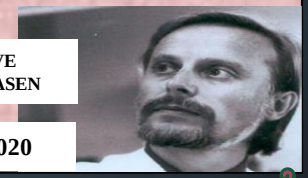
39th IACDE National Conference

WHAT IS DENTAL TRAUMA?
Injuries to the teeth, periodontium and the surrounding structures

TO TREAT THE TRAUMATIZED TEETH, DIFFERENTIATE THEM!

An accurate, clear, and easy- to- use traumatic dental injury (TDI) classification and definition system is a prerequisite for proper diagnosis, study, and treatment. Presently, the *Ellis and Davey's Classification* and *Andreasen's Classification* are most commonly used. Recently entities were generated, called *NA0D, "Injury of teeth or supporting structures"* and *Eden Baysal Dental Traumatic Index* has been put forward.

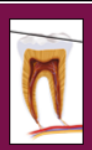
FATHER OF DENTAL TRAUMATOLOGY



JENS OVE ANDREASEN

1935-2020

ELLIS AND DAVEY'S CLASSIFICATION

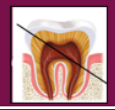


Class I: Enamel fracture, non-tender

Class II: Enamel and dentin fracture, sensitivity

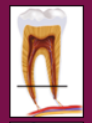
Class III: Enamel, dentin and pulp fracture, tenderness

Class IV: Non vital tooth, with or without loss of tooth structure



Class IX: Fracture of deciduous tooth

Class V: Avulsion



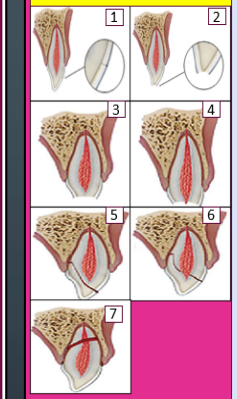
Class VI: Root fracture with or without loss of crown structure

Class VII: Displacement of tooth without the fracture of crown/root

Class VIII: Fracture of crown en mass

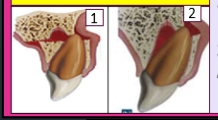
ANDREASEN'S CLASSIFICATION

TOOTH FRACTURE



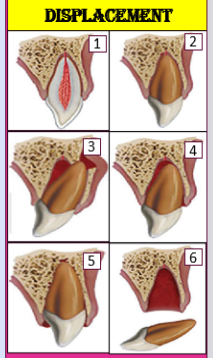
1. ***Crown infarction:*** Fracture of enamel
2. ***Enamel infarction:*** Fracture of enamel
3. ***Uncomplicated crown fracture:*** Involving enamel and dentin, not exposing pulp
4. ***Complicated crown fracture:*** Involving enamel and dentin and exposing the pulp
5. ***Uncomplicated crown root fracture:*** Involving enamel, dentin and cementum
6. ***Complicated crown root fracture:*** Involving enamel, dentin and cementum and exposing pulp
7. ***Root fracture:*** Involving dentin, cementum and the pulp

BONE FRACTURE



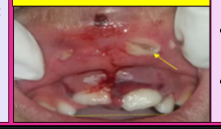
1. Fracture of the alveolar process
2. Fracture of the alveolar socket wall
3. Comminution of alveolar socket
4. Fracture of the Mandible and Maxilla

TOOTH DISPLACEMENT



1. ***Concussion:*** Injury to the tooth supporting structures
2. ***Subluxation:*** Abnormal loosening without displacement of the teeth
3. ***Lateral Luxation:*** Displacement of the tooth in a direction other than axially
4. ***Intrusive Luxation (central dislocation):*** Displacement of the tooth into the alveolar bone
5. ***Extrusive luxation (peripheral dislocation partial avulsion):*** Partial displacement of the tooth out of its socket
6. ***Exarticulation(complete avulsion):*** Complete displacement of the tooth out of its socket

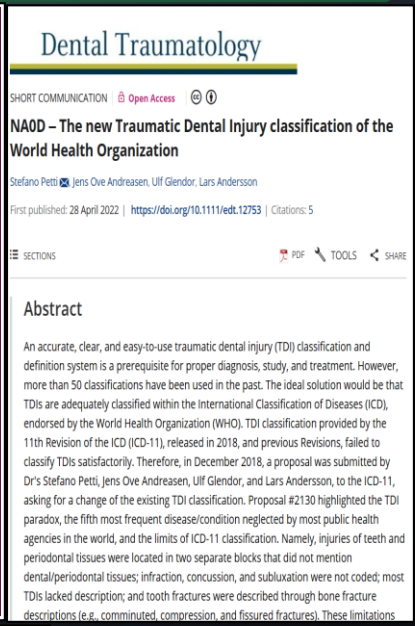
SOFT TISSUE INJURIES



- Laceration of gingiva or oral mucosa
- Contusion of gingiva or oral mucosa
- Abrasion of gingiva or oral mucosa

NAOD- INJURY OF TEETH OR SUPPORTING STRUCTURES

- ***NA0D: Injury of teeth or supporting structures***
  - ***NA0D.0: Injury of hard dental tissue and pulp***
1. ***NA0D.00:*** Enamel infarction
2. ***NA0D.01:*** Enamel fracture
3. ***NA0D.02:*** Enamel-dentin fracture
4. ***NA0D.03:*** Complicated crown fracture
5. ***NA0D.04:*** Uncomplicated crown-root fracture
6. ***NA0D.05:*** Complicated crown-root fracture
7. ***NA0S.06:*** Root fracture
8. ***NA0D.0Y: Other specified injury of hard dental tissues and pulp***
9. ***NA0D.0Z: Injury of hard dental tissues and pulp, unspecified***
  - ***NA0D.1: Injury of periodontal tissues***
1. ***NA0D.10:*** Concussion of periodontal tissue
2. ***NA0D.11:*** Subluxation of tooth
3. ***NA0D.12:*** Extrusive luxation of tooth
4. ***NA0D.13:*** Lateral luxation of tooth
5. ***NA0D.14:*** Intrusive luxation of tooth
6. ***NA0D.15:*** Avulsion of tooth
7. ***NA0D.1Y: Other specified injury of periodontal tissues***
8. ***NA0D.1Z: Injury of periodontal tissues, unspecified***
  - ***NA0D.Y: Other specified injury of teeth or supporting structures***
  - ***NA0D.Z: Injury of teeth and supporting structures, unspecified***



Dental Traumatology

SHORT COMMUNICATION | Open Access

NA0D – The new Traumatic Dental Injury classification of the World Health Organization

Stefano Petti, Jens Ove Andreasen, Ulf Glendor, Lars Andersson

First published: 28 April 2022 | https://doi.org/10.1111/edt.12753 | Citations: 5

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Abstract

An accurate, clear, and easy-to-use traumatic dental injury (TDI) classification and definition system is a prerequisite for proper diagnosis, study, and treatment. However, more than 50 classifications have been used in the past. The ideal solution would be that TDIs are adequately classified within the International Classification of Diseases (ICD), endorsed by the World Health Organization (WHO). TDI classification provided by the 11th Revision of the ICD (ICD-11), released in 2018, and previous Revisions, failed to classify TDIs satisfactorily. Therefore, in December 2018, a proposal was submitted by Dr's Stefano Petti, Jens Ove Andreasen, Ulf Glendor, and Lars Andersson, to the ICD-11, asking for a change of the existing TDI classification. Proposal #2130 highlighted the TDI paradox, the fifth most frequent disease/condition neglected by most public health agencies in the world, and the limits of ICD-11 classification. Namely, injuries of teeth and periodontal tissues were located in two separate blocks that did not mention dental/periodontal tissues; infraction, concussion, and subluxation were not coded; most TDIs lacked description; and tooth fractures were described through bone fracture descriptions (e.g., comminuted, compression, and fissured fractures). These limitations

EDEN BAYSAL DENTAL TRAUMA INDEX

No. of tooth (FDI)

1st digit (CROWN FRACTURE)
0 to 5
0= none
1= enamel
2= uncomplicated crown
3= complicated crown
4= uncomplicated crown-root
5= complicated crown-root

2nd digit (ROOT FRACTURE)
0 to 3
0= none
1= apical 1/3
2= middle 1/3
3= cervical 1/3

3rd digit (LUXATION INJURIES)
Capital first letter
N= None
C= Concussion
S= Subluxation
E= Extrusive luxation
L= Lateral Luxation
I = Intrusive luxation
A= Avulsion

4th digit (MATURITY OF APEX)
Small first letter
i= immature
m= mature
r= resorbed

5th digit (ALVEOLAR PROCESS FRACTURE)
+ or –
+ = presence
- =absence