Complications of endodontic treatment

Local
Regional
Systemic
Plug of dentin chips

Ledging

Transportation of the root canal

Via falsa

Zipping a elbow
Local complications
Plug

Reasons

Insufficient irrigation and recapitulation

Loss of the working length
Solution

Repeated careful instrumentation with a thin instrument

Irrigation is not effective in this case!!!
Ledging

**Reasons**

- The instrument is not bended in advance!
- No control of the WL
- No recapitulation
- Loss of the WL
Solution
The instrument must be bended in advance

Careful but complete rotation

Finishing with the fine filing

*No NiTi!!!*
Zipping a Elbow

The instrument is not bended in advance!

Rotation in curved canals
Stripping

**Reasons**

Bad orientation in morphology – no diagnostic x-ray

Instruments are not bended

Rotary NiTi with a big taper

**Dangerous zones**

*Mandibular molars – mesial roots*

*Premolars, esp. maxillar*

*Mandibular incisors*

*Oblast isthmu*
Stripping

Důkladný přehled!

Šetřit oblast isthmu!

Ruční preparace!

Menší kónus NiTi!
Stripping

Bend the instrument and eventually blunt it!
Fracture of the root canal instrument

Reasons

- Insufficient coronal flaring
- Old root canal instrument
- Aggressive force
- Incorrect movement of the root canal instrument
Solution

Enlargement of the root canal till the instrument

Ultrasound tips

Rotating root canal instrument – caution!

Bypass

Leaving in

Surgical treatment
Bypass
Fractured instrument
Regional complications
Píštěl
Systemic complications
Systemic complications

- Periostitis

- Inflammation of soft tissues (face, neck)

- Gulp of the instrument (X ray, remnant diet, information) - cough

- Aspiration of the instrument - emesis
Odstranění cizího tělesa z hrtanu

Stlačení hruďníku ze stran
Caution!

Always find the loss instrument !!!!!!