Treatment of Angle class I.
General anomalies
Outline

• Deep bite
• Open bite
• Transversal anomalies
  Lateral cross bite, Scissor bite,
  Crowding
Deep bite

- **Dento alveolar**
  Over eruption of incisors
  Lack of laterals eruption
  Multiple extraction

- **Skeletal**
  Usually together with
  Angle II/2
Analysis of the cephalogram

- ML-NL angle ↓
- ML-NSL angle ↓
- NL-NSL angle ↑
- Gonion angle ↓
Treatment of deep bite

- Intrusion of incisors
- Extrusion of molars
- Appliances:
  Multiband or removable appliance
Treatment with fixed appliance

Deep bite (Angle II/2)
Passive plate with bite raising block in the front
Open bite

- Anterior
- Lateral
  Unilateral Bilateral
- Dento alveolar
  Habitual dysfunction
- Skeletal
  Vertical development of the mandible
Analysis of the cephalogram

- ML-NL angle
- ML-NSL angle
- NL-NSL angle
- Gonion angle
Typical skeletal and dentoalveolar open bite
Treatment of open bite

• Elimination of the causes
• Correction of the vertical relation between the upper and lower jaws
• Appliances:
  Oral screen
  Activator
  Fixed appliance with intermaxillary elastics
ORAL SCREEN
Az aktivátor

- Andresen
- Häupl—funkciós állcsontortopédia
- Merev akrilátblokk
- Labiálív
- Öntött kapcsok
- Aktiválás ➔
- vertikális irányú becsiszolás
Dentoalveolar open bite due to habitual dysfunction
Treatment with tongue cribs

Tongue trust swallowing
Treatment of the open bite with fixed appliance
Treatment of the open bite with fixed appliance

- Tongue trust swallowing
- Utility arch
Transversal anomalies
Lateral cross bite

- Unilateral
- Bilateral
- Dentoalveolar
- Skeletal

[Lateral scissors]

[Lateral cross bite]
Analysis of the model

• Measurement of the indexes
• Analysis of the relation between the apical and the coronal base

Pont- and the Schmuth- index
Treatment alternatives of lateral cross bite

- In the deciduous dentition grinding and functional training (bite exercise)
- Functional appliance with screw
- Frankel I
- Active plate
- Quad-helix
- Hyrax screw
Hasund-féle Hansa készülék:

- felső lemezrész tágító csavarral, torqueáló-rugóval, Adams-kapoccsal
- Alsó lemezke
- speciális rugóval,
- ajakráccsal
Frankel appliance

- Buccális pajzs
- pelották
- transzpalatinális ív
- segédrugók

- Periosteum viszkoelasztikus elhúzódása
Upper and lower active plates
Unilateral cross bite
forced bite
Transversal widening
Treatment of scissors bite

• Closing the upper arch
• Expanding the lower arch
• Appliances: multiband, activator (with screw) active plate
Transversal anomalies
Crowding

• **Primer:**
  Size of tooth arch $\leftrightarrow$ Size of teeth

• **Secounder:**
  Early deciduous extraction and its consequence

• **Tertier:**
  Eruption of the wisdom
Crowding

• Primary $\leftrightarrow$ Jaw size $\Rightarrow$ Tooth dimension
• Secondary $\leftrightarrow$ Early extraction of deciduous
• Tertiary $\leftrightarrow$ Third molar
Treatment of crowding

- Prevention
- Space creation
  - Transversal and or sagittal widening (help: Pont index)
- Tooth material reduction
  - Extraction or stripping of enamel
  - (help: Bolton analysis)
Treatment of crowding

- Prevention
- Provision of space
  Pont index sagittal and or transversal expansion)
- Reduction of tooth material  (extraction stripping)
Non extraction treatment

- Crowding
- Large scale deep bite
- (Angle II/1.)
After the treatment
After the treatment
Extraction treatment

• Consideration: Expansion ⇔ extraction
• The measure of the narrow: 0-5mm, 5-10mm, 10-
• Consideration of the protrusion
• Consideration of the vertical relation
systemic extraction

• Extraction of deciduous canines
• Extraction of first deciduous molars
• Extraction of first premolar