



# Periodontal Propedeutics II.

CAUSE-RELATED THERAPY

# Phases of Comprehensive periodontal treatment

## **0. Treatment of acute and systemic conditions, BPE (Acute/systemic phase)**

### **1. Initial/Cause-related therapy (= nonsurgical therapy)**

- ▶ Complete periodontal chart: PPD, REC, CAL, FMPS, FMBS, furcation (I-III), tooth mobility (1-3)
- ▶ Individual tooth prognosis (safe, doubtful, hopeless/irrational-to-treat)
- ▶ Case presentation, consequences from the lack of treatment
- ▶ Oral hygiene instruction, smoking counseling
- ▶ Scaling and root surface debridement, removal of plaque retentive factors, temporary splinting, local fluoride therapy, monitoring of oral hygiene
- ▶ Reevaluation at 6-8 weeks (complete perio chart), corrective treatment plan

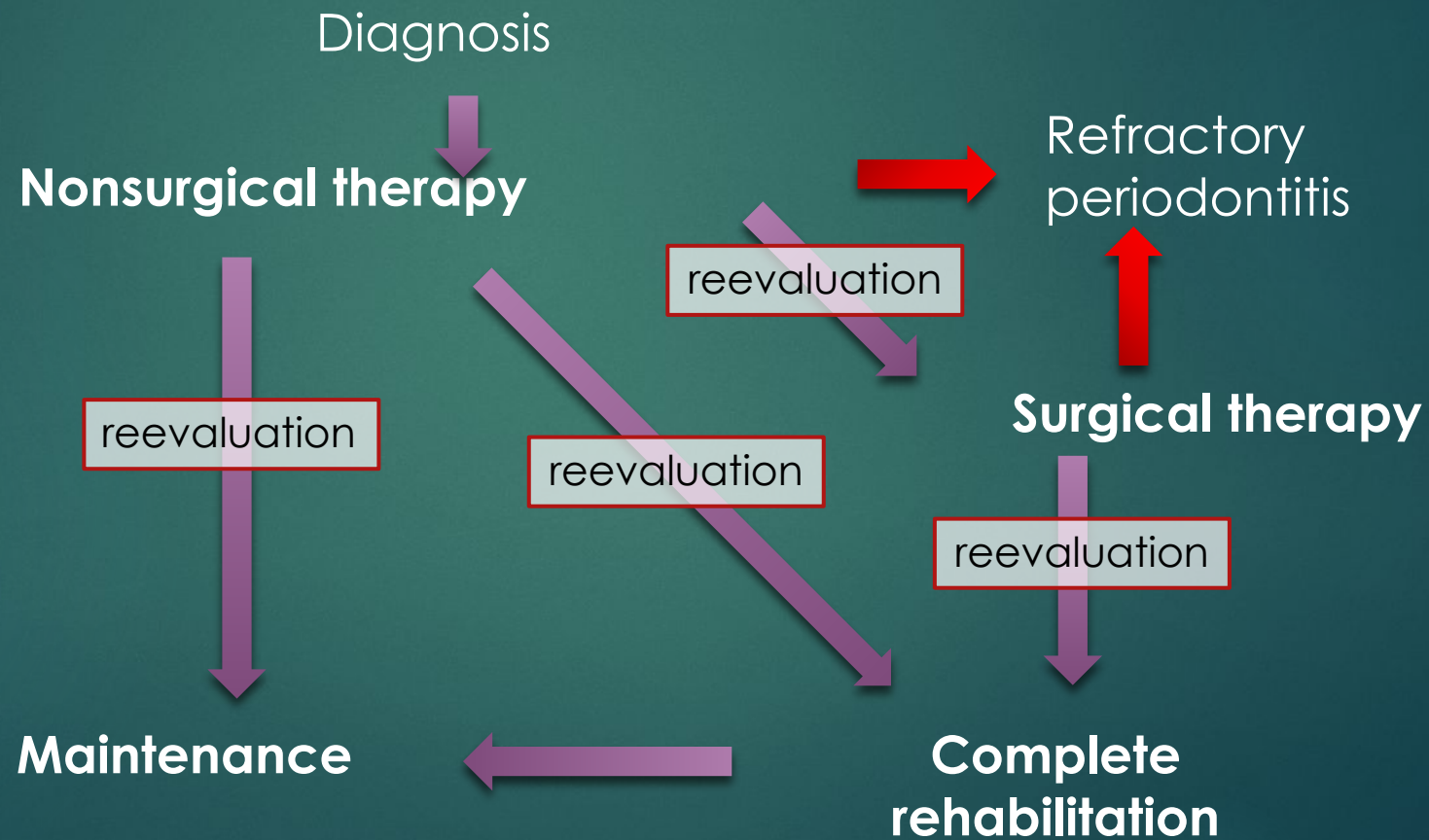
### **2. Corrective phase (Surgical phase, prosthetic rehabilitation)**

- ▶ Periodontal surgery
- ▶ Restorative, prosthetic and orthodontic treatment, implant surgery

### **3. Maintenance phase (SPT)**

- ▶ Risk assessment

# Comprehensive periodontal therapy



# Cause-related periodontal treatment

## 1. Aim:

- ▶ Bringing caries and gingivitis under control and arrest the progression of periodontal tissue destruction

## 2. Steps:

- ▶ Improve the oral hygiene
- ▶ supra-, subgingival scaling
- ▶ Root surface debridement
- ▶ extract hopeless teeth
- ▶ Eliminate plaque retentive factors
- ▶ Treatment of carious lesions
- ▶ Splinting
- ▶ Antibiotics if needed



# Scaling and root planing

- ▶ Goals:

- ▶ Resolution of gingivitis
- ▶ Stop attachment loss
- ▶ Calculus
- ▶ Dental plaque
- ▶ Infected cementum
- ▶ Granulation tissue

} removal



# Instruments

- ▶ Ultrasonic scalers
- ▶ Sonic scaler
- ▶ Manual scalers
- ▶ Curettes
- ▶ Other: laser instruments





# Supragingival Scaling





# Supragingival scaling, Polishing





# Subgingival scaling



# Ultrasonic instruments

- ▶ Effective plaque and calculus removal by vibration of the instrument's tip
- ▶ frequency: 24000-42000 Hz
- ▶ use for supra and subgingival scaling
- ▶ always with water-spray!!!
- ▶ contra-indication: pacemaker





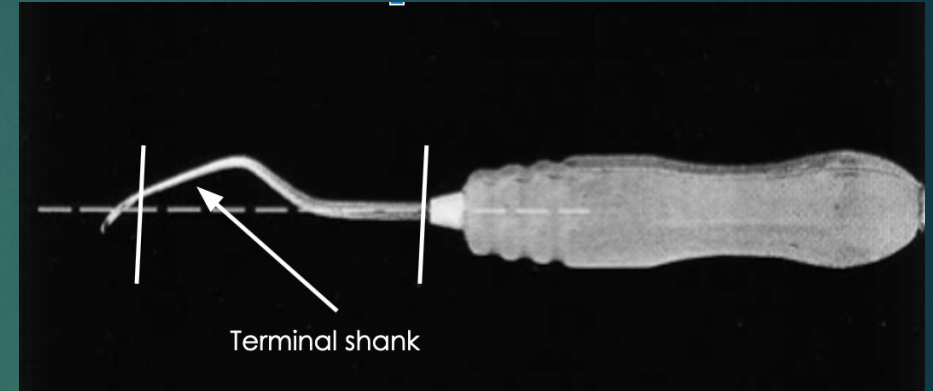
# Sonic instruments

- ▶ Mechanically produced vibration in the sonic range
- ▶ effective for calculus removal
- ▶ use with water-spray (friction)
- ▶ has no contra-indication
- ▶ air driven instrument



# Hand instruments

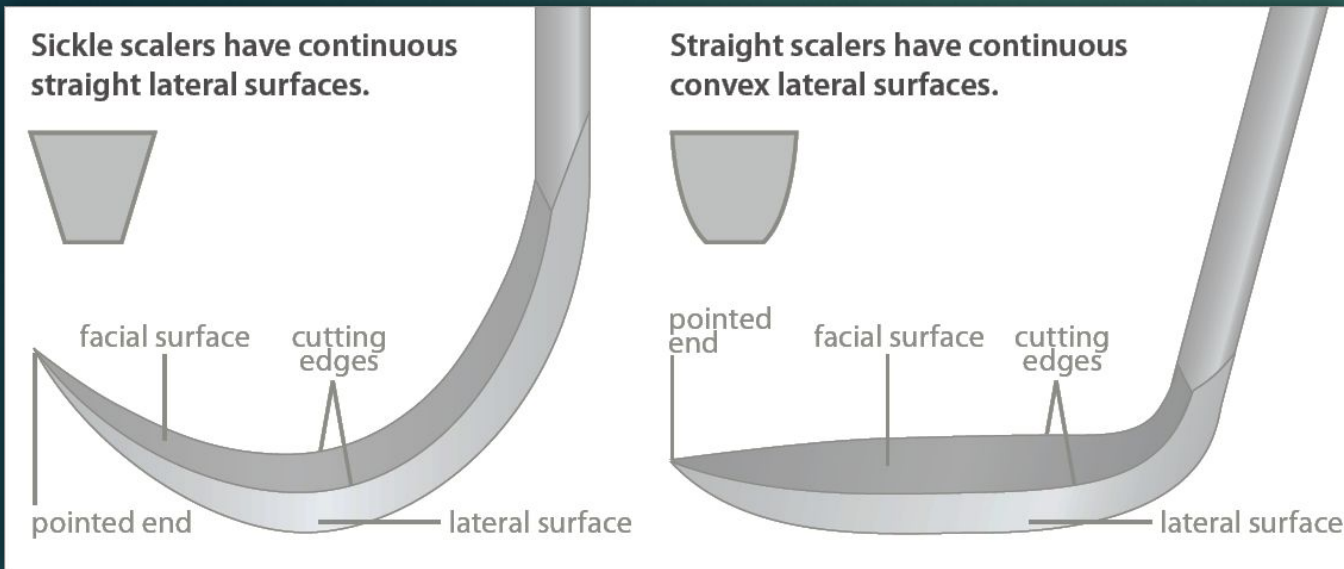
- ▶ blade – shank – handle (shaft)
- ▶ blade has a facial and a lateral surface
- ▶ the edge is the working part of the blade





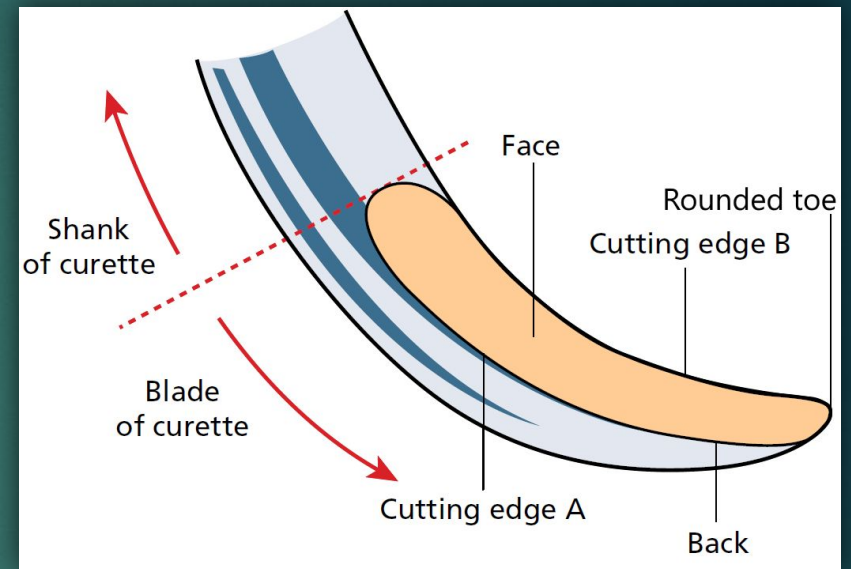
# Instruments

## Scalers



- sharp-ended blade
- triangle cross section
- two cutting edges
- for supragingival scaling and debridement only

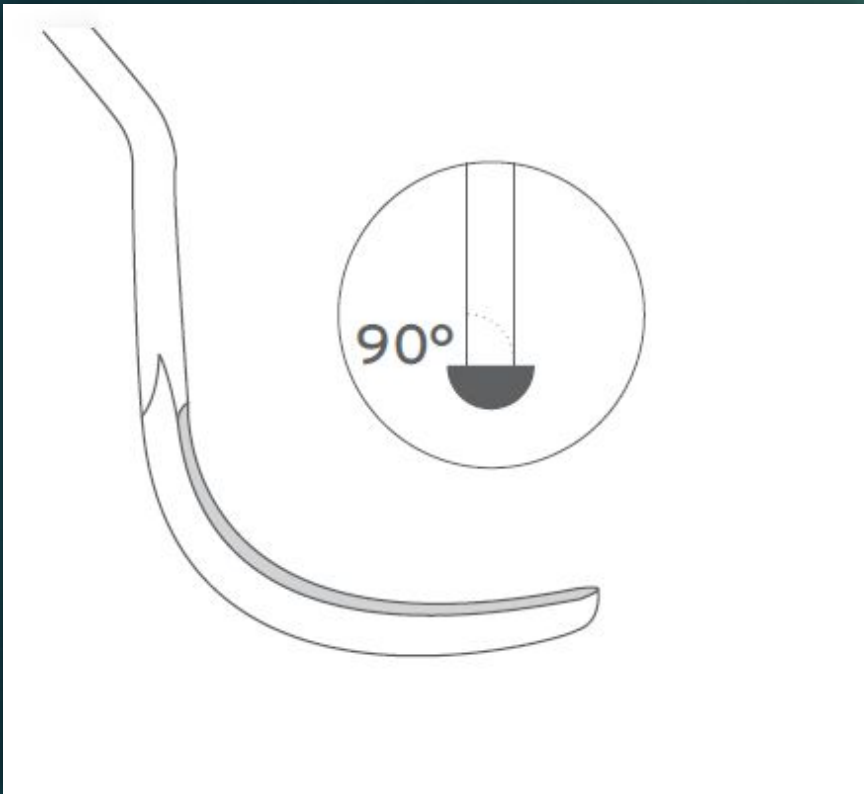
## Universal Curette



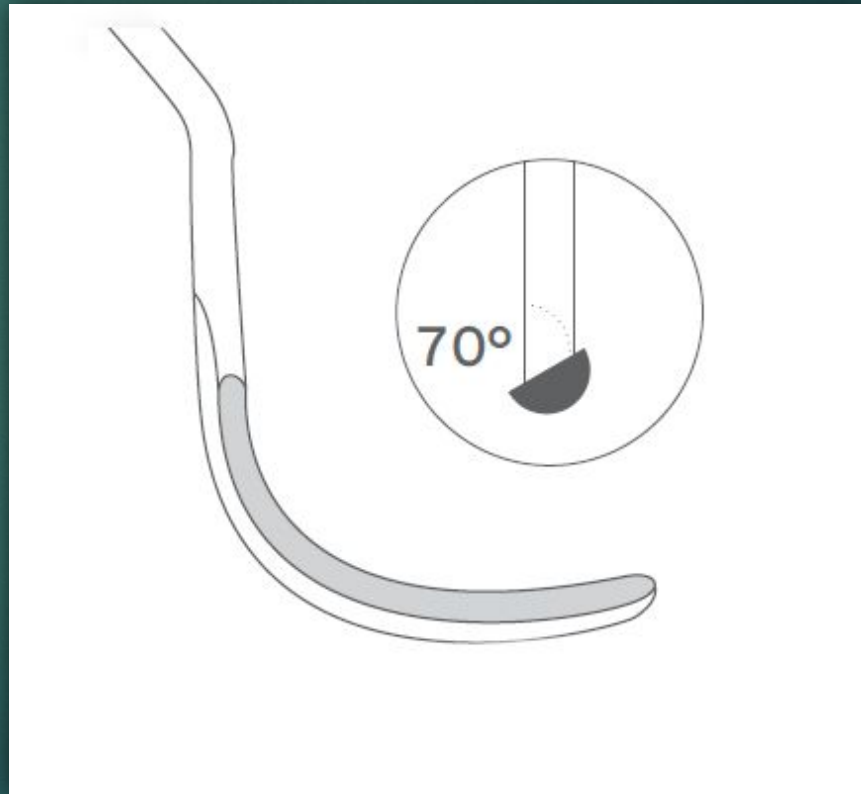
- dull-ended blade
- two working edges, spoon shaped blade
- used for supra and subgingival debridement, scaling, root planning

# Curettes

Universal curette



Gracey curette



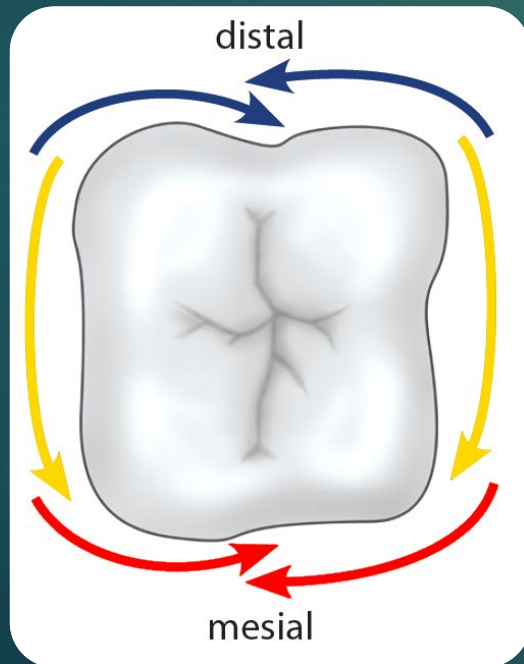
- surface specific
- one working edge („it looks down”)
- double-ended (mirror-turned blades)
- semicircular cross section



# Gracey curettes



- ▶ Area specific
- ▶ One working edge



## Gracey Application Chart

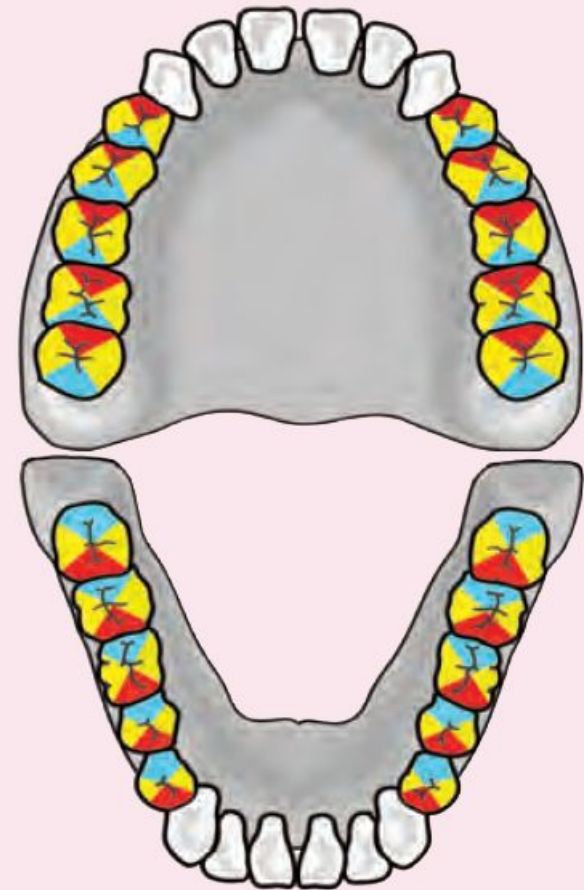
Use this color-coded chart to select the correct Gracey patterns for your application.

### Anteriors

- All Surfaces  
Gracey Patterns 1-2, 3-4 or 5-6

### Premolars and Molars

- Buccal & Lingual Surfaces  
Gracey Patterns 7-8 or 9-10
- Mesial Surfaces  
Gracey Patterns 11-12 or 15-16
- Distal Surfaces  
Gracey Patterns 13-14 or 17-18



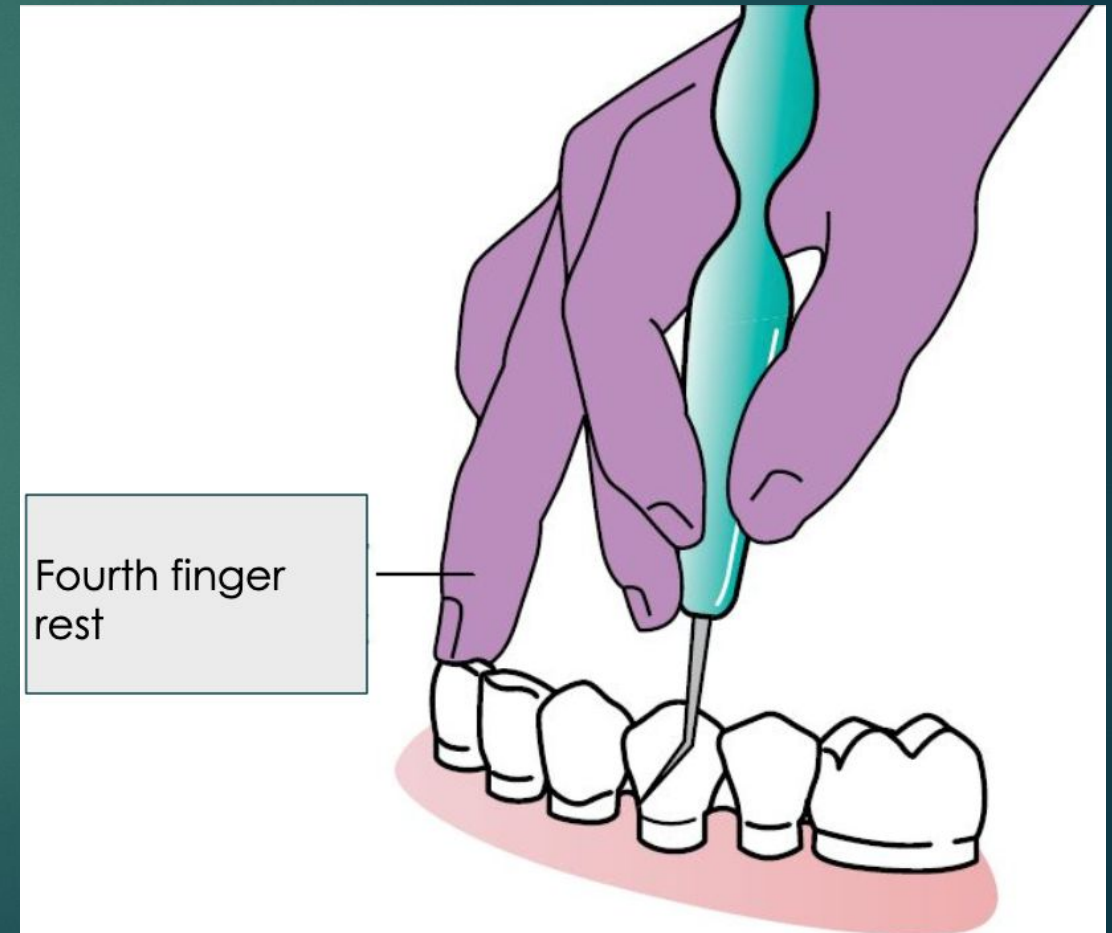
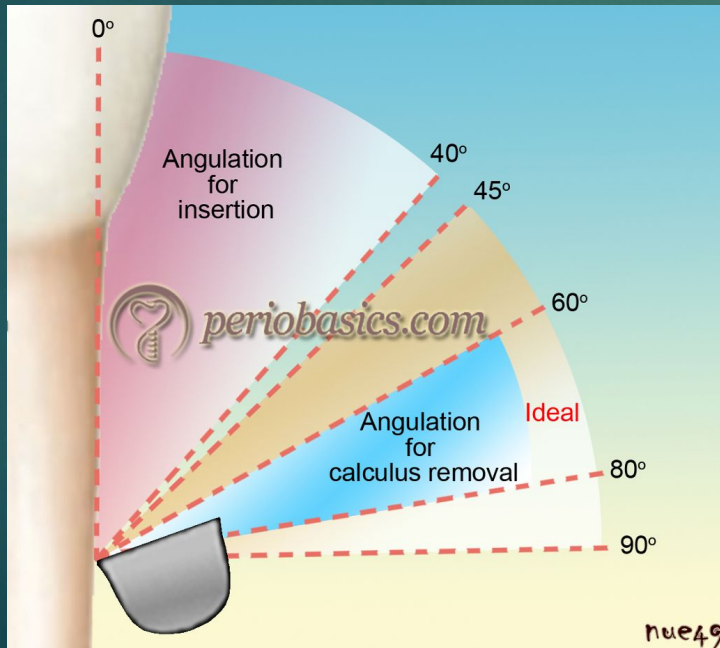
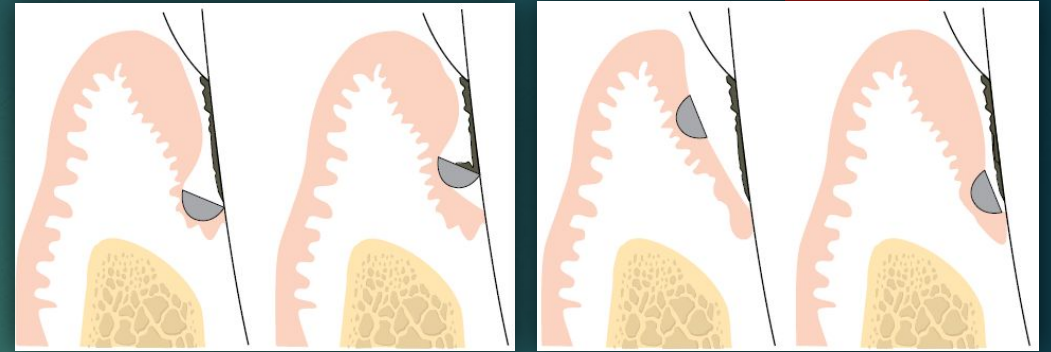
- ▶ Gracey 1-2 : incisor teeth
- ▶ Gracey 3-4: front teeth
- ▶ Gracey 5-6: front teeth, premolars
- ▶ Gracey 7-8, 9-10: buccal and oral surface of premolars and molars
- ▶ Gracey 11-12: mesial surface of premolars and molars
- ▶ Gracey 13-14. distal surface premolars and molars
  
- ▶ Gracey 15-16: mesial surface of the mandibular molars
- ▶ Gracey 17-18: distal surface of molars





# Use of Gracey curettes

- usually in local anaesthesia
- modified pen grasp with proper finger rest
- strokes from the apical to the coronal direction



# Results of cause-related therapy





# Results





# Results



# Results



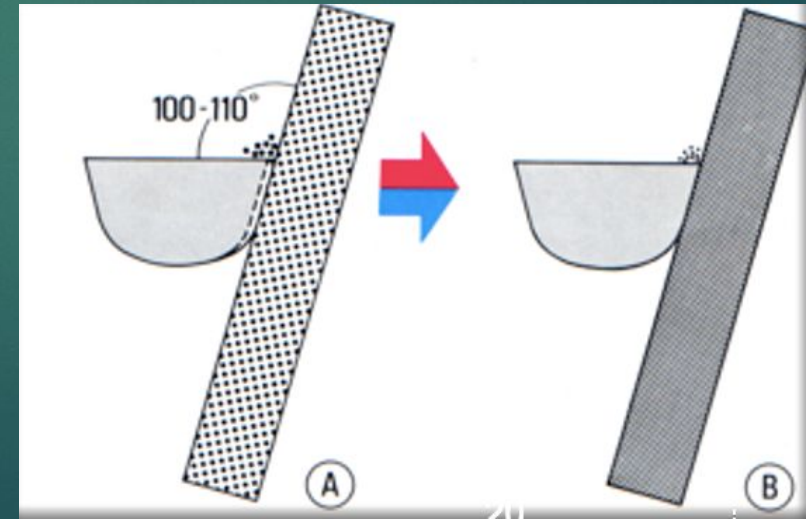
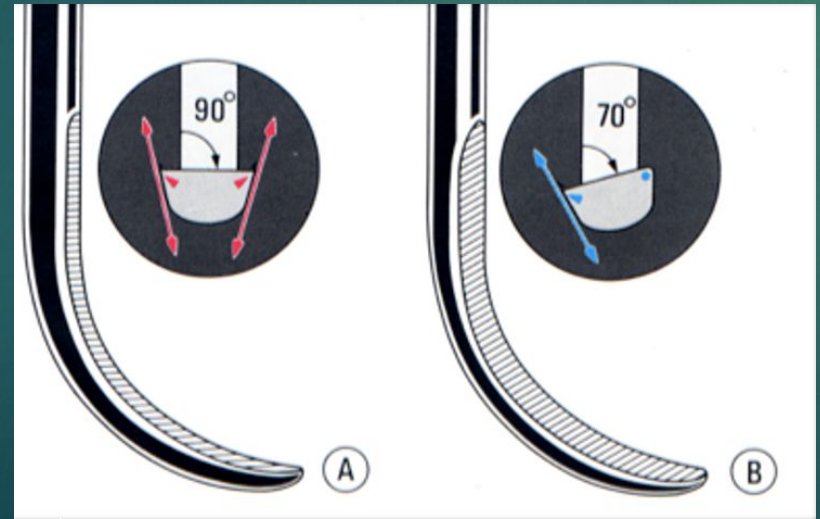
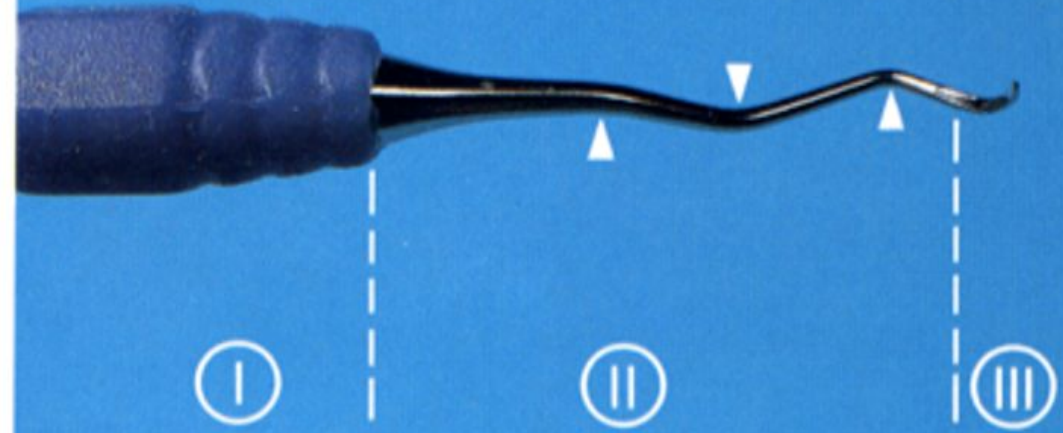
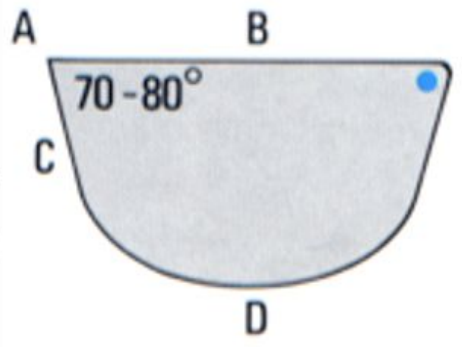


# Upkeep of instruments - sharpening

Ceramic sharpening stone







Sharpening the  
Gracey curette

Angulation between  
vertical plane and  
sharpening stone:

Scaler and universal  
curette: 20°

Gracey-curette: 40°





Sharpening  
machine





Thank you for your attention!

