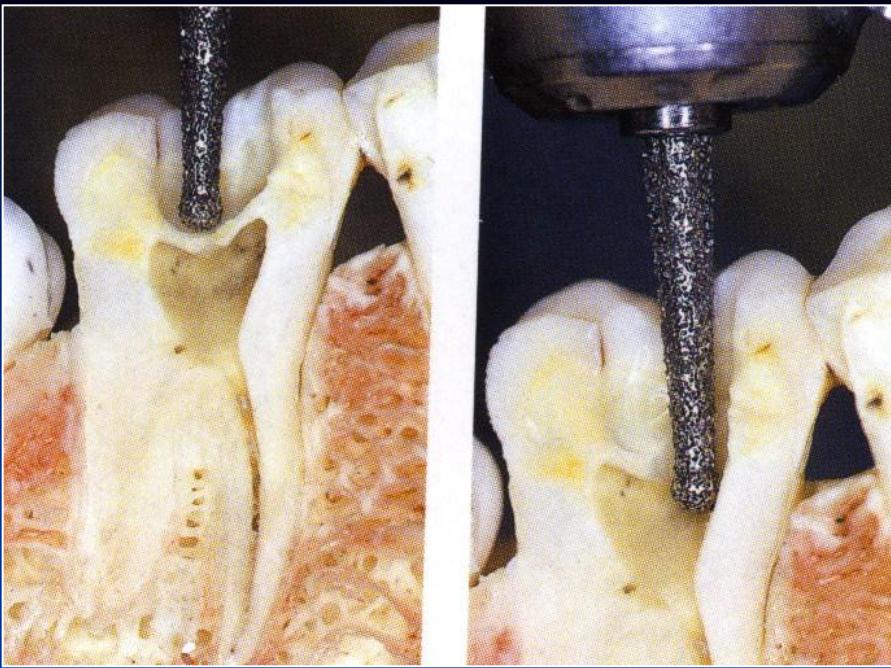


Phases of the endodontic treatment

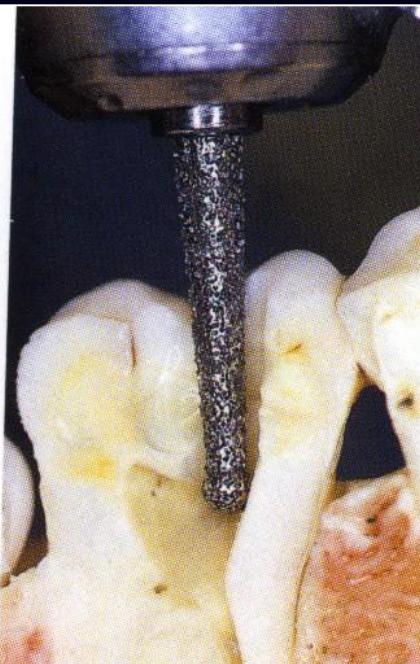
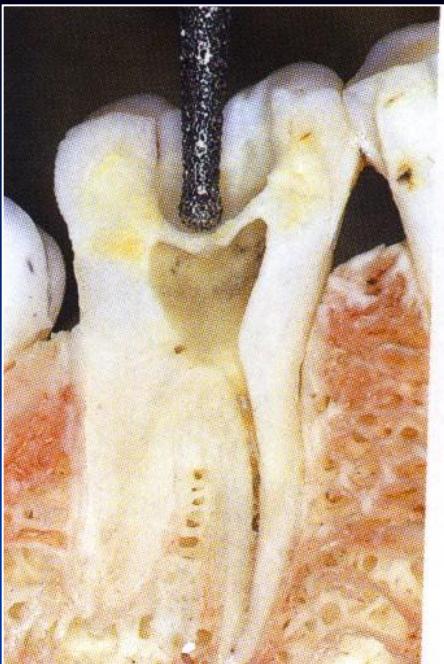
- Diagnosis
- Consideration
- Removal of carious dentin, old fillings, built up the clinical crown or reduction of cusps
- Local anaesthesia
- Dry operating field
- Access to the pulp chamber
- Root canal shaping
- Root canal cleaning
- Root canal filling
- X ray
- Postendodontic treatment



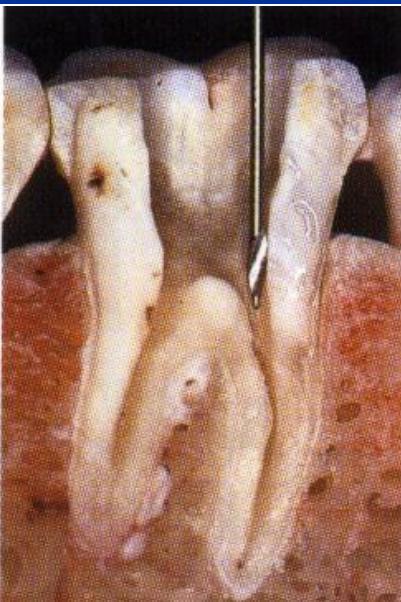
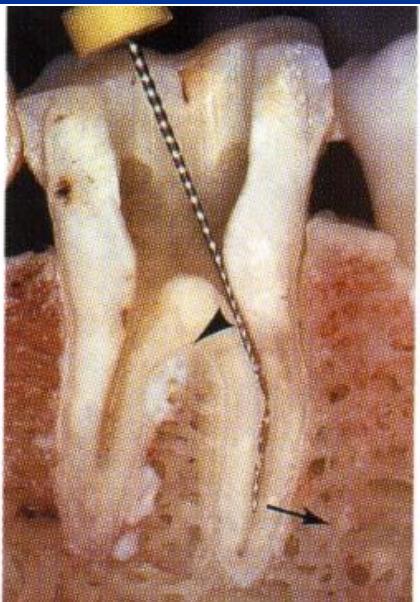


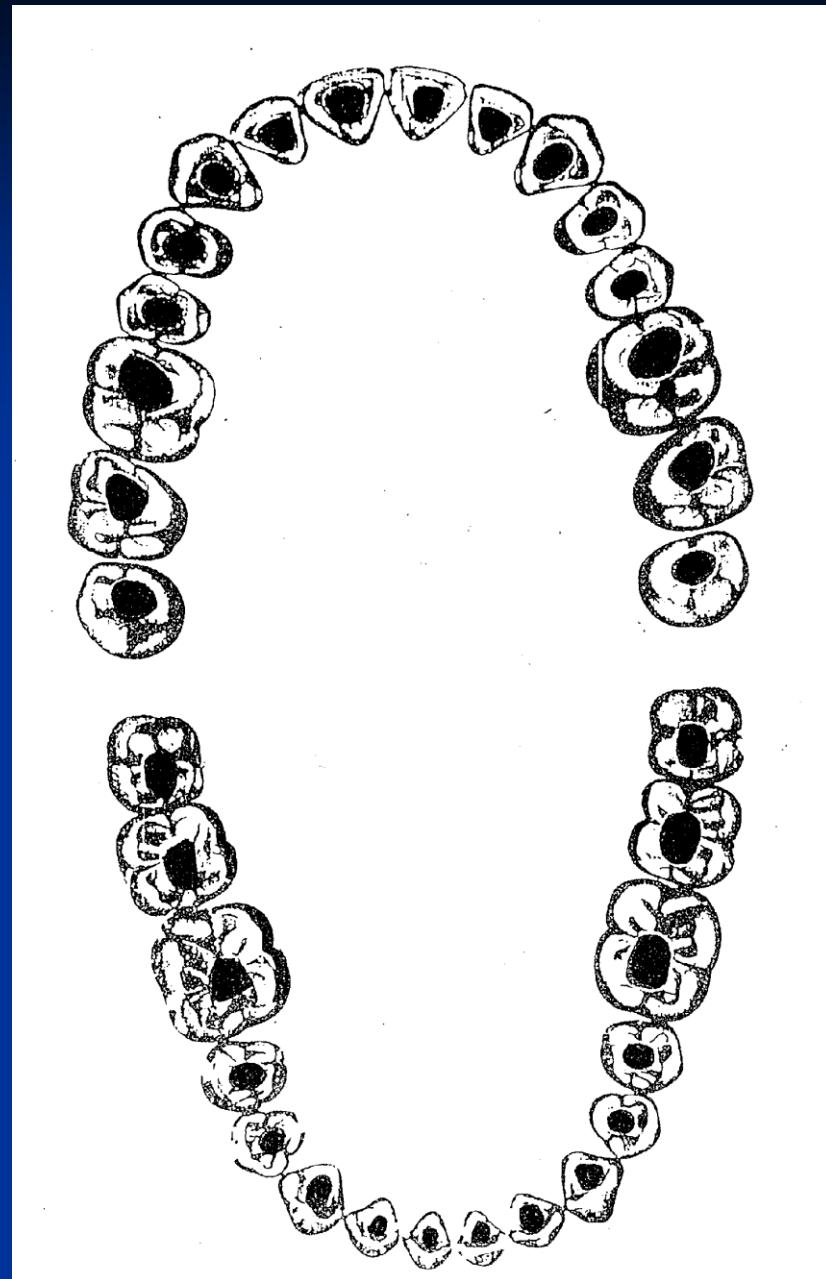
Access

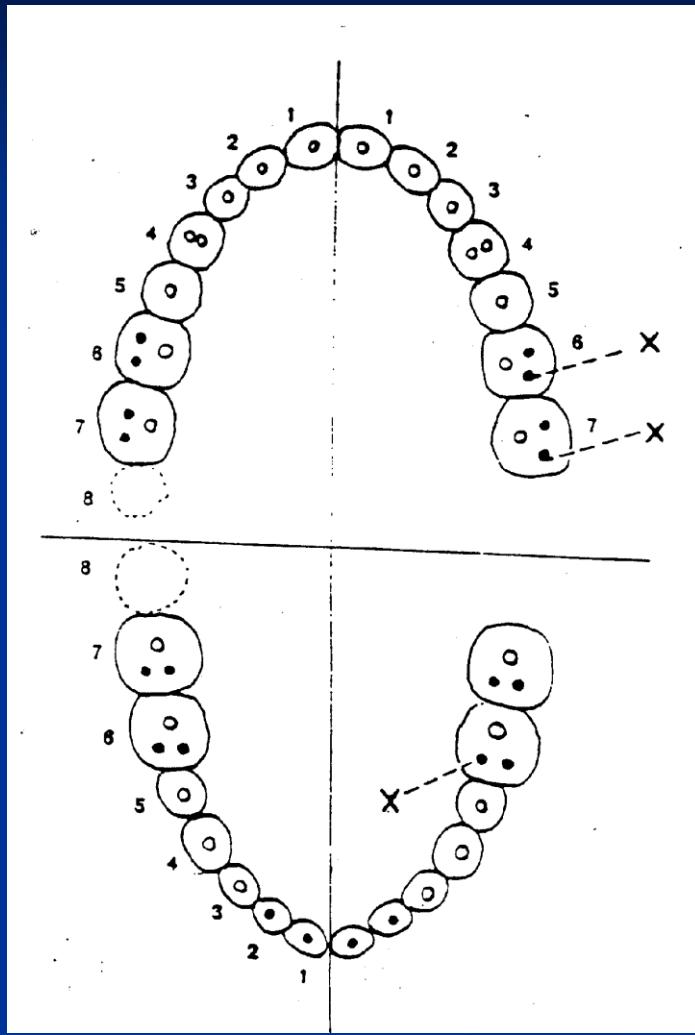




Access







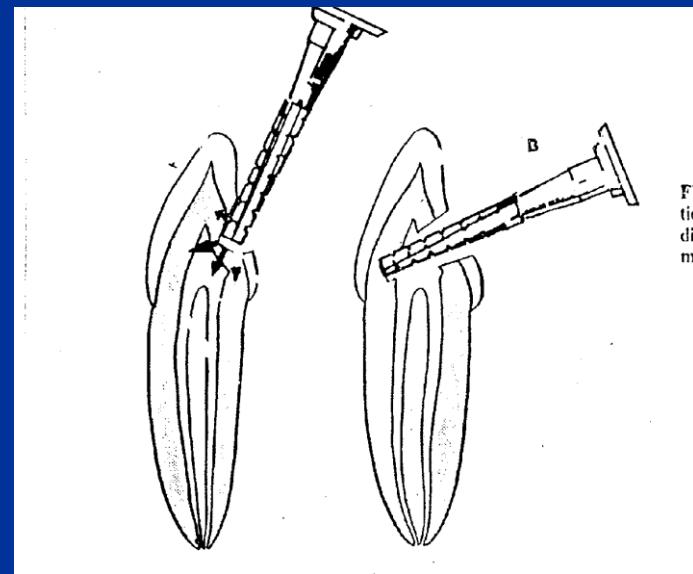
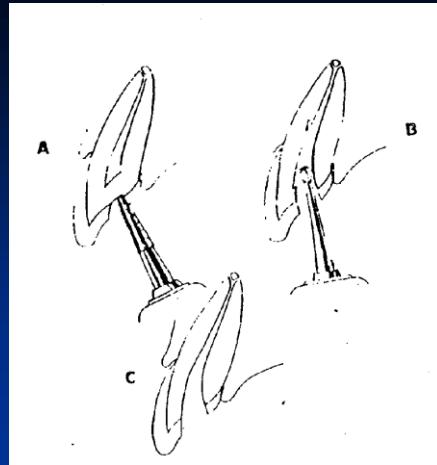
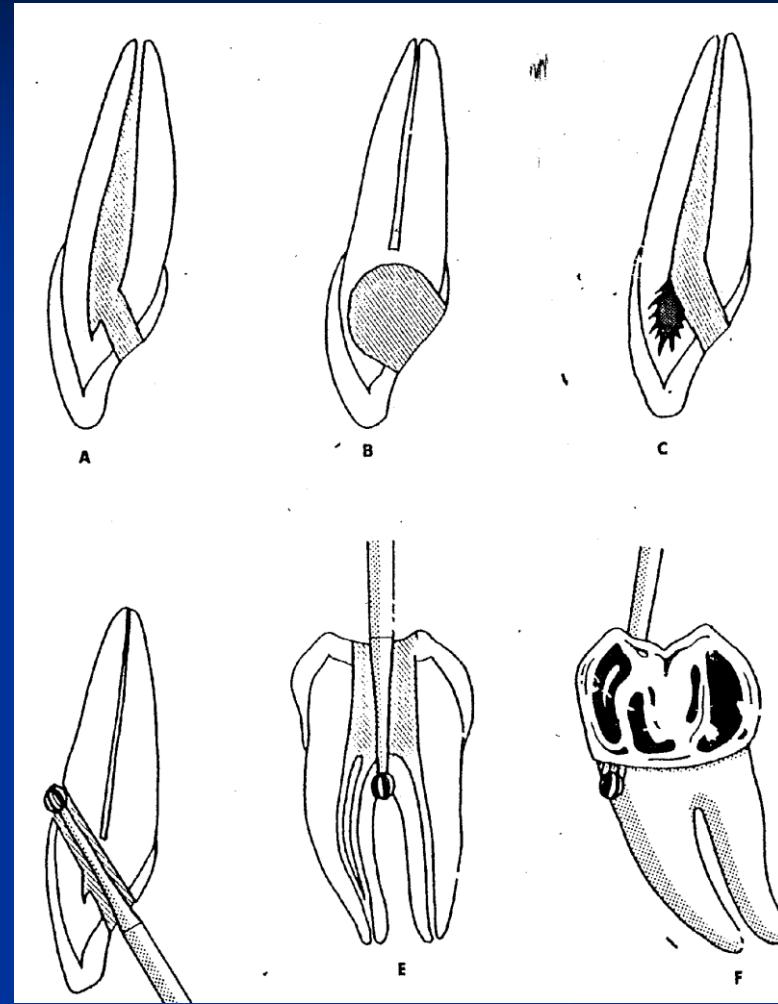


FIG.
tic
die
mo



Access – opening of the pulp chamber



Dia trepan



Dia balls



Round Burs



Preparation of the endodontic cavity –facilitating form



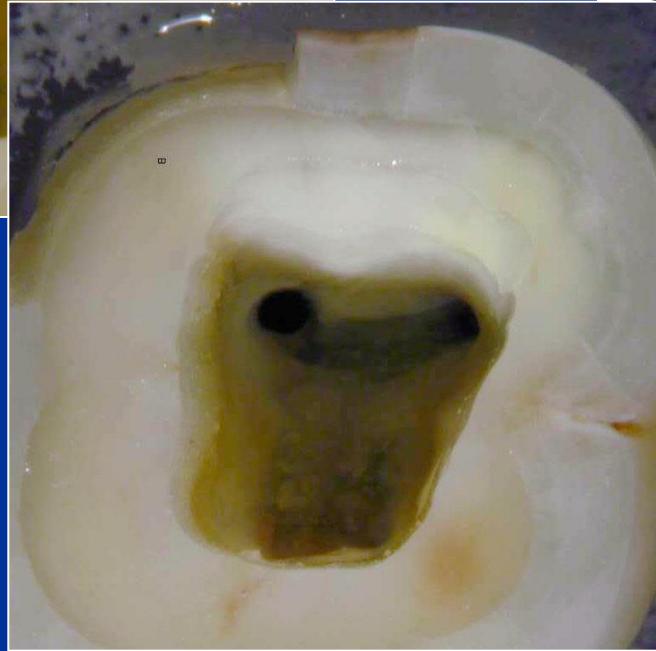
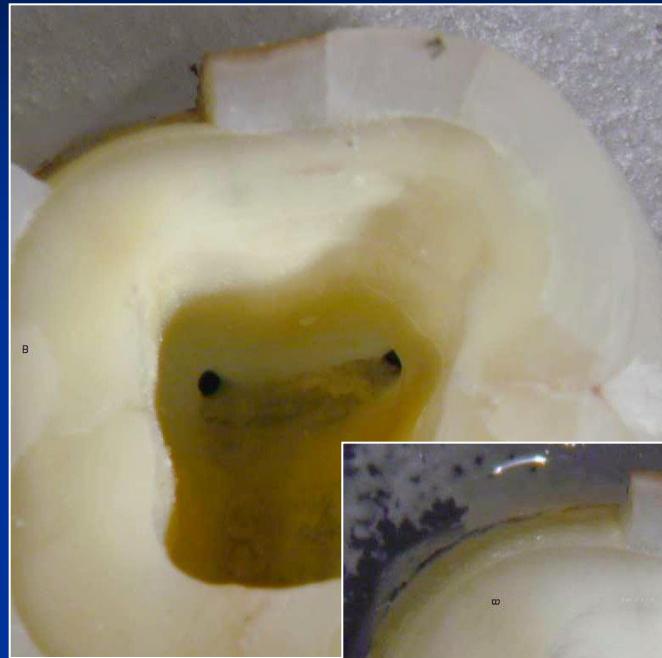
Dia trepan



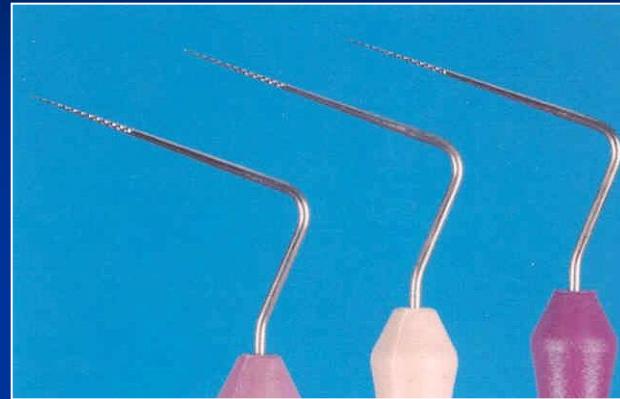
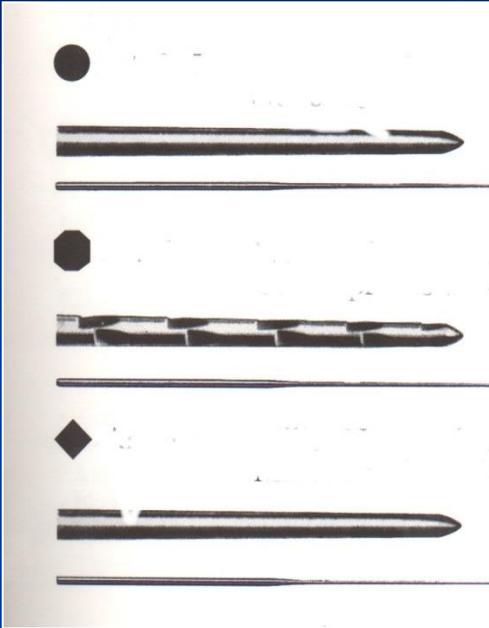
Instruments with safe
ended tips),
Acc. to Batt



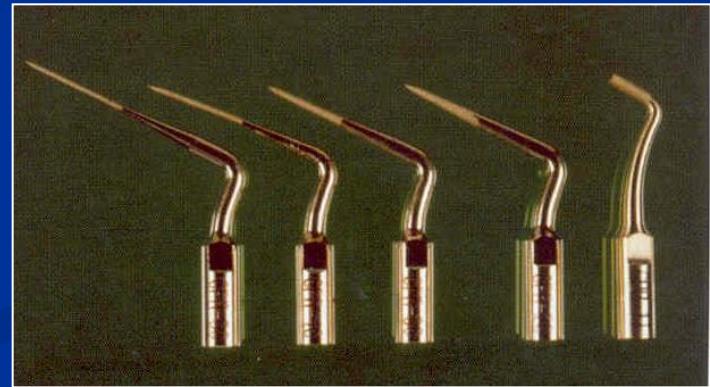
Fissure burs



Root canal access



← Endodontic probes
Microopeners



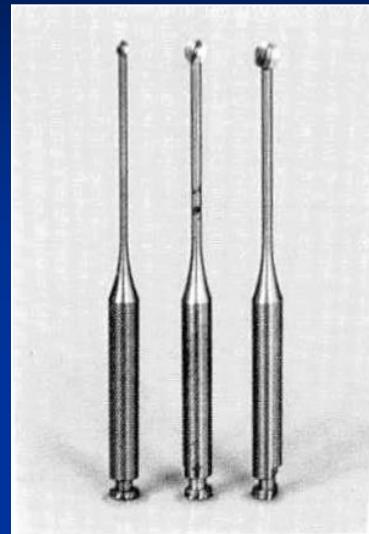
Ultrasound

Dye

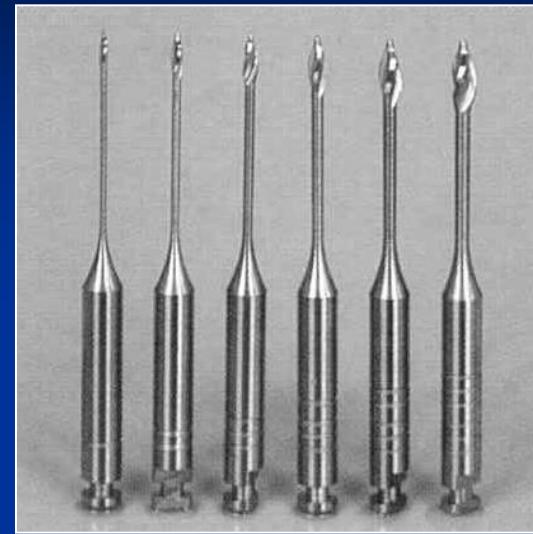
Opening of the root canal orifices



Round burs



Miller's burs



Gates Glidden's burs



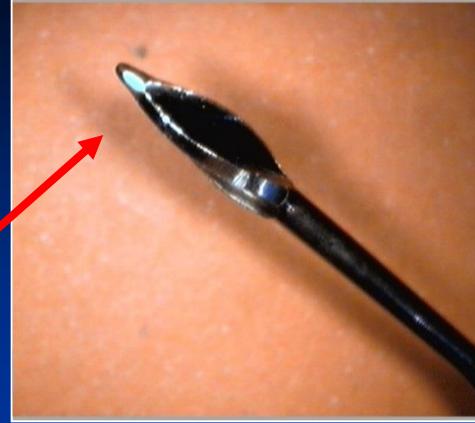
Peeso – Largo burs



Gates - Glidden

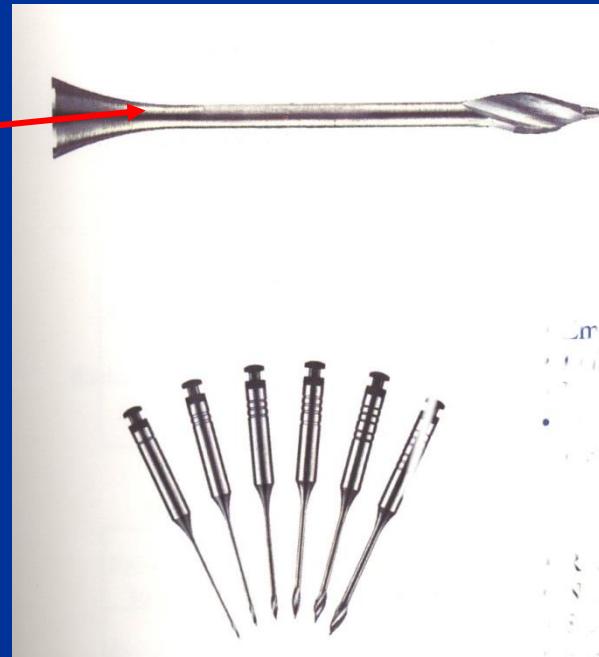


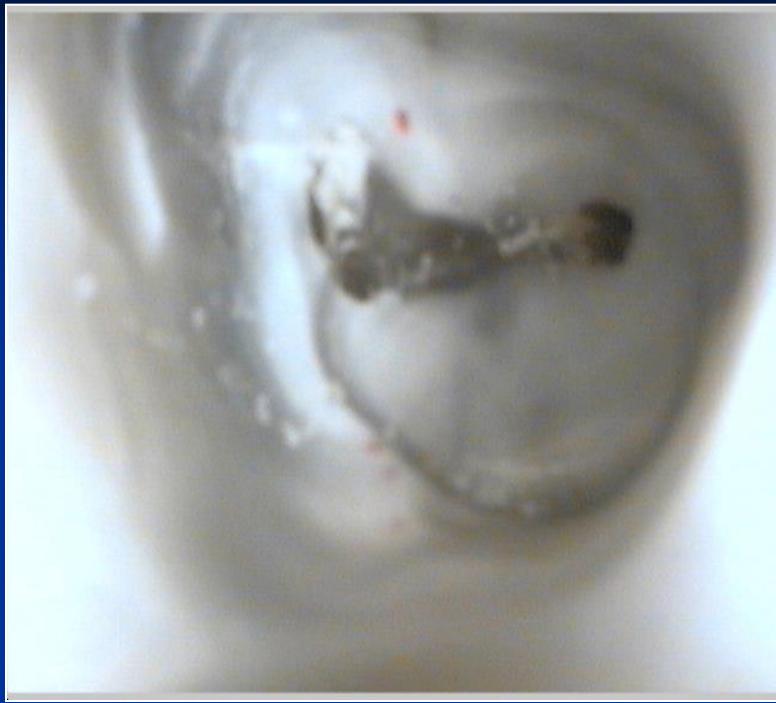
Peeso-Largo



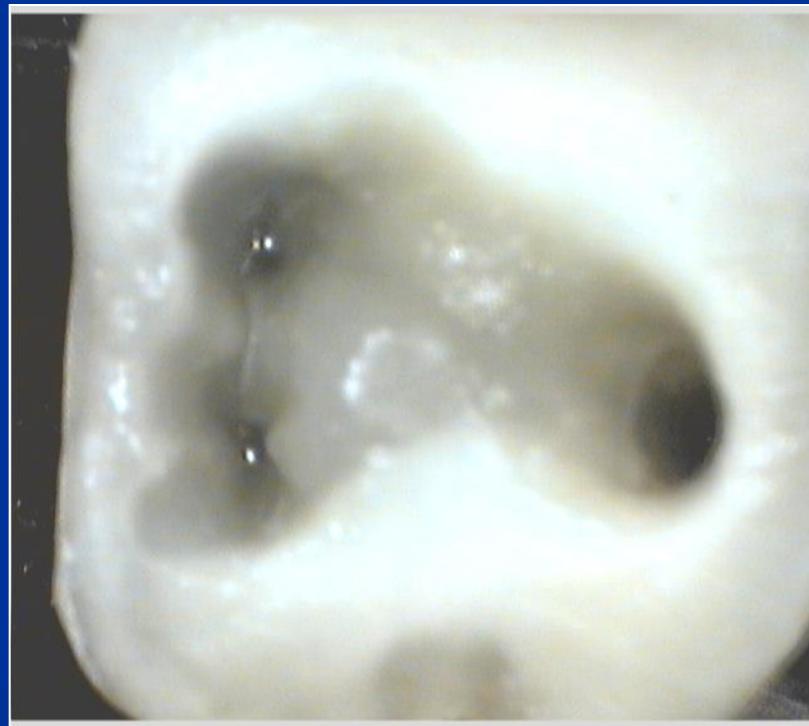
Gates – Glidden:

Point of breakage





Bad endodontic cavity

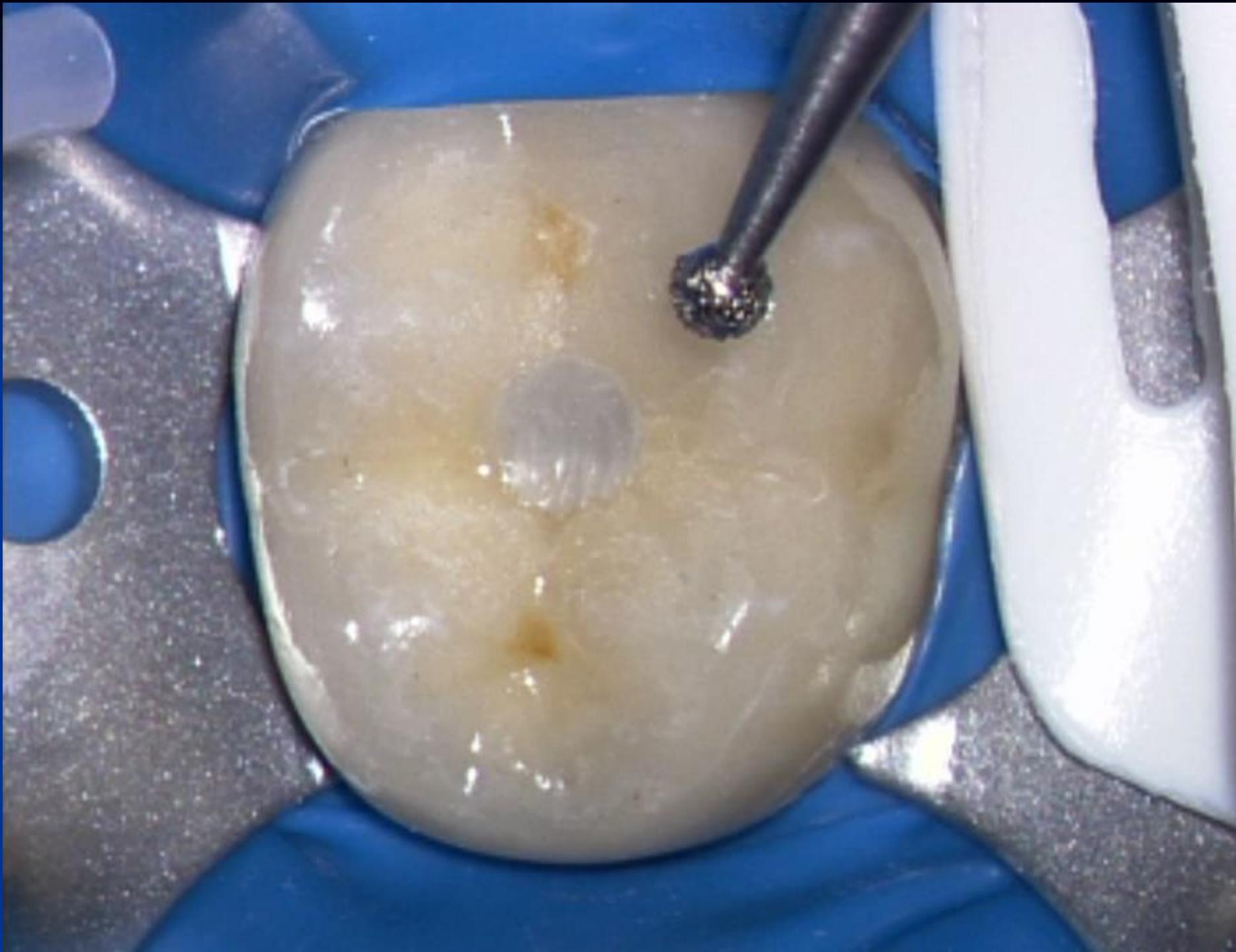


Good endodontic cavity



Přístupové sady Access kits









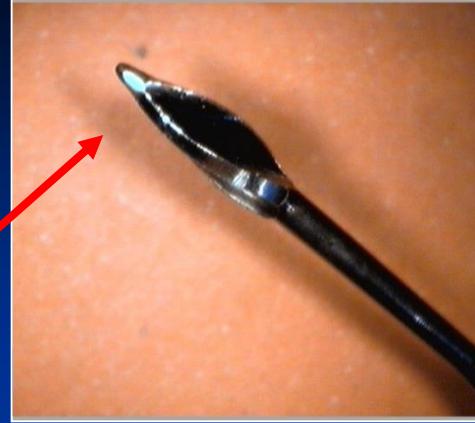




Gates - Glidden



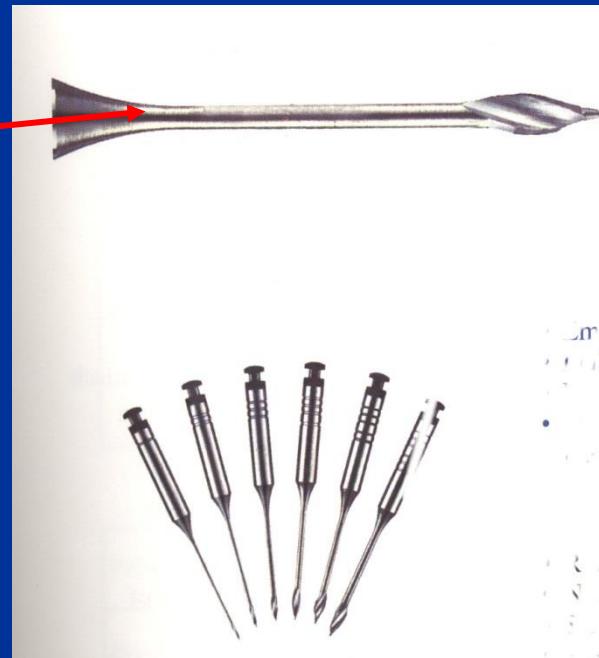
Peeso-Largo



Gates – Glidden:

Tupá, neaktivní vodící špička

Naprogramované místo
zlomu



X-GATES

Velikost hrotu :

Gates 1

Maximální průměr
– Gates 4

Místo zlomu

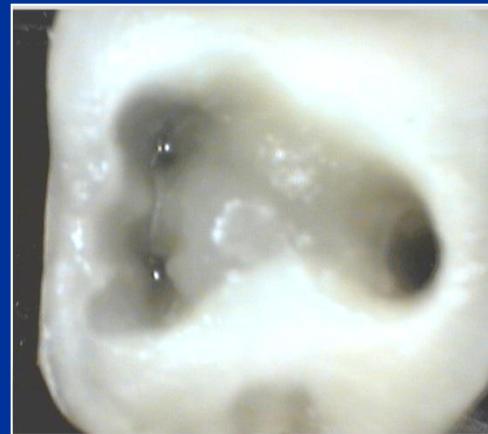
Dřív: Gates 3

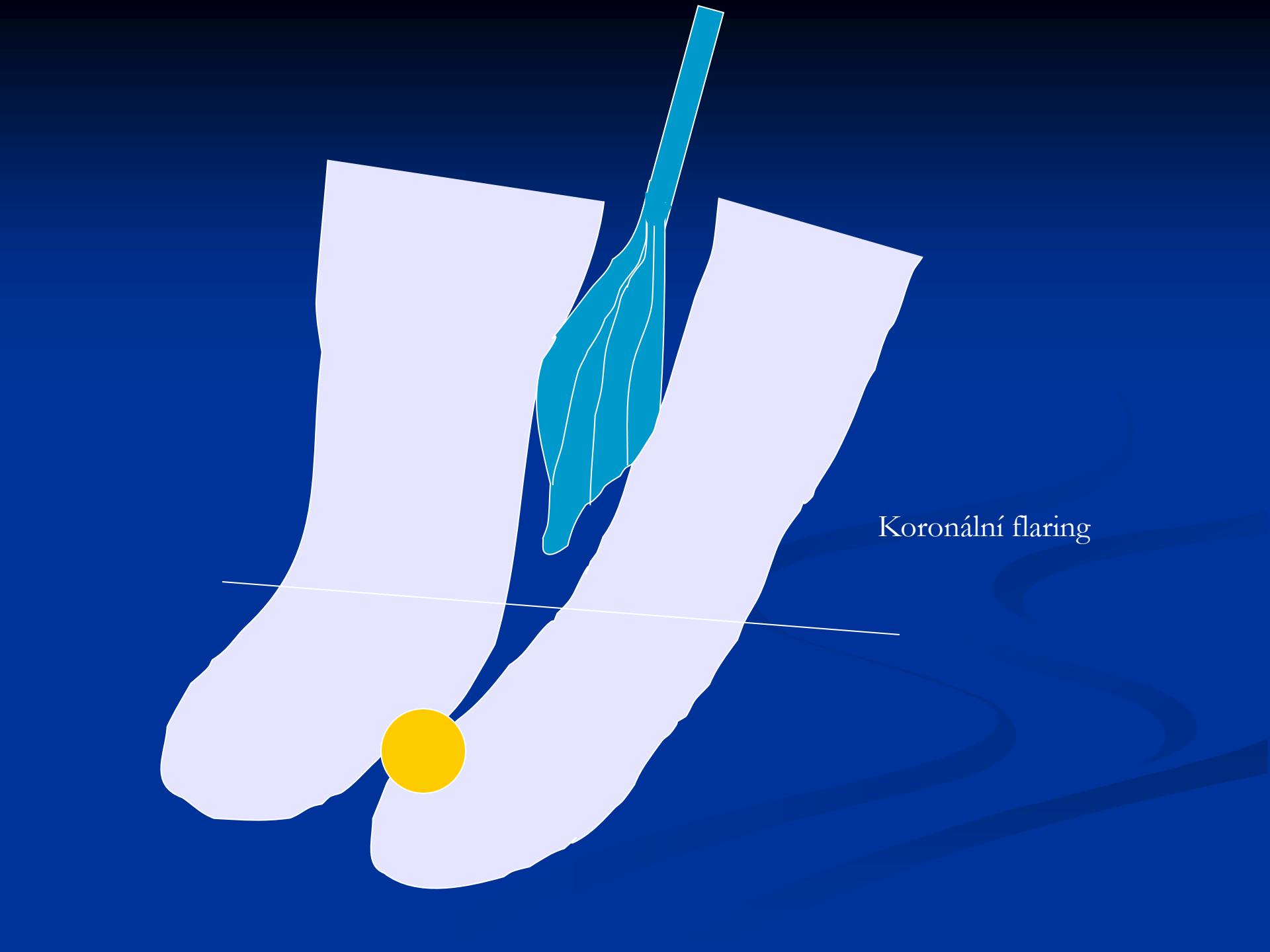




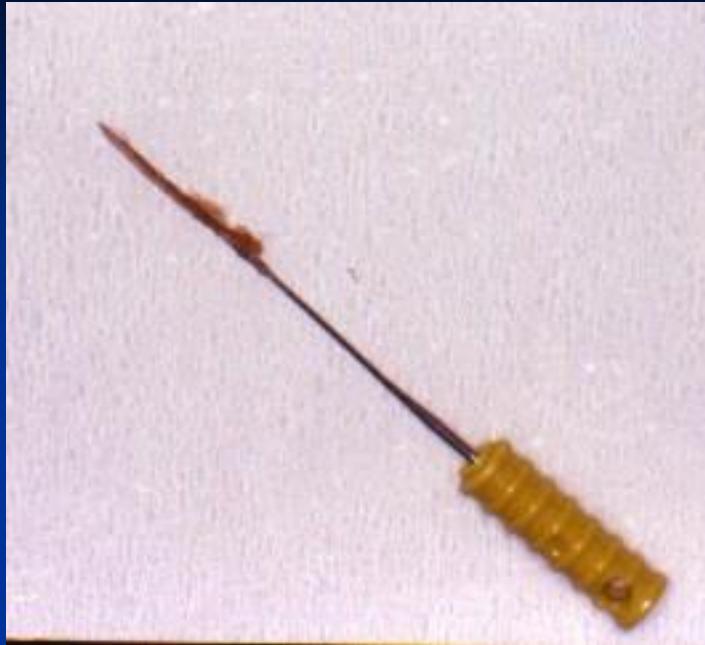


Nalezení a rozšíření vstupu do kořenových kanálků





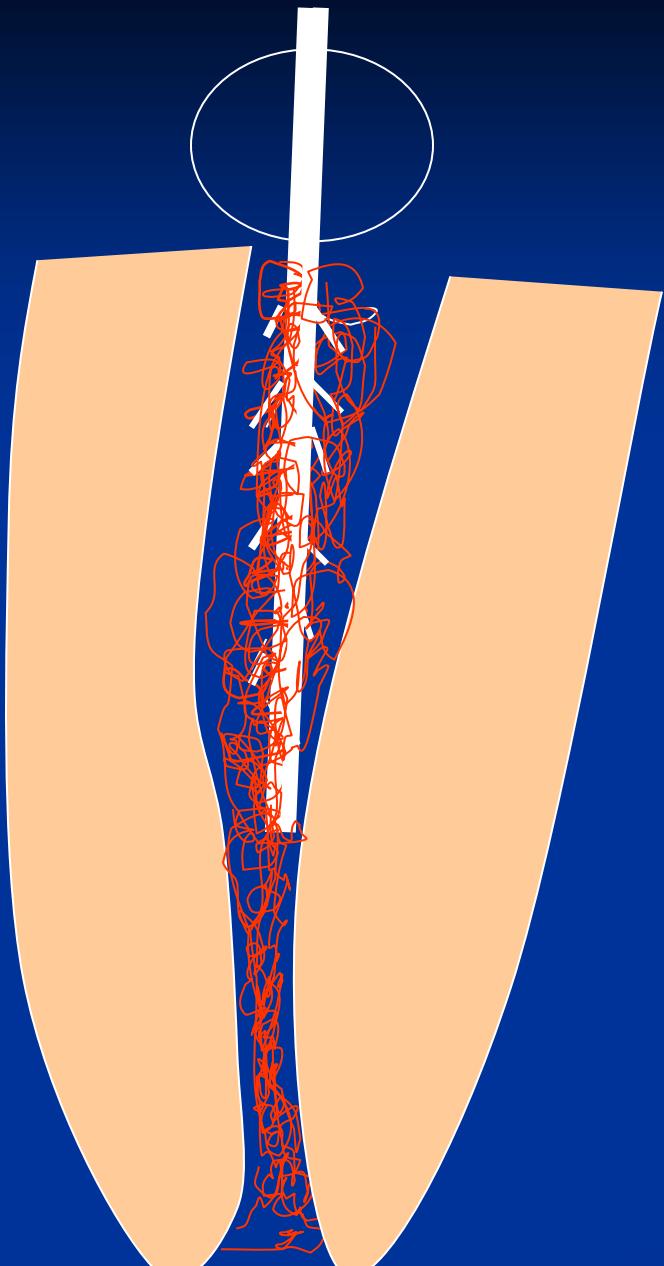
Koronální flaring



Extraction of the content of the root canal - exstirpation

Pulpextraktor – made of soft wire





➤ Rotation and exstirpation!

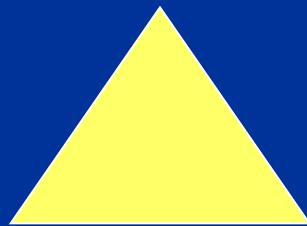
Canal shaping

- Reamers
- Files

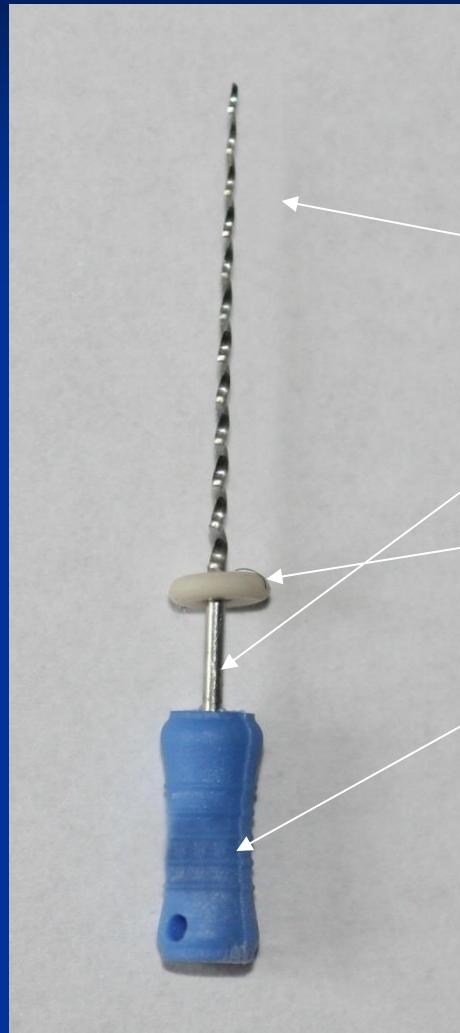
Reamer

-

K -reamer



Reamer

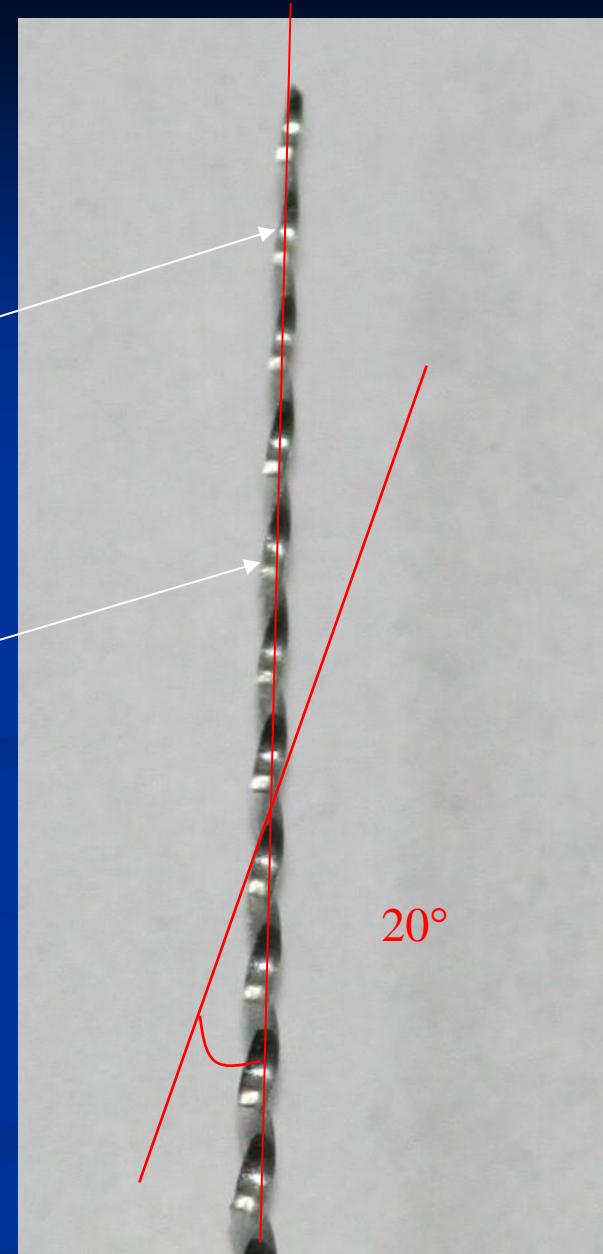


Reamer

Cutting edges

Space for chips

Clockwise rotation



Files

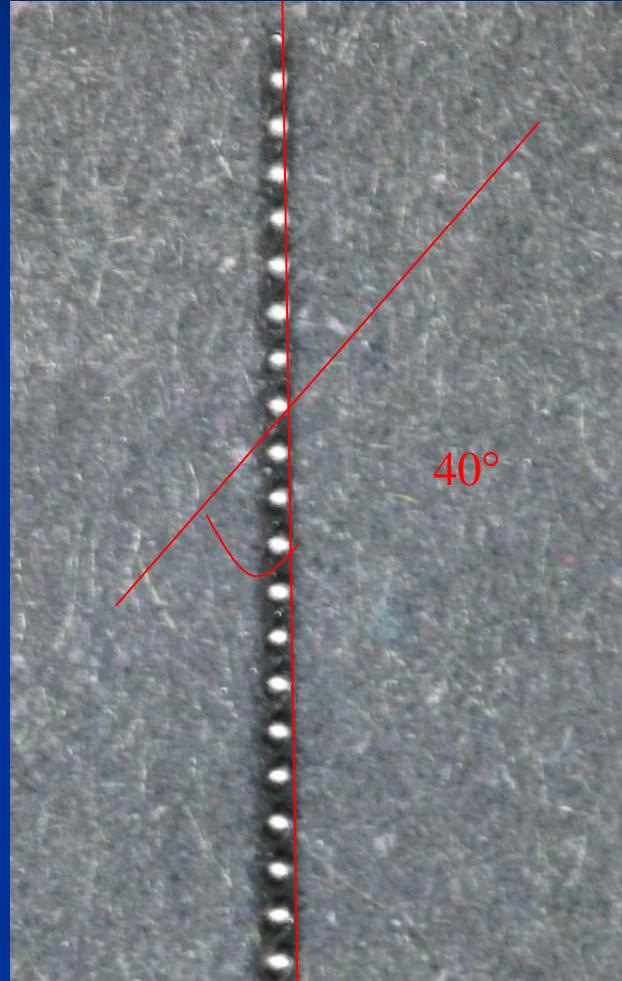
1. **K-file**
2. **K-flexofile, flexicut, flex-R - file**
3. **K-flex**
4. **H-file, S-file**

K file



K-file

*Filing and (or) rotation
Straight canals 45° - 90°)*

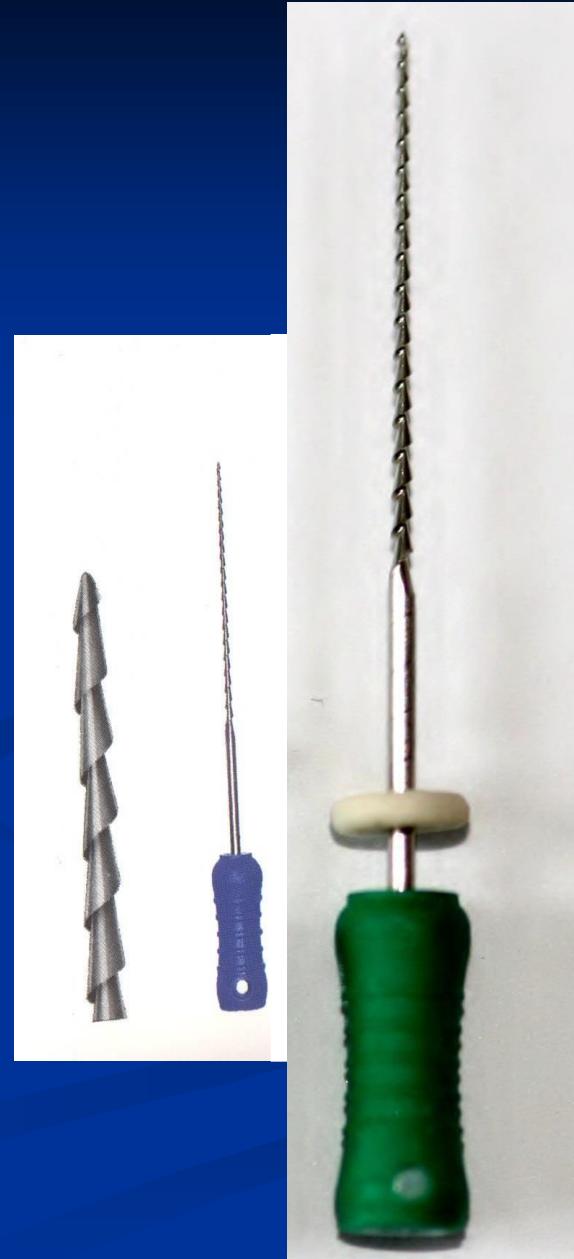


K-file x reamer



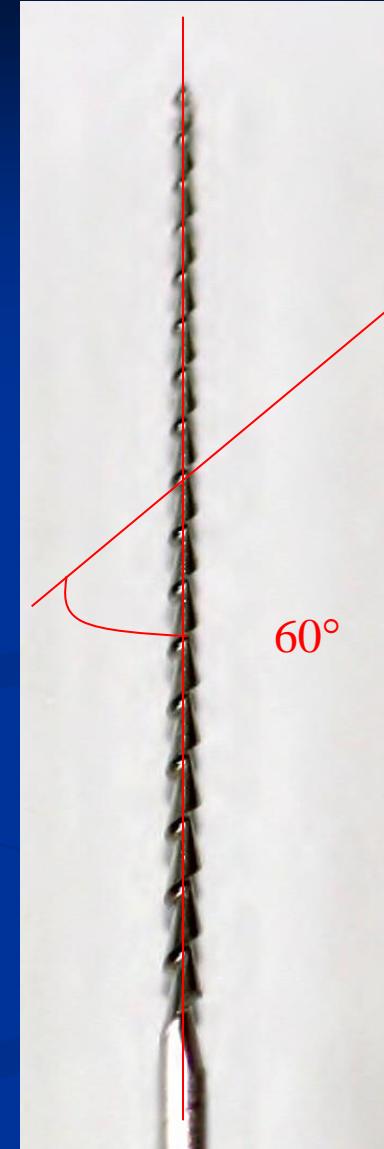
H-file

= Hedström file



H- file

Filing only!!!!



ISO norma

- Diameter
- Length of the cutting part
- Taper



06 pink

08 gray

10 purple

15 white

20 yellow

25 red

30 blue

35 green

40 black

45 white

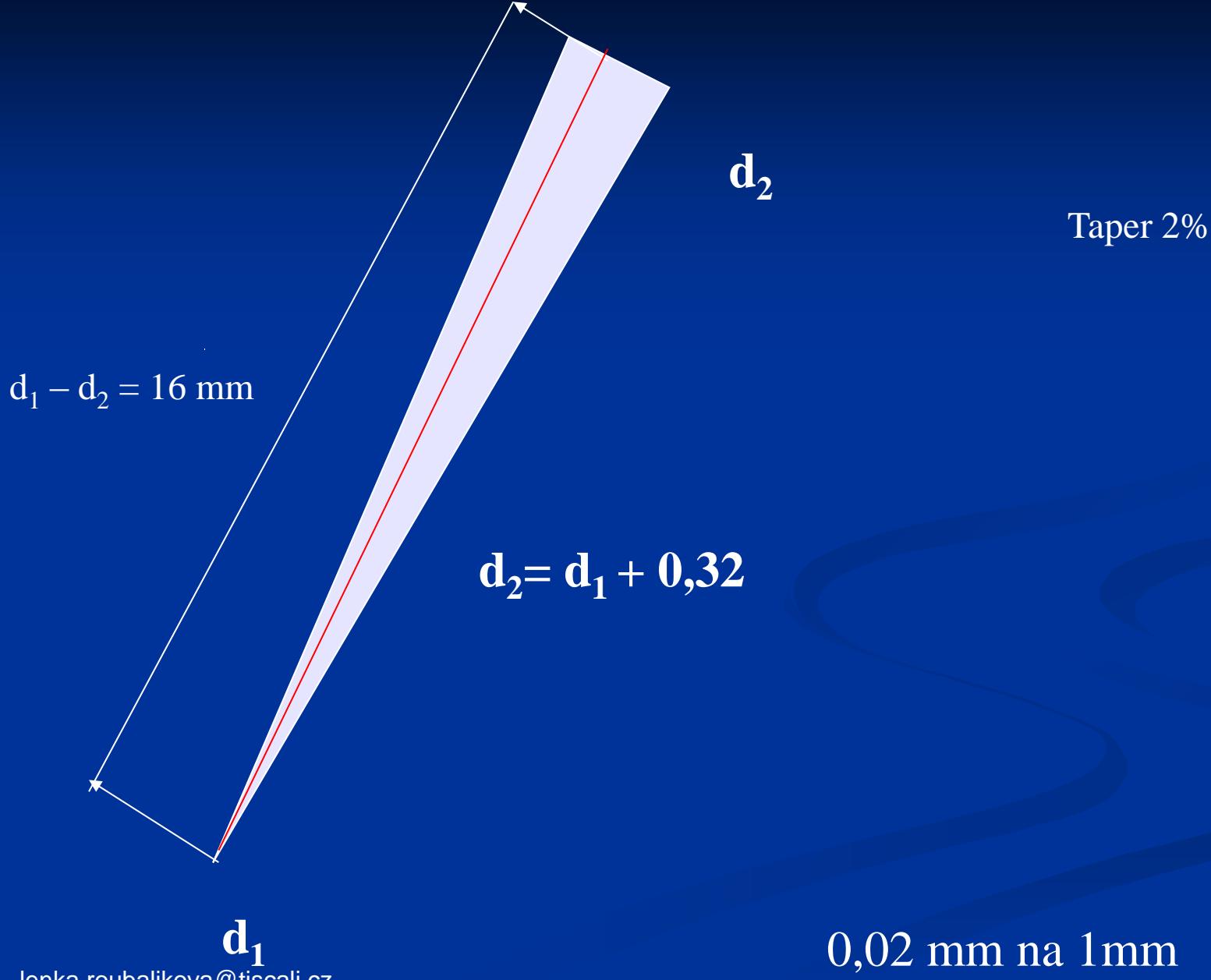
50 yellow

55 red

60 blue

70 green

80 black





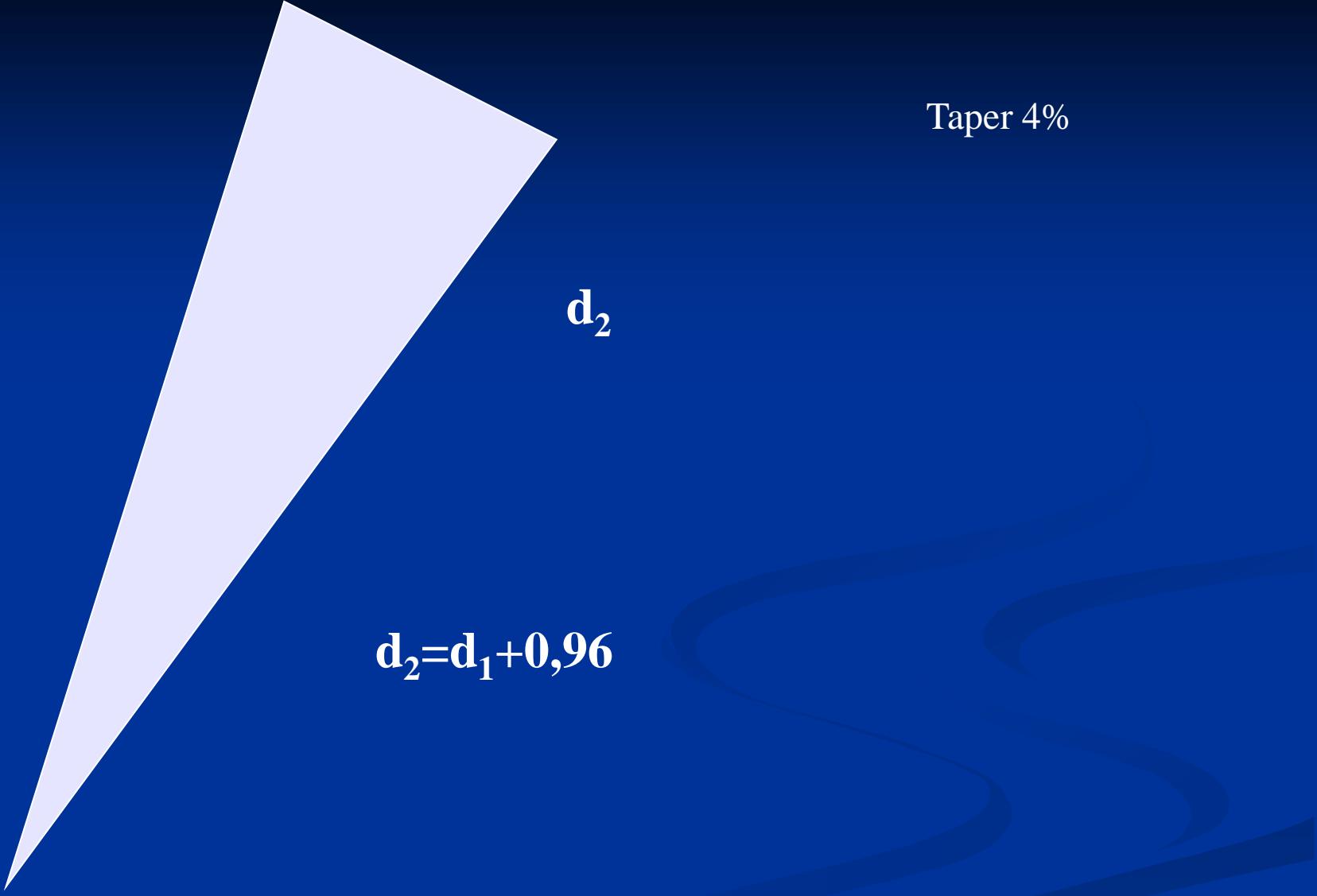
d_2

Taper 4%

$d_2 + 0, 64$

d_1

0,04mm na 1 mm



Taper 4%

d_2

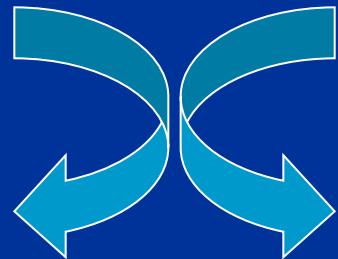
$$d_2 = d_1 + 0,96$$

d_1

0,06mm na 1 mm

Instrumentation

- Rotace tam a zpět – 45°

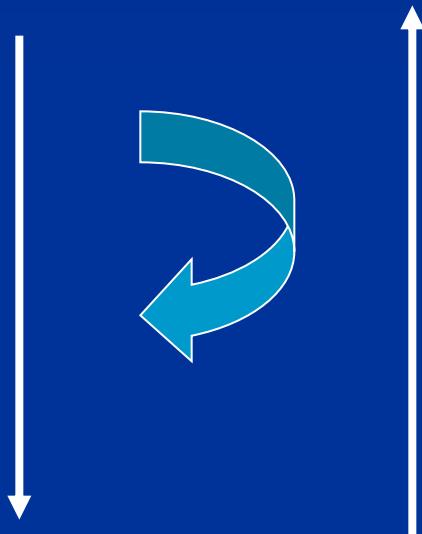


K – reamer

K- file

Instrumentation

Rotation

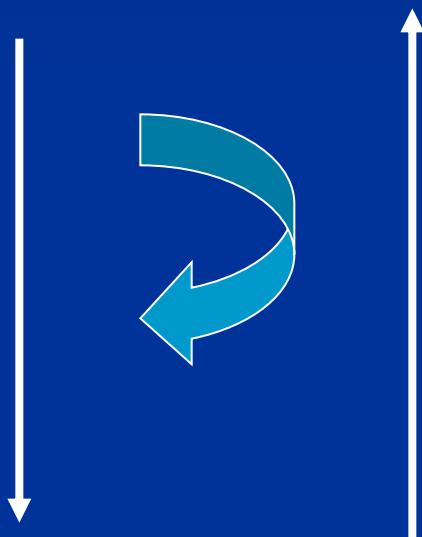


K – reamer

K- file

Instrumentation

- Filing

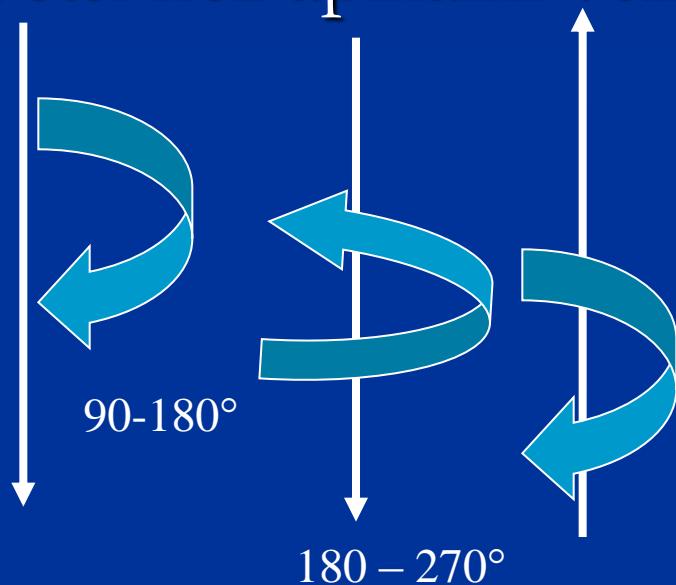


H- file

K – file

Instrumentation

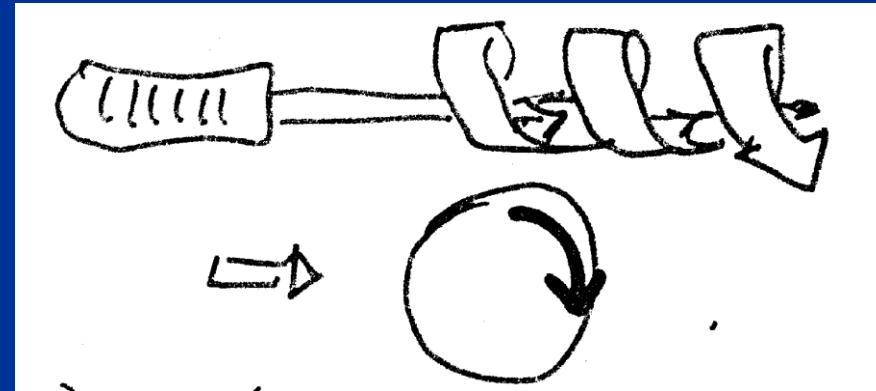
- Technika balancované síly – nástroj o 1 číslo větší než apikální velikost



K- flexofile

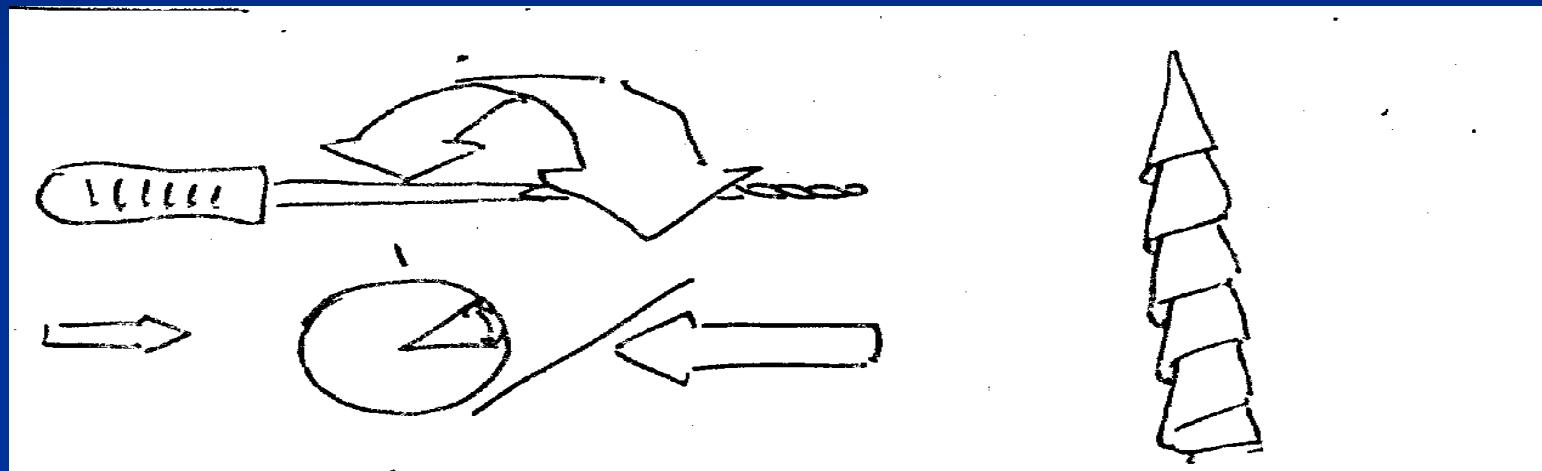
K – file (?)

Reaming

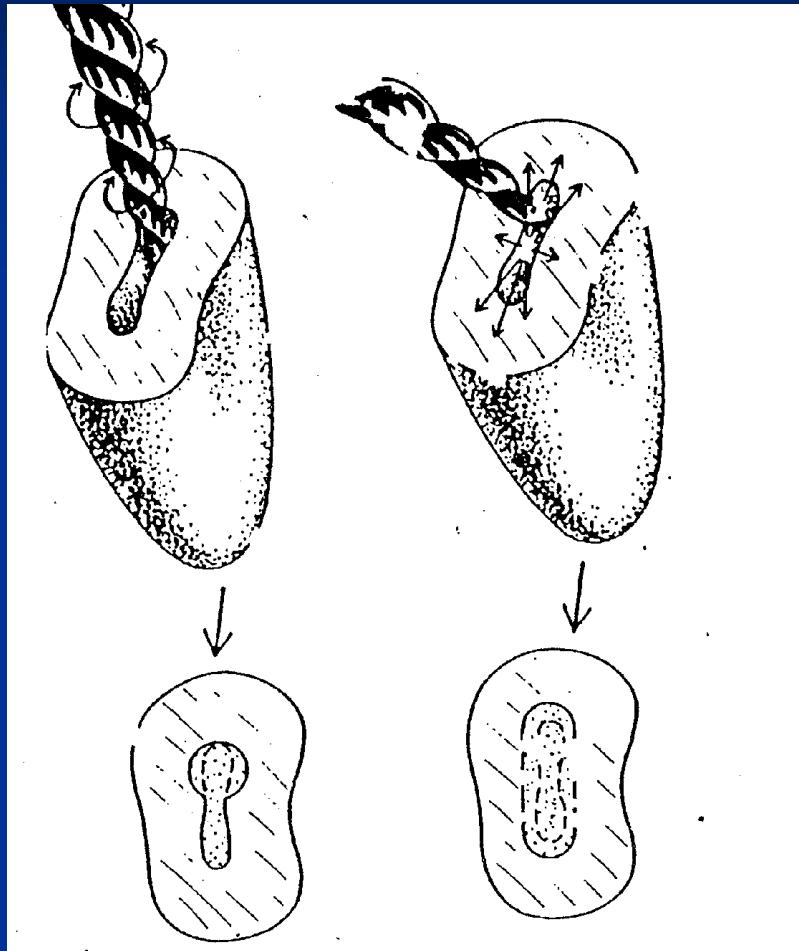


Simple clockwise rotation

Filing



Circumferential filing



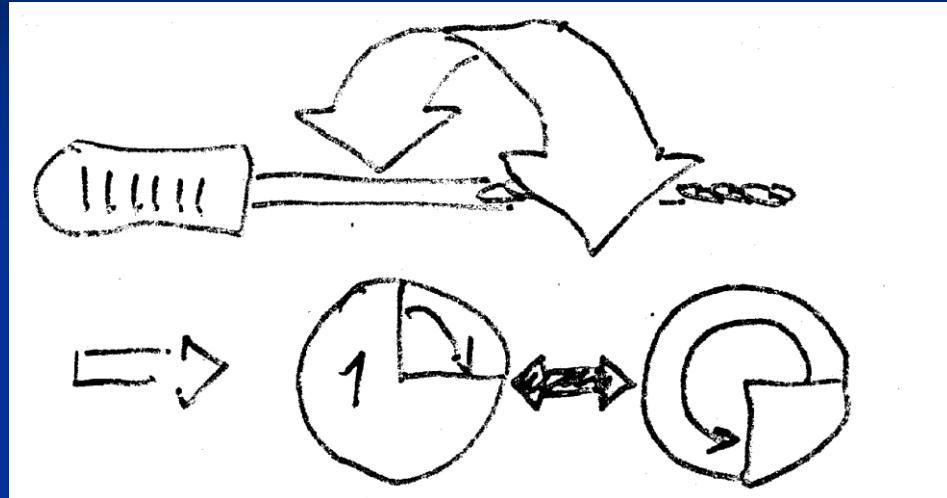
H -file

Introduction of th root canal instrument
root canal.

Pull motion – action.

Staying in contact with the root canal wall
Rotate without any action
Go in and pull with action.

Balance forced technique



K- file
Flex O file
Fülex R file

Go into the root canal rotating clockwise
 $90 - 180^\circ$
Until the contact
Slight pressure and rotate
Contractionwise 270°
Pull out the instrument rotating clockwise again

