

# Indications and contraindications of root canal treatment

## Endodontic emergencies



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# Aim of root canal therapy

- to keep healthy
- to get healthy

the periapical area

# Indications of root canal treatment

- Exposed pulp
- Irreversible pulpitis
- Hyperplastic pulpitis
- Internal resorption
- Necrotic pulp
- Acute apical periodontitis
- Chronic apical periodontitis
- Condensing osteitis
- Acute apical abscess
- Chronic apical abscess =

= Suppurative apical periodontitis

# Indications of root canal treatment

- Apical curettage
- Apicoectomy
- Intentional devitalization
- Root amputation or hemisection
- Bicuspidization

# Indications of root canal treatment

- Prosthetic indication
  - axial differences of teeth
- Excessive coronal destruction
  - post and core
  - post-retained restoration
- Unsure vitality of the tooth is
- As part of periodontal surgery
- Excessive lesion of adjacent tooth
  - before surgery

# Contraindication of root canal treatment

- Irreparable tooth
- Destruction of periodontium
- Non-cooperative patient
- Mental/physical handicapped patient
- Serious chronic illness
- Vertical fracture
- Technical difficulties
- Tooth without function

# Endodontic emergencies

## Aim of the treatment in emergency

- *pain* relief
- reconstruction of *function*
- reparation of *esthetics*

# Endodontic emergencies

- unexpected patient
  - unscheduled office visit
- lack of time
- even so correct treatment



# Endodontic emergencies

**We are for the patient**

and

**no they are for us!!!**

# Endodontic emergencies

Very important is the **DIAGNOSIS**

- Medical history – spontaneity  
intensity and duration of pain
- Subjectiv examination: source of pain:  
pulpal/periapical
- Inspection, percussion, sensitivity

# Endodontic emergencies

**PAIN** can be of

- Endodontic
- Periodontic
- Endo-periodontal origin
- Adjacent tooth
- Neuralgiform reason

# Therapy of endodontic emergencies

Reversible pulpitis

→ save the vitality

# Therapy of endodontic emergencies

## Irreversible pulpitis

→ Root canal treatment

→ Extraction

# Therapy of endodontic emergencies

- X-ray picture = radiographic examination
- Anesthesia
- Isolation – rubber dam
- Frontal tooth → pulpectomy  
working length
- Lateral tooth → pulpotomy
- Irrigation NaOCl
- Temporary restoration

# Therapy of endodontic emergencies

- Irrigation – NaOCl
- Root canal preparation (enough time?)
- Drying the root canal
- Intracanal medicament  $\text{Ca}(\text{OH})_2$
- Temporary filling
- Analgetics?

# Therapy of endodontic emergencies:

## Trauma

- Importance of documentation!!!!
- Radiographic examination
- Soft tissue lesions, injuries
- Removal of foreign objects from wound
- Severe lacerations require suturing
- Reponation of tooth...



# Therapy of endodontic emergencies:

## Trauma

- Exposed dentin surface
  - $\text{Ca}(\text{OH})_2$
  - ZOE-cement
  - temporary crown
- Exposed Pulpa
  - to keep the vitality
  - pain relief

# Therapy of endodontic emergencies:

## Trauma

How to keep the vitality of the tooth

- dry the injured surface
- $\text{Ca(OH)}_2$
- ZOE cement in interim crown
- Recall, checkup

# Apexification

- Radiological examination
- Isolation – rubber dam
- Access opening
- Determination of working length
- Preparation of the canal
- Irrigation
- Drying
- $\text{Ca}(\text{OH})_2$
- Interim restoration
- Regular recall

# Apexification