TREATMENT OF ANGLE II. CLASS
Angle Classification

- Class I Molar (65%)
- Class II Molar (30%)
- Class III Molar (5%)
Angle I. osztály
Class I.

Disto Cuspid (Class II)

Divisions of Class II
Division 2
Divisions of Class II

- Division I - excess OJ
- Division II - "rabbited" incisors
- Subdivision - one side
Overjet

Distocclusion (the mandible is behind)

Sometimes the prognathism of the upper jaw is also responsible for the anomaly

Deep bite 70-80 %
Angle II/1 osztályú rendellenességek jellemzői

- Upper incisors are protruded
- Profile !!
- The lower jaw is in distal position
Angle II./1

- Upper incisors lean on the lower lip
- Incomplete lip closure
- Hyperactivity of the musc. mentalis and the lower part of musc. orb. oris
- Mouth breathing (often, but not always)
- Gingivitis, dry lips
Angle II./1

- Narrow upper arch can prohibit the mesial movement (growing) of the lower jaw
- Körbitz: it’s similar to slippers
Reasons of II/1

BAD HABITS:

- Thumb sucking
- Tongue thrust swallow
- Mouth breathing
- Hereditary
Distoocclusion
Overbite (always)
Retrusion of upper incisors
Angle II./2

- Hereditary anomaly
- Excessive function of the upper lip
- Pronounced sulcus mentolabialis (deep bite)
- Nose breathing
- „Forced distooclusion”
Purposes of the treatment

- Treatment of distoocclusion
- Treatment of overbite
- Straightening of the incisors
- Expansion of the upper arch
Early treatment
Oral screen
REVERSED INCLINED PLANE
Early treatment II/2

Plates

(with springs or mini screws for the protrusion of the upper incisors)
Early treatment II/2 Plates
(with springs or mini screws for the protrusion of the upper incisors)
Y Plate (2 screws)

Early treatment II/2 Plates
(with springs or mini screws for the protrusion of the upper incisors)
The indication for the Y plate overlaps with that of the more recent Bertoni screw (3-way-screw).
Bertoni screw
Expansion of the upper arch (slipper metaphor)
Hyrax !! (ripping of the midpalatal suture), quad-helix
Early treatment
Trainers
Functional jaw orthopaedics
Functional jaw orthopaedics
Functional jaw orthopaedics

- Restructuring of TMJ
- Restructuring of dentoalveolar area
- New muscle balance
Bimaxillary appliances - Functional jaw orthopaedics
AKTIVATOR
Construction bite - set of anteroposterior and vertical relationship
Functional jaw orthopaedics

Set of vertical relationship
Grinding of appliance
Set of incisors and vertical relationship
Grinding of appliance
FRANKEL - APPLIANCE
Double Plate
Double Plate
Treatment with fixed appliance
Fixed appliances for the treatment of II. class anomalies

- Herbst-appliance
- Jusper Jumper
- Forsus spring stb.
CLASS II MALOCCLUSION
FIX FUNCTIONAL APPLIANCES

PERMANENT DENTITION
CLASS II DIVISION 1

HERBST APPLIANCE (FIXED)
MANDIBLE HELD IN
PROTRUSION +
OPEN VERTICALLY
CLASS II MALOCCLUSION
FIX FUNCTIONAL APPLIANCES

HERBST APPLIANCE
II. Class rubbers
Headger and fixed appliance

If the maxilla is responsible for the anomaly and in mild distal occlusion:
- Distalisation of upper molars
- Prohibition of growing of upper jaw
Headgear
Anchorage
Distalisation of molars
Treatment of vertical anomalies
Treatment of II. class anomalies in adulthood

Extraction of upper premolars (compromised treatment)
Four premolar extraction

It’s not a routine treatment in II. class
By serious crowding or protruded lower incisor,
when we can’t avoid lower extractions
The purpose: I. class occlusion
CLASS II MALOCCLUSION
EXTRACTION OF FOUR PREMOLARS
DIFFERENTIAL ANCHORAGE

PRE-TREATMENT
SLEIGHTLY CONVEX
SOME LIP PROTRUSION
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

PERMANENT DENTITION
CLASS II SUBDIVISION RIGHT
MODERATE OVERJET
CLASS II MALOCCLUSION EXTRACTION

DEEP OVERBITE
LOWER MIDLINE RIGHT
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

MILD CROWDING
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

EXTRACTION OF
UPPER FIRST PREMOLARS +
LOWER SECOND PREMOLARS
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

UPPER ARCH

LOWER ARCH
CLASS II MALOCCLUSION
EXTRACTION OF UPPER FIRST AND LOWER SECOND PREMOLARS
DIFFERENTIAL ANCHORAGE

POST-TREATMENT
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

POST-TREATMENT
CLASS II MALOCCLUSION
EXTRACTION
DIFFERENTIAL ANCHORAGE

UPPER ARCH

LOWER ARCH
Surgical solutions
Orthodontic treatment before surgical intervention - Usually bimaxillary operations are indicated

Purpose: two regular, proportionate dental arch
Transversal expansion with surgical intervention in adulthood
Thank you!
Angle II/1.

Disto Cuspid (Class II)

Distal  Mesial
22. ábra. Skeletalis nyitott harapás
Divisions of Class II
Division 1