



# Periodontal abscess management

# Periodontal abscess classification

## AAP 1999 (location)

- Gingival abscess
- Periodontal abscess
- Pericoronal abscess

## AAP/EFP 2018 (Etiology)

Gingival abscess + Periodontal abscess  
= periodontal abscess



# PERIODONTAL ABSCESS

## ETIOLOGICAL FACTORS

### PERIODONTITIS PATIENTS

- Acute infection from bacteria in subgingival biofilm in periodontal pocket
- Pre-existing **periodontal pocket**
  - Marginal closure of deep periodontal pocket
  - Deep tortuous pocket
  - Furcation involvement
- Bacteria virulence
- Decrease host defense

### NON-PERIODONTITIS PATIENTS

- Acute infection from bacteria coming from another local source
- Previously non-diseased sites
  - Foreign body impaction
  - Alterations of root surface

AAP/EFP 2018



# PERIODONTAL ABSCESS IN PERIODONTITIS PATIENTS

- Acute exacerbation
  - Untreated periodontitis
  - Non-responsive to therapy periodontitis
  - Supportive periodontal therapy

- After treatment
  - Scaling and root planing
    - : dislodge calculus fragments could be pushed into tissue
    - : remaining calculus in deep pocket area
  - Surgical periodontal therapy
    - : presence of foreign bodies such as membrane , sutures, piece of periodontal pack
  - Systemic antibiotic
    - : without appropriate subgingival debridement
    - : probably related to overgrowth of opportunistic bacteria
  - Other drug : Nifedipine



## PERIODONTAL ABSCESS IN NON-PERIODONTITIS PATIENTS

- **Impaction of foreign bodies**

- Dental floss , tooth pick or popcorn hulls
- Orthodontic elastic , rubber dam

- **Harmful habits**

- Wire or nail biting and clenching

- **Orthodontic factors**

- Inadequate orthodontic forces
- Crossbite

- **Gingival enlargement**

- **Alterations of the root surface**

- Severe anatomical alterations
  - : invaginated tooth , dens evaginatus
- Minor anatomical alteration
  - : enamel pearl , developmental groove
- Iatrogenic conditions
  - : Perforations
- Severe root damage.
  - : Fissure or fracture , crack tooth syndrome
- External root resorption



# Differential diagnosis

- Other odontogenic abscess
  - Dento-alveolar abscess
  - Pericoronitis
  - Endo-perio abscess
- Tumor lesions
- Abscess after surgical procedure





	<b>Periodontal Abscess</b>	<b>Pulpal Abscess</b>
History	Periodontal disease Periodontal treatment Previous antibiotic therapy	Caries , Fracture , Tooth wear Restorative treatment Endodontic treatment
Clinical findings	Swelling usually includes gingival tissue, with an occasional fistula  Pain is usually dull and localized.  Vital pulp  Board wide pocket	Swelling is often localized to the apex, with a fistulous tract  Pain is often severe  Nonvital pulp  Deep narrow pocket
Radiographic findings	Alveolar crestal bone loss Angular bone loss Furcation involvement	Apical radiolucency Endodontic or post perforation





# Management



## Immediate management

- Space infection

## Initial management

- pain relief
- control the spread of infection
- establish drainage

## Definitive therapy

- Restored function and esthetic
- 
- 

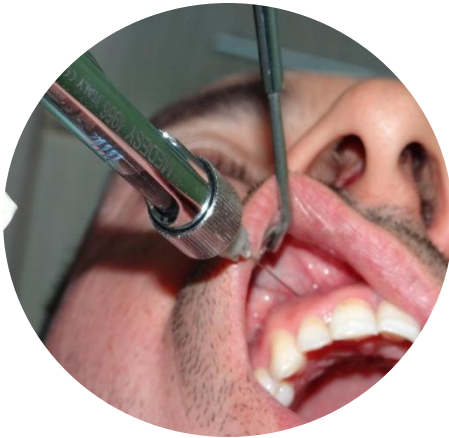


# Initial management

- Drainage \*\*
- Debridement (Scaling and Root planing)
- Systemic antibiotics
- Tooth removal hopeless



# Drainage



## Anesthesia

- Delayed onset
- Nerve block
- LA at uninfected tissue



## Drainage

- Through the pocket
- Through incision

# Debridement



- Remove foreign bodies
- Subgingival calculus
- Granulation tissue



## Periodontal surgery

- Large residual lesion
- Poorly accessible
- Remove remaining calculus

# Antibiotic therapy



## Indication

- Cellulitis
- Fever
- Regional lymphadenopathy
- Immunocompromised status
- Deep inaccessible pocket

## Antibiotic of choice

“High-dose short-course”

### **Amoxicillin**

- 1g loading dose, 500 mg t.i.d. For 3 days

### Allergy to B-lactam drugs

### **Clindamycin**

- 600 mg loading dose, 300 mg q.i.d. for 3 days

### **Azithromycin (or Clarithromycin)**

- 1g loading dose, 500 mg q.i.d. for 3 days



# Extraction

## Hopeless prognosis

- Bone support <25%
- PD > 6mm
- Second to third degree mobility
- Furcation involvement III

(TAP 2024)

