidak kering.
Ø Bawa gigi berkenaan dan kanak-kanak yang terlibat berjumpa doktor gigi dengan segera.

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