

## Self-injurious Behaviour & Foreign-body Entrapment - Case Report

### Abstract

In clinical situations presence of foreign body in oral cavity of a child is usually associated with accidental etiology; none think about the role of self inflicted injury. Self Injurious Behavior (SIB) is a deliberate alteration or damage to oneself without a suicidal intent. Self inflicted injuries are very common and range from simple to severe forms of self-mutilation. Foreign bodies can be placed anywhere in the mouth or even beyond it- like the pharynx, trachea and the esophagus (oro-aero-tracheo-esophageal). Self inflicting injuries can lead to accidental grave problems depending on the site of placement. Absence of positive history, inconsistent clinical features and uncoherent radiographic features cause difficulty in diagnosis of SIB. Prompt diagnosis and early treatment can decrease morbidity in children.

### Key Words

Self Injurious Behaviour, Self Mutilation, Habits, Foreign Body, Radiography.

### Introduction:

Self Injurious Behavior (SIB) is a deliberate alteration or damage to oneself without a suicidal intent.<sup>[1]</sup> SIB is the deliberate alteration to one's own body part without suicidal intent. Self Harm, Deliberate Self Harm, Self Injury, and Self Poisoning are other terms used to describe the same condition. Self mutilation patients violently inflict lesions to their own bodies with no intent to commit suicide.<sup>[2]</sup>

Self inflicted injuries are very common and range from simple to severe forms of mutilation. Various foreign objects are reported to be lodged like pencil leads, darning needles, metal screws, beads and stapler pins.<sup>[3]</sup> Self inflicting injuries can lead to accidental grave problems. Several aero-digestive accidents can result and accidental inhalation of foreign bodies can lead to accidental death during childhood.<sup>[4]</sup> Foreign bodies in pediatric airway is potentially life-threatening. Coughing, choking, and wheezing are some of the presenting symptoms seen for 95% of the patients.<sup>[5]</sup> The manifestations again depends on type and severity of etiology.

### Case Report:

A 5 year old boy presented with the chief complaint of pain in the upper front tooth. Pain was present and severe past 2 days. Past history revealed dull aching constant pain past 1 year in the same tooth and occasional pus discharge from adjacent gum region. General examination

revealed an otherwise healthy child. Child's behavior assessment showed a definitely negative behavior which could be related to severe pain at the time of presentation to clinic.

Intra-oral examination showed dentition corresponding to 6 years, tooth number 51 showed intrinsic black discoloration, grade II mobility, tenderness to percussion and presence of a yellow metallic object in the lingual aspect of tooth number 51. The metallic object was tightly wedged preventing easy removal and attempts to touch the tooth caused severe pain leading to behavior problems in the child. Tooth 21 had erupted but 11 was missing due to retained 51 (**Figure 1-labial view & Figure 2- Palatal view**). Soft tissue findings included presence of gingival-vestibular abscess surrounding tooth number 51.

When the child was enquired regarding the placement of metallic object, he was initially reluctant to inform regarding the incident due to shame. Once the parents were separated; the child revealed that he regularly indulged in placement of metallic objects like pins into the tooth to remove impacted food particles.

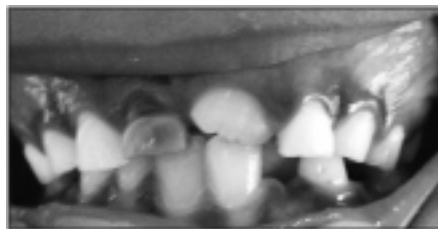


Figure 1 - Labial View

<sup>1</sup> Cheranjeevi Jayam

<sup>2</sup> Murali H Rao

<sup>3</sup> Anila Bandlapalli

<sup>4</sup> Nikunj Patel

<sup>1</sup> Senior Lecturer,

Dept. of Pedodontics & Pediatric Dentistry  
College Of Dental Sciences & Research Centre

<sup>2</sup> Professor,

Dept. of Conservative Dentistry & Endodontics  
DapmrV Dental College

<sup>3</sup> PG Student,

Dept. of Conservative Dentistry & Endodontics  
Aecs Maaruti College Of Dental  
Sciences & Research Center

<sup>4</sup> Senior Lecturer, Dept. of Orthodontics  
MP Patel Dental College

### Address For Correspondence:

Dr. Cheranjeevi Jayam,

Department of Pedodontics & Preventive Dentistry,  
College Of Dental Sciences & Research Centre,  
Opp. Pleasure Club, Bopal-Ghuma Road,  
Ta.Sanand, Ahmedabad, Gujarat - 382115.

Phone number: +91 9099775313

Mail ID: cheranjeevij@gmail.com

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### Quick Response Code



Unfortunately the last act resulted in tight wedging of the metal; self removal of which was unsuccessful. The child did not notify parents regarding the mischief as he feared punishment by parents.

**Intraoral-IOPA view** was advised (**Figure 3-IntraOral Periapical Radiograph of maxillary anterior segment**). IOPA view revealed presence of sharp radio-opaque mass wedged within the pulpal outlines of the tooth 51. Presence of peri-apical radiolucency surrounding tooth 51, high amount of bone loss apically and laterally to the tooth indicative of peri-apical pathology.

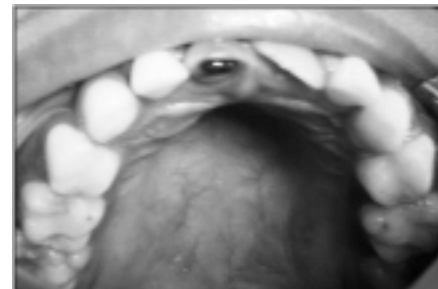


Figure 2 - Palatal Intra-oral View



Figure 3 - Intraoral Periapical Radiograph Of Maxillary Anterior Segment

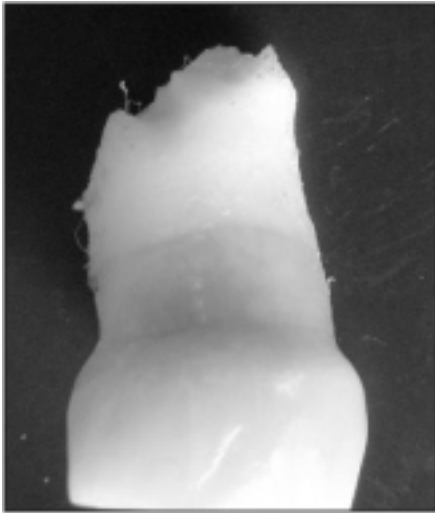


Figure 4 - Labial And Palatal View Of Extracted Teeth

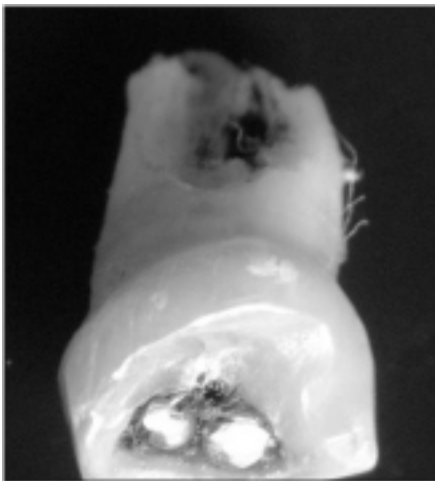


Figure 5 - Labial And Palatal View Of Extracted Teeth

Tooth 11 was impacted. A diagnosis of foreign body impaction and periapical abscess with respect to retained tooth 51 was given.

**Treatment:** Vaccination history was enquired and tetanus booster dose was administered to the patient. Based on prognosis of the tooth and dental age of

the patient, extraction of the tooth was carried out followed by drainage of the abscess. Since the patient indulged in the habit for a very long time, care was taken to carefully inspect the local site for presence of any other foreign bodies. Careful debridement of socket was carried out to clear any other foreign body remnants (**Figure 4 & 5- Labial and Palatal view of extracted teeth**). Patient was followed at 1 week interval. At follow-up period there was absence of symptoms and there was presence of good healing socket. Child was counseled regarding the ill effects of placing foreign bodies in the mouth.

#### Discussion:

In clinical situations presence of foreign body in oral cavity of a child is usually associated with accidental etiology; none think about the role of self inflicted injury. Foreign bodies get deposited accidentally due to trauma or sometimes due to self mutilation.<sup>[2]</sup> Foreign bodies can cause acute problems like atelectasis, bleeding into tracheo-bronchial tree or act as potential source of chronic infection.<sup>[4]</sup> Although accidental deposition of foreign body occur at all ages, self-mutilation type is more common in childhood because children have the habit of placing various foreign bodies in the mouth.

Presence of self mutilation or self-injurious behavior might go un-noticed if history is not enquired properly, in such conditions clinicians usually tend to regard presence of foreign body as accidental injury rather than self-mutilation injuries.<sup>[6],[7]</sup> Rarely parents are aware of child's self injurious habit; Parental narration does not ascertain the condition. Initial misdiagnosis can lead to delay in treatment, complications or worsening of the situations.<sup>[8]</sup> Early diagnosis and treatment can decrease morbidity and length of hospital stay in these children.<sup>[8]</sup>

Radiographic examination is very useful especially when the foreign body is metallic or radio-opaque. Various radiographic techniques can come handy in diagnosis & treatment. Importantly, a negative radiographic finding does not rule out the absence of foreign body in aero-digestive tract foreign body as many of these foreign bodies are radiolucent.<sup>[9]</sup> Clinician should not totally rely on the use of radiography to detect foreign bodies.

As a whole, absence of positive history, inconsistent clinical features and radiolucencies of objects cause difficulty in diagnosis.<sup>[10]</sup> Since the aetiology of both differ, the treatment also differs- In accidental foreign body impaction treatment is only limited to symptomatic treatment but in the SIB, a psychological counseling of patient might be required to prevent repetition of the habit.<sup>[11]</sup>

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