

# ORTHODONTICS

Diagnostic examination

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# Diagnostic examination

## 1. ANAMNESIS

### a] Family anamnesis

- dental problems of parents
- orthodontic anomalies of parents
- genetic health problems



# Diagnostic examination

## 1. ANAMNESIS

### b] health anamnesis of the patient

- medicaments
- allergy
- facial and dental injury
- contagious disease



# Diagnostic examination

## 1. ANAMNESIS

### c] special anamnesis of the patient

- frenulectomy
- adenotomy
- habits
- mouth breathing



# Diagnostic examination

## 2. CLINICAL EXAMINATION

### a] extraoral examination

- profile [convex, concave, straight]
- face symmetry
- temporomandibular joints



# Diagnostic examination

## 2. CLINICAL EXAMINATION

### b] intraoral examination

- Status of dentition, caries, fillings
- Anomalies of the relationship of dental arches – Angles classification
- Overjet, overbite
- Status of oral soft tissues, frenulum
- Functional examination, centric occlusion
- hygiene



# Diagnostic examination

## 3. MODEL EXAMINATION

- space analysis, discrepancy
- arch form
- dental anatomy
- intercuspidation



# Diagnostic examination

## 4. RADIOGRAPHS

### a] Panoramic

- detection of congenital absences of teeth
- detection of supernumerary teeth
- evaluation of the dental health of the permanent teeth
- assessment of trauma to the teeth after injury
- determination of dental age of the patient
- calculation of root resorption
- condyles







# Diagnostic examination

## 4. RADIOGRAPHS

### b] Cephalometric radiographs

- evaluation of craniofaciodental relationship
- assessment of the soft tissue matrix
- determination of mandibular position
- prediction of growth and development
- detection of skeletal age





# ANALÝZA KEFALOMETRICKÉHO SNÍMKU

N - nasion (1)

S - sella (2)

a - articulare (3)

Me - menton (6)

Po - pogonion (7)

SpA - spina nasalis ant. (9)

SpP - spina nasalis post. (10)

A - bod A (11)

Is' - apex horního středního řezáku (12)

Is - incisale superius (13)

Li - incisale inferius (14)

Li' - apex dolního řezáku (15)

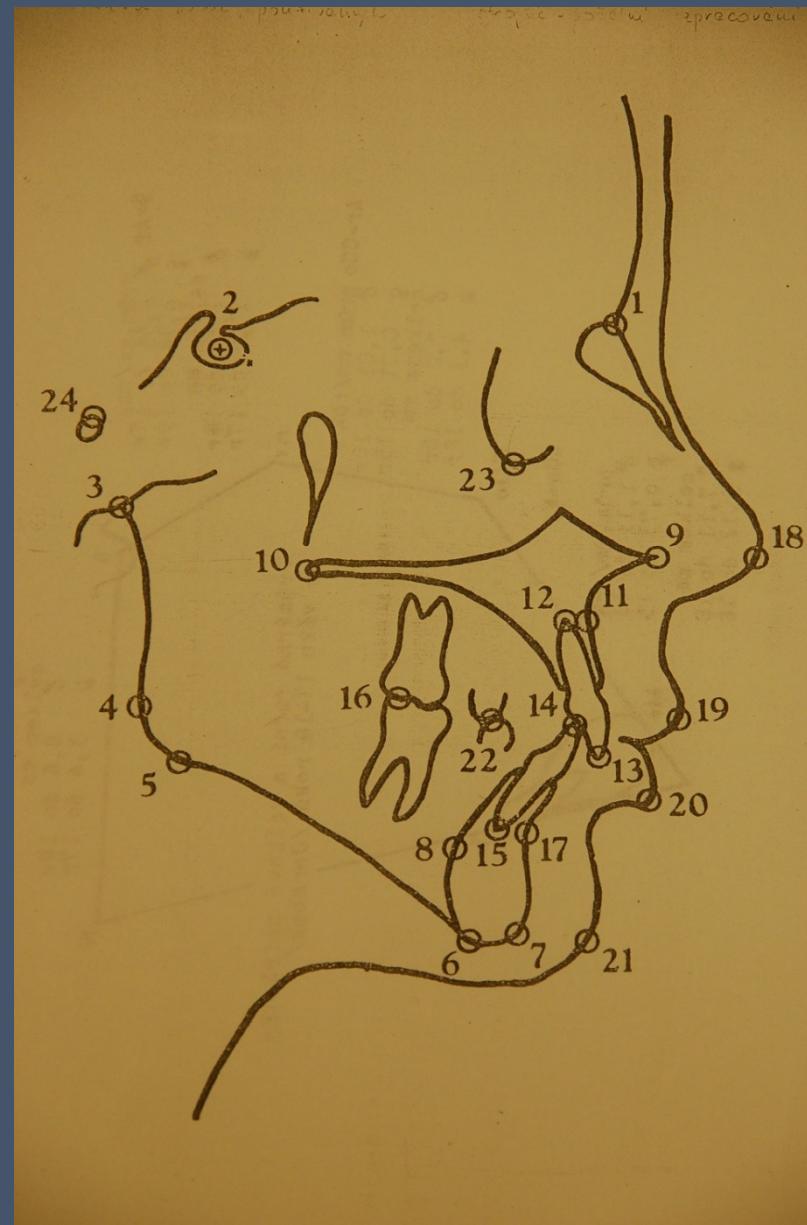
B - bod B (17)

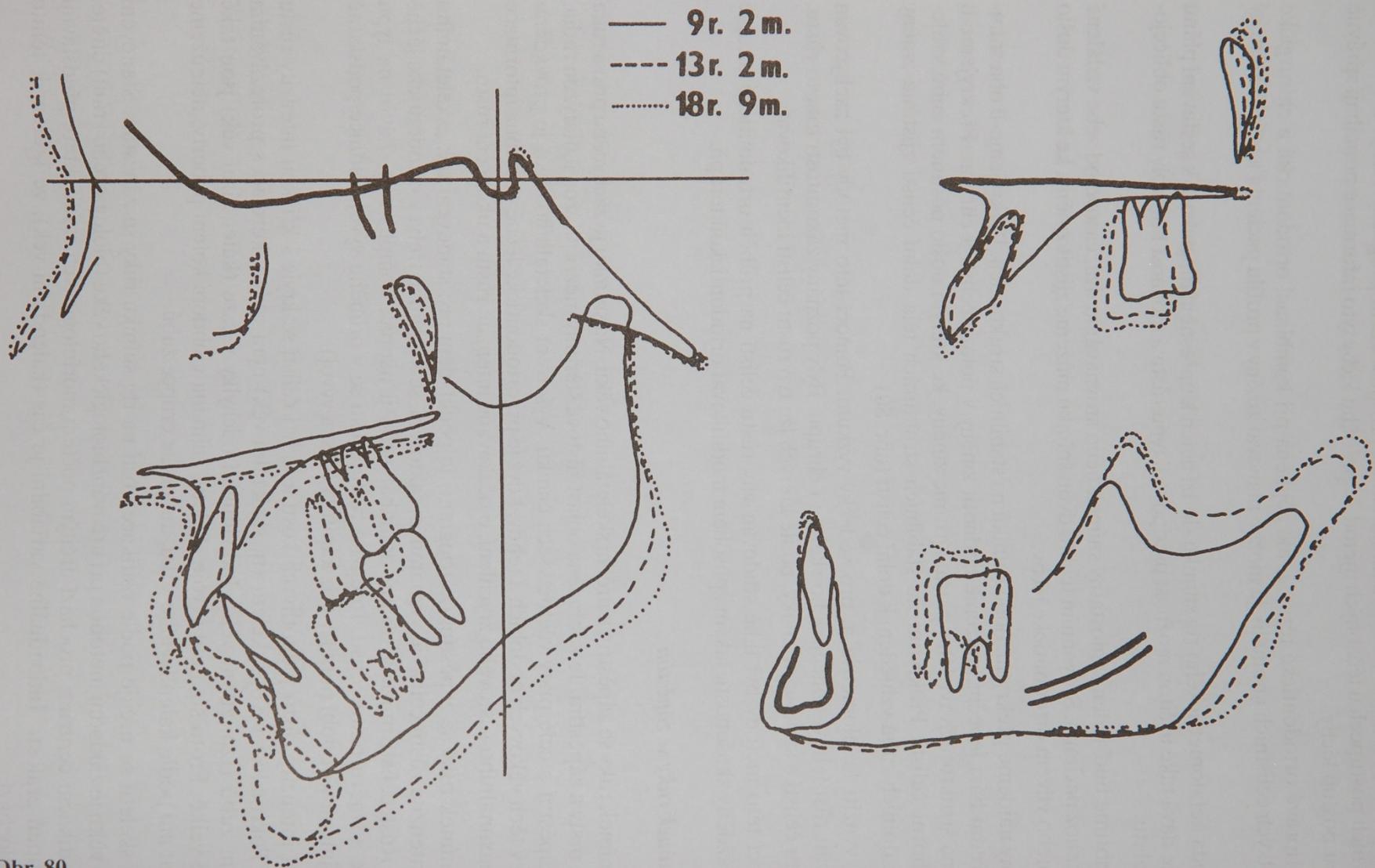
Go - gonion (kontr. bod: 1. a-4, 2. ML)

Gn - gnation (konstr. bod: 1. N-Po, 2. ML)

ML - mandibulární linie (Me-5)

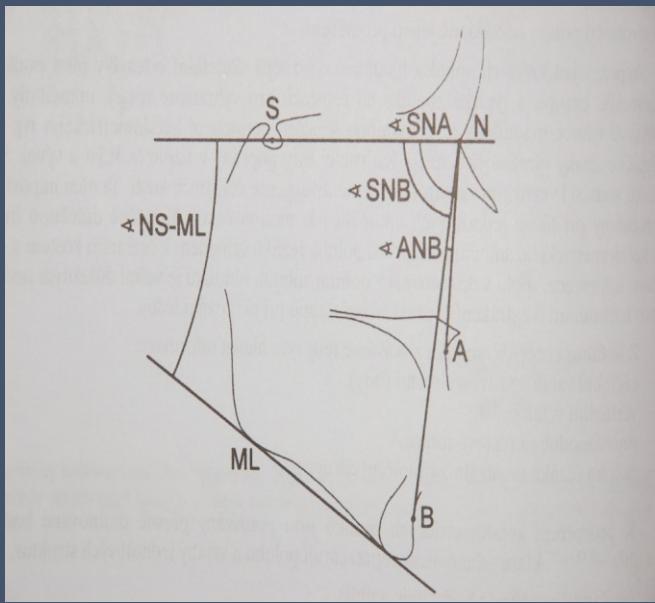
FOL - funkční okluzální linie





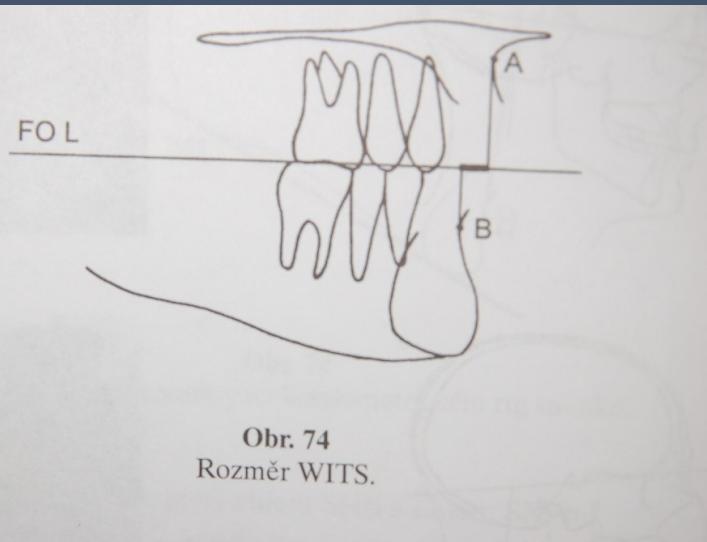
Obr. 80





## skeletal analysis

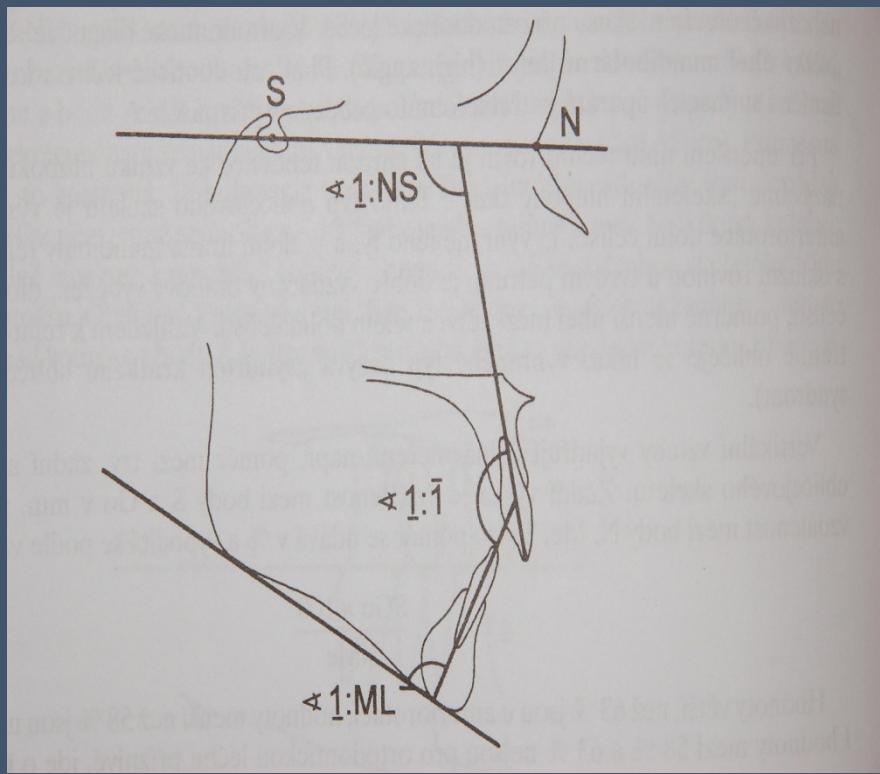
- ANB (-1 až +5 stupňů)



Obr. 74  
Rozměr WITS.

- WITS (-2 až +2)





# Skeletal class I



## Skeletal class II

div. 1 with protrusion



div. 2 - with retrusion



## Skeletal class III



# Bimaxillary protrusion



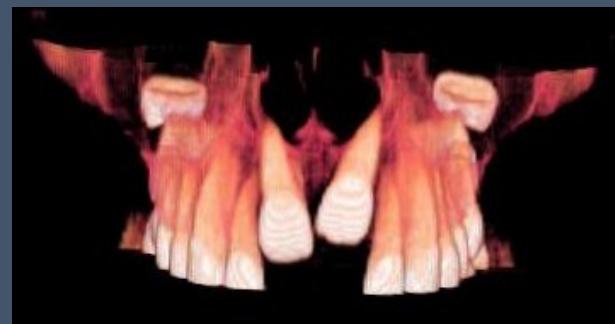
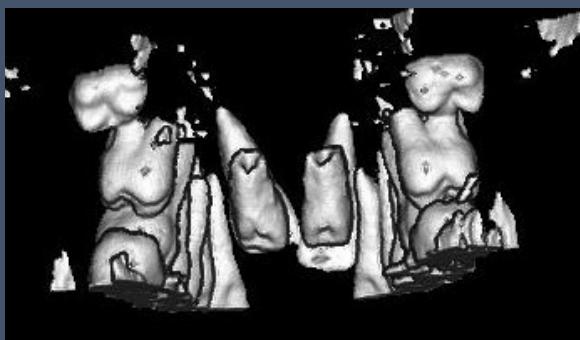
# Diagnostic examination

## 4. RADIOGRAPHS

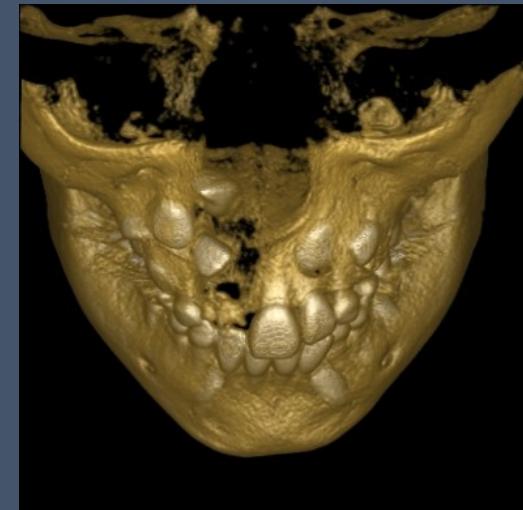
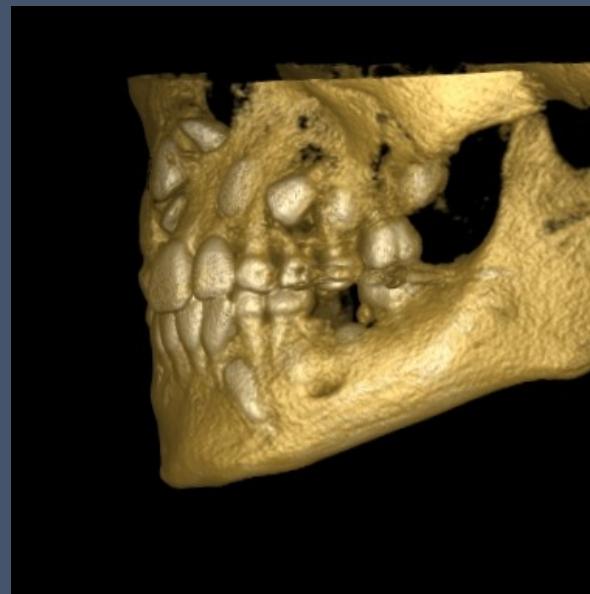
### c] Other radiographs

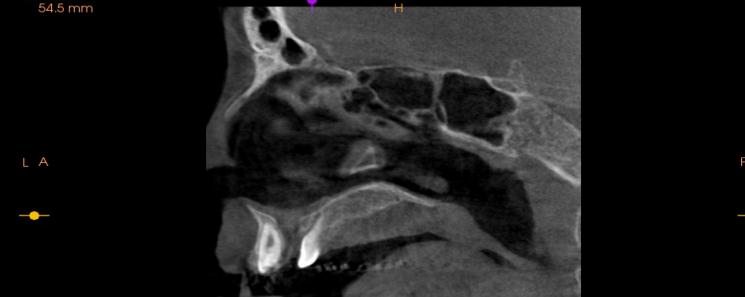
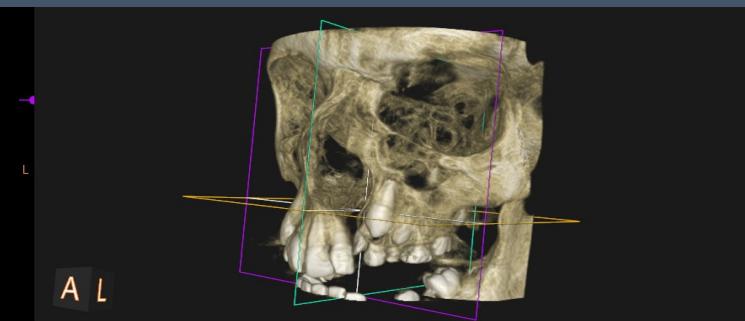
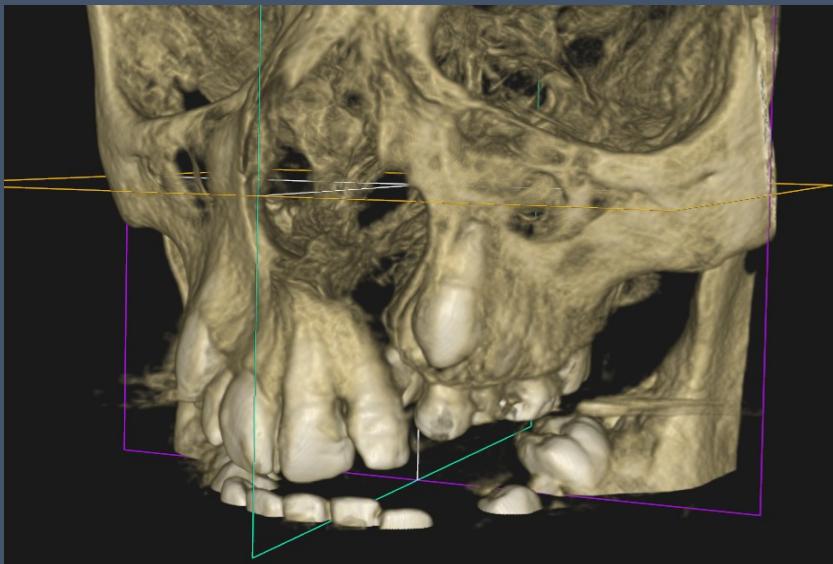
- Bitewing – caries detection
- Hand wrist – detection of skeletal age
- Computer tomography –CT scan [impacted tooth, ankylosed tooth, difficult skeletal anomalies
- Digital imaging – computer generated model reconstructed from the initial imaging data











# Diagnostic examination

## 5. PHOTOGRAPHS

- extraoral photographs - frontal
  - profile
  - smile
- Intraoral photographs - frontal teeth
  - right and left side
  - upper and lower arch







try to diagnose orthodontic anomalies

?



Case 1- ?



Case 1



Inverted bite

Shifted midline

Missing 13,23



Case 2 -?



## Case 2



Anterior cross bite 11, 22

Protrusion of 21

Mixed dentition



Case 3 - ?



# Case 3



Crowding  
Shifted midline  
Vestibular eruption 23  
Anterior cross bite 12



Case 4 -?



# Case 4



Deep bite  
Angle class I  
Crowding  
Mesial inclination 12, 21



# Case 5 - ?



# Case 5



Lateral Cross bite  
Crowding  
Angle class I



# Case 6 - ?



# Case 6

Deep bite  
Angle class I  
Retrusio 11, 21



# Case 7 - ?



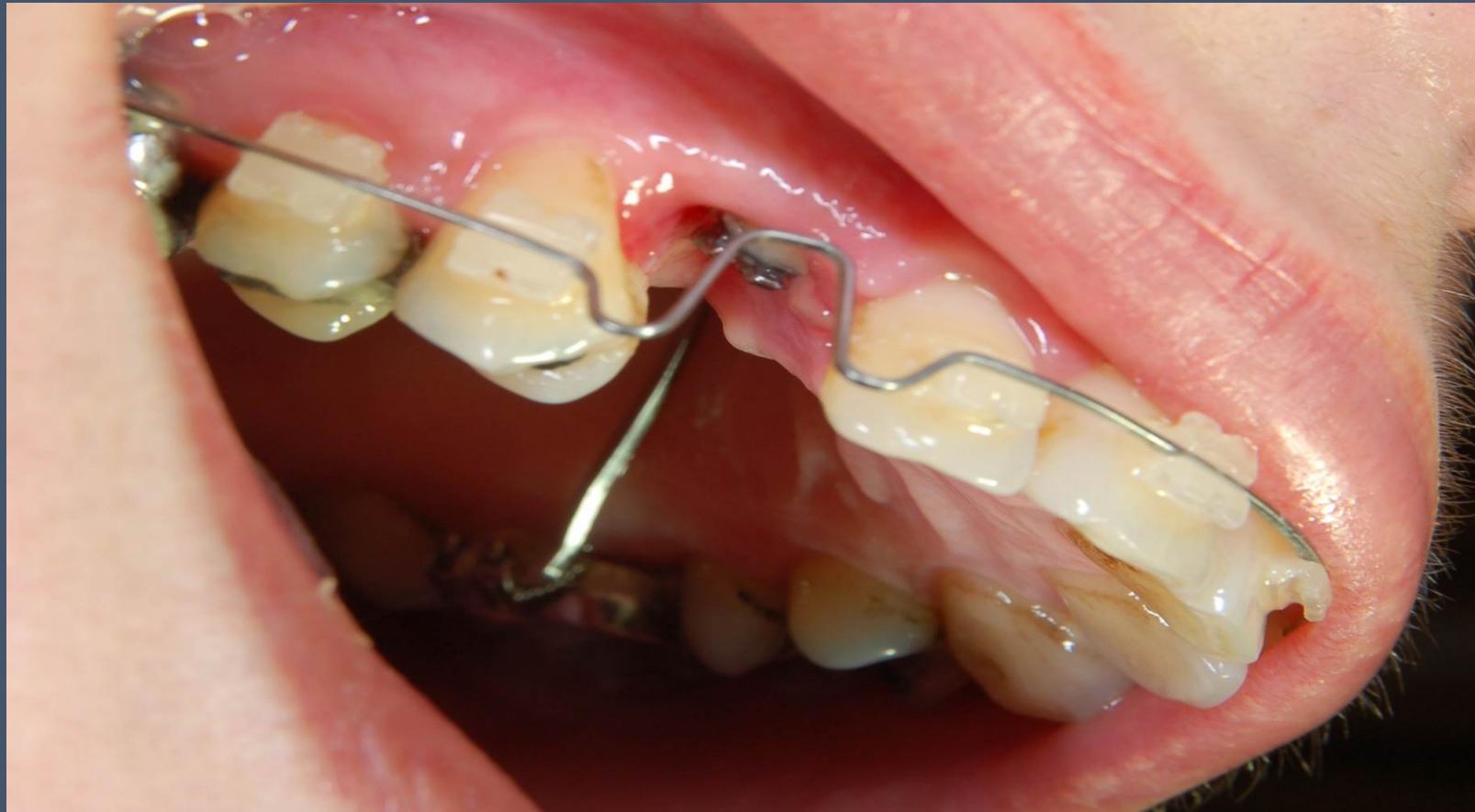
# Case 7



Open bite  
Angle Class II  
Protrusion upper incisors



# Case 8 - ?



# Case 8



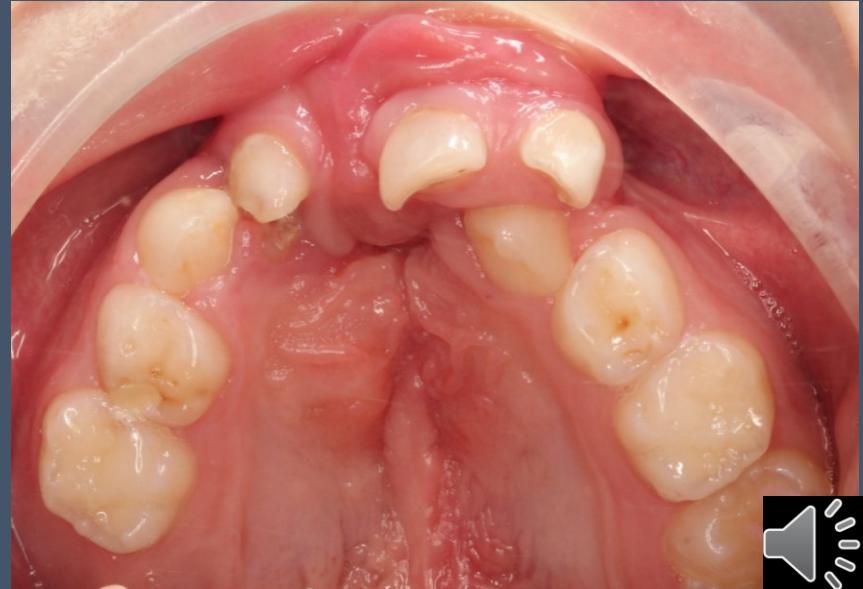
Retention of 13



Mezialization 47 on the 46 position with minisrew – space closure



# Cleft lip and palate patients



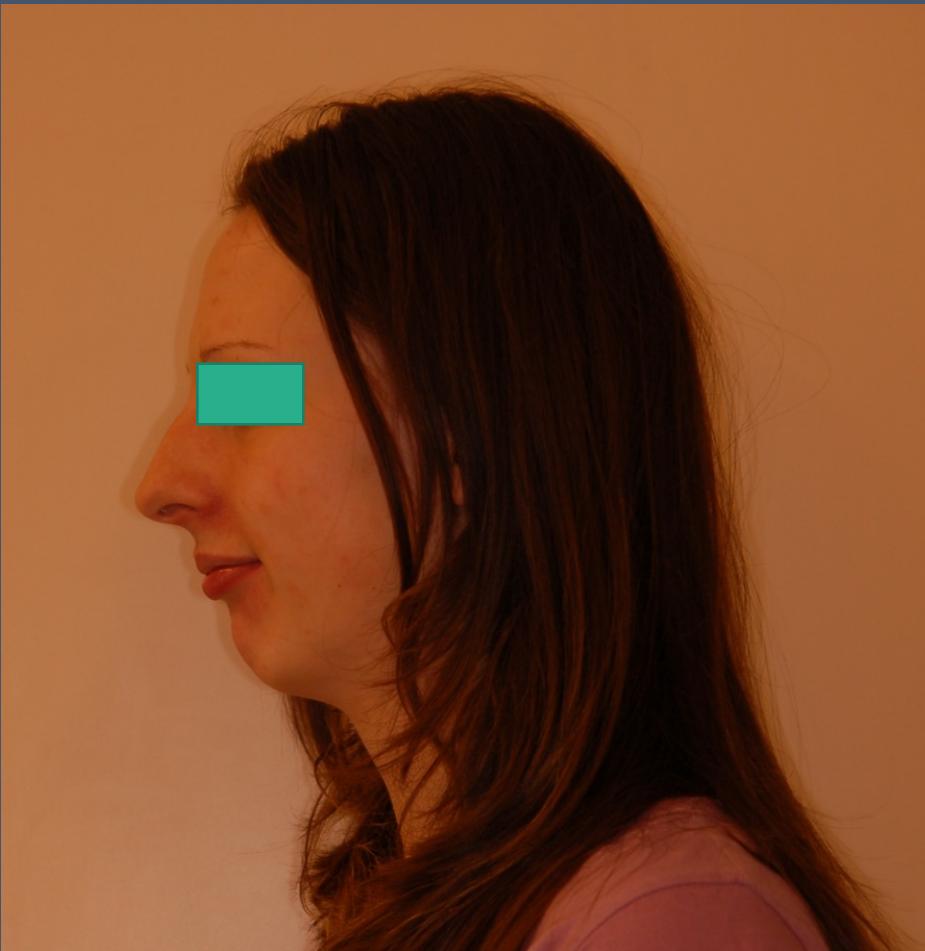
# Gummy smile, inclined occlusal plane



# Skeletal class II, protrusion upper incisors



# Skeletal class II



# Skeletal class III



# Skeletal class III, open bite, inverted bite



# Thank You four Your attention

Questions – email – [alena.brysova@fnusa.cz](mailto:alena.brysova@fnusa.cz)

Consultation – Orthodontic department - St. Anne's Hospital, building D2b – Thursday 1-2 p.m.

