

III. osztályú anomáliák kezelési lehetőségei

Dr. Nemes Bálint

Semmelweis Egyetem,
Gyermekfogászati és Fogszabályozási Klinika



SEMMELWEIS
EGYETEM 1769

Vázlat

Angle III anomália **diagnózisa**

Angle III **kezelésének időzítése**

Angle III **kezelésének lehetőségei**

Konzervatív kezelés

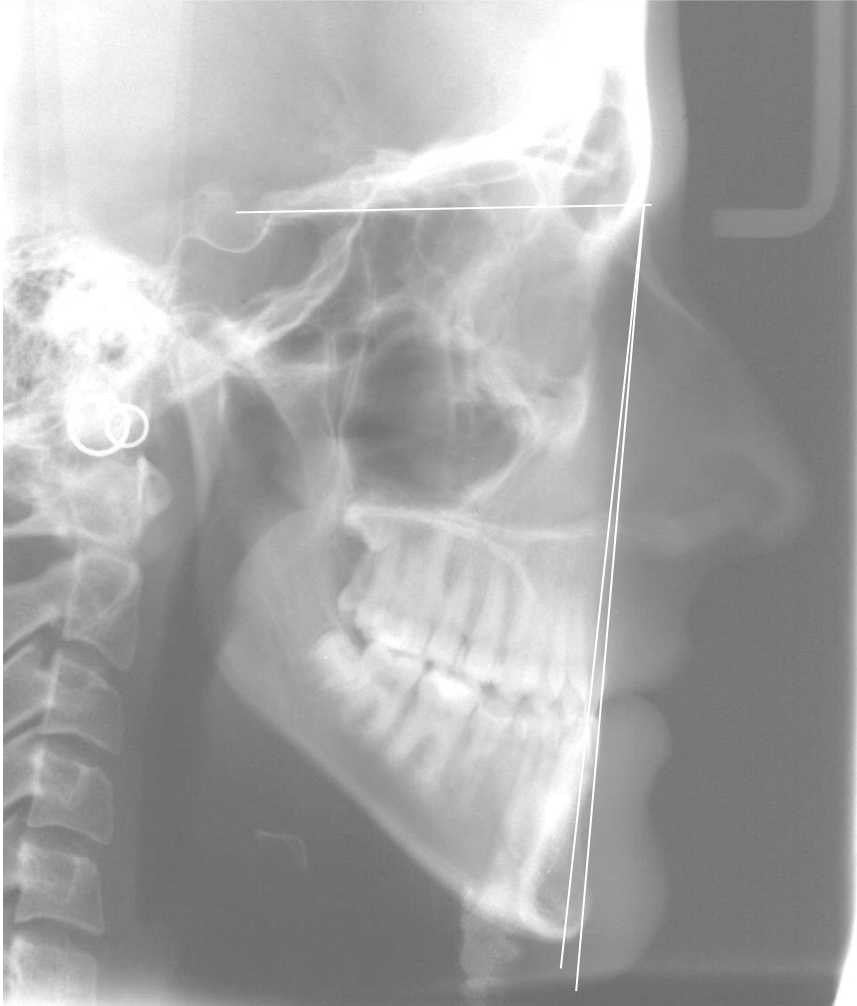
Szemikonzervatív kezelés

Szemiinvazív kezelés

Műtéti kezelés

Esetbemutatók

Szkeletális diagnózis



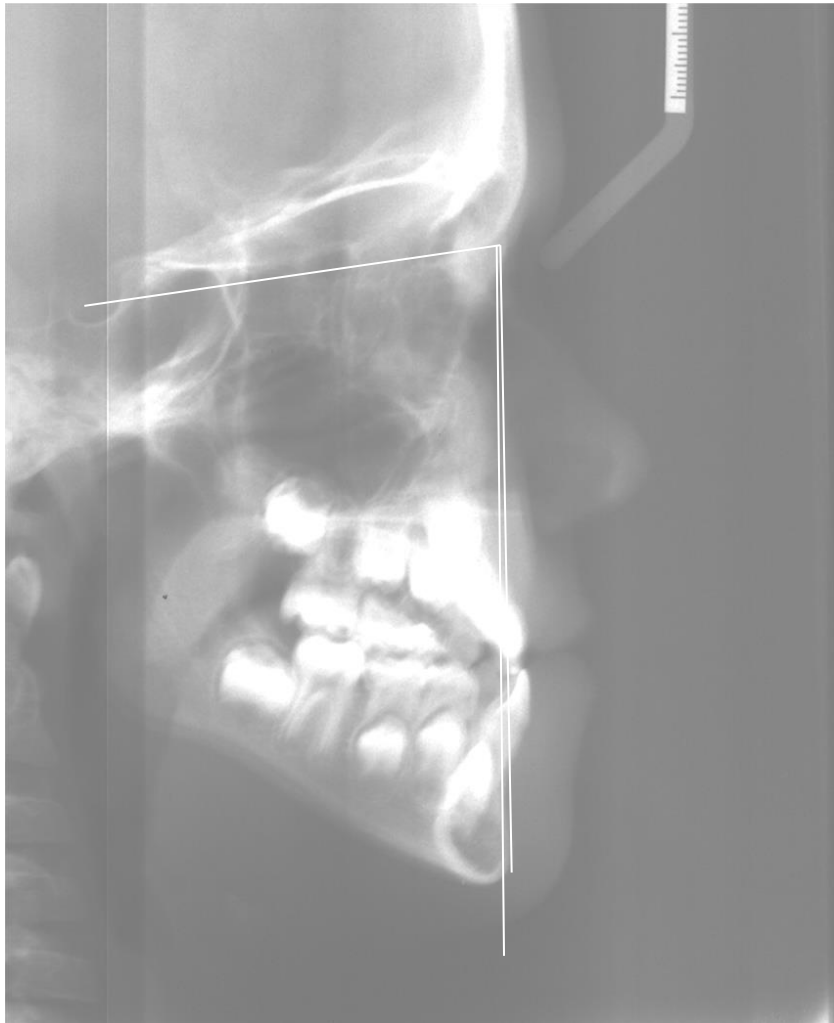
ANB szög : -2°

Norm. érték : 2°





Szkeletális diagnózis

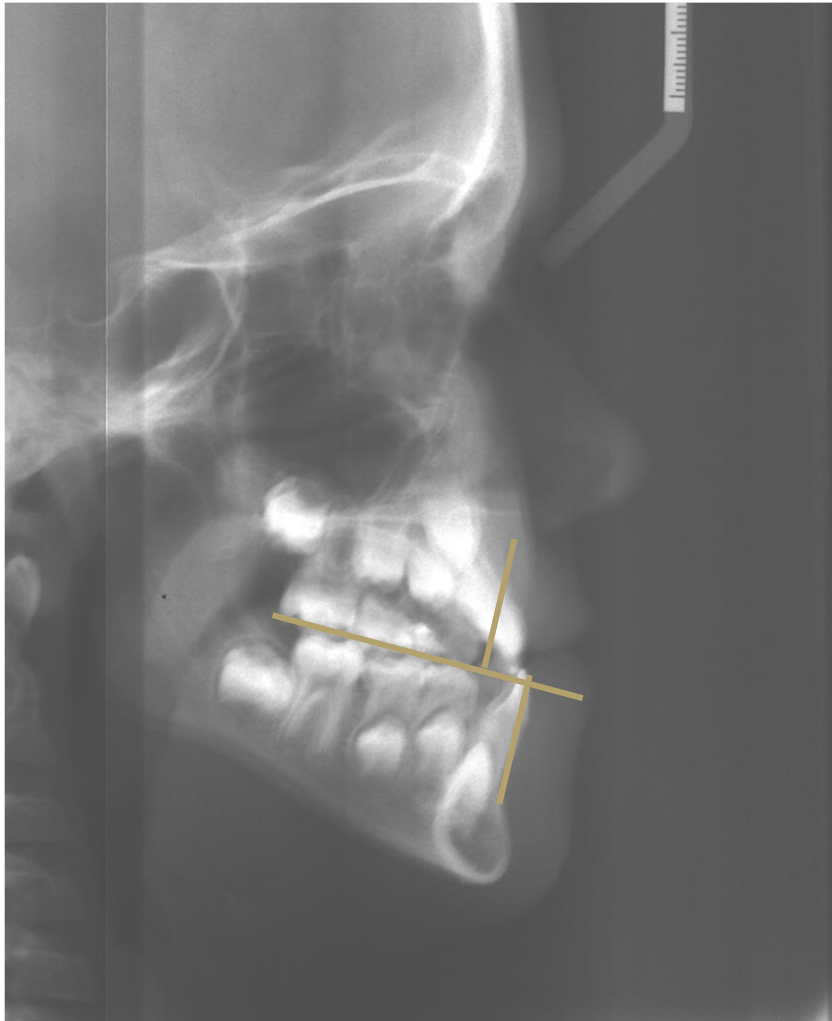


ANB szög=+0.5°

Norm. érték :2°

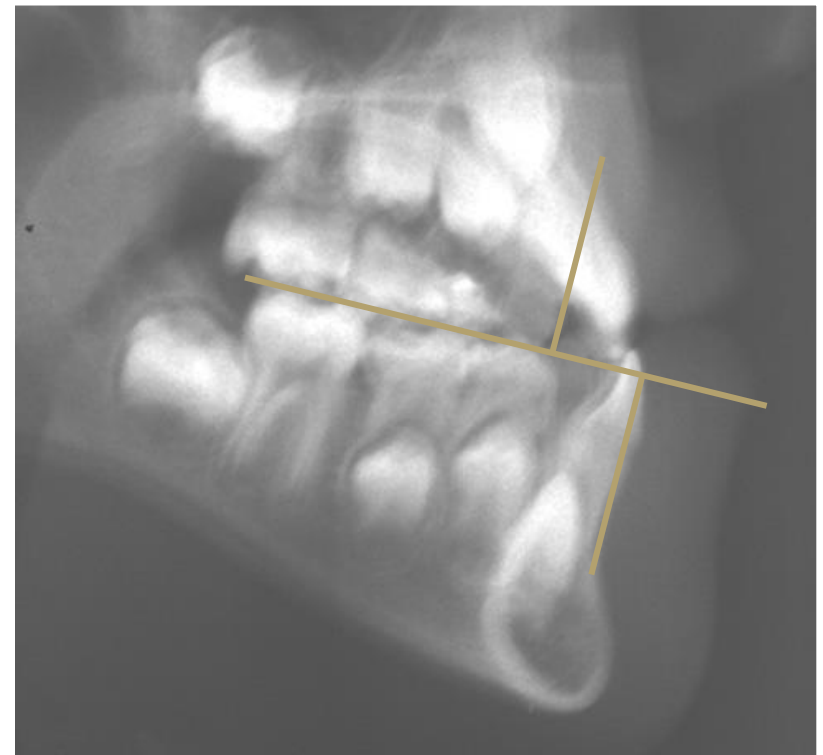


Szkeletális diagnózis

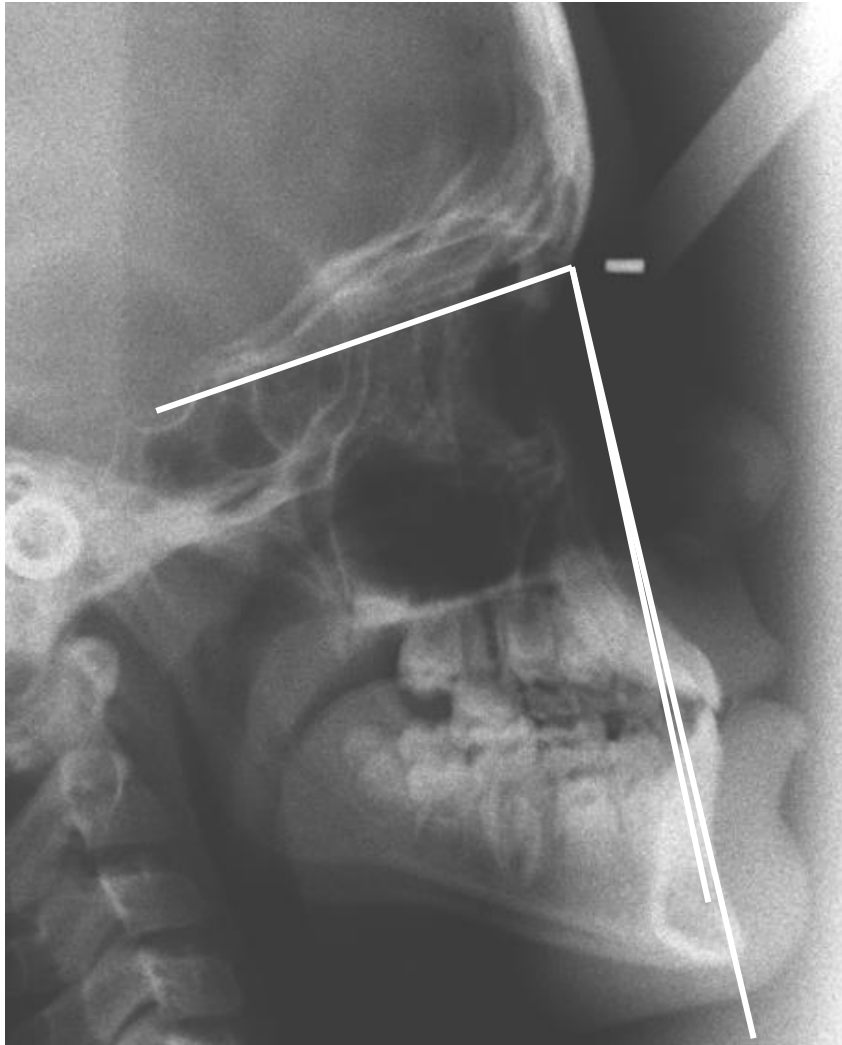


WITS érték: -9mm

norm:0 -2 mm

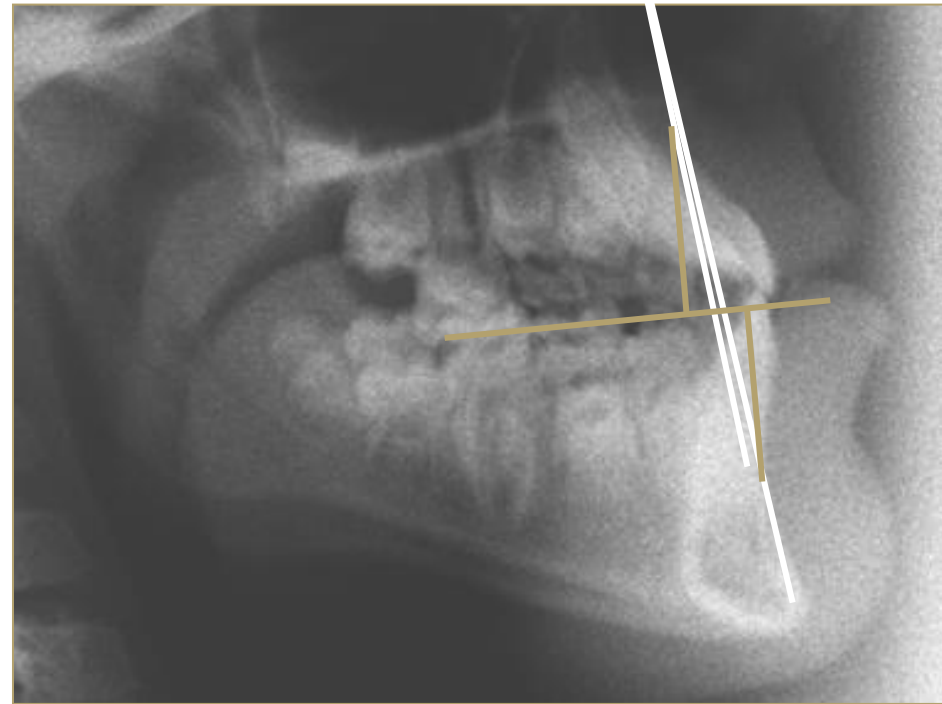


Szkeletális diagnózis

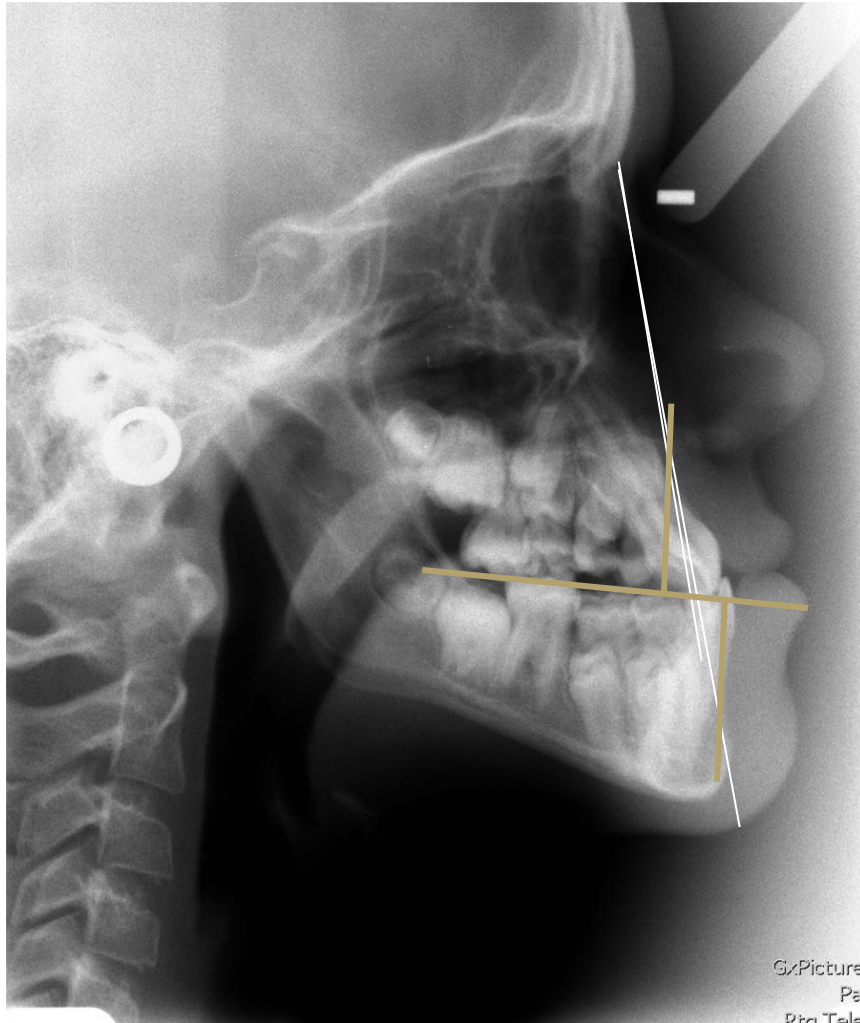


ANB szög=-1°

WITS: -8mm



Szkeletális diagnózis

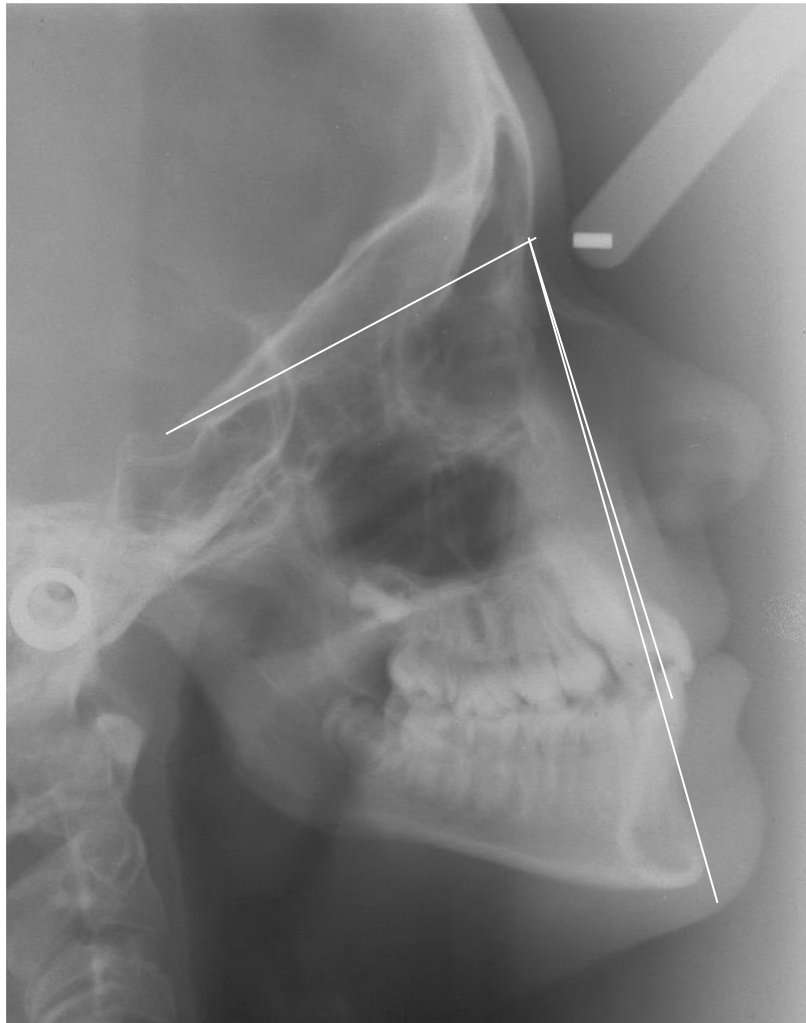


ANB szög= -1°

WITS: -10mm

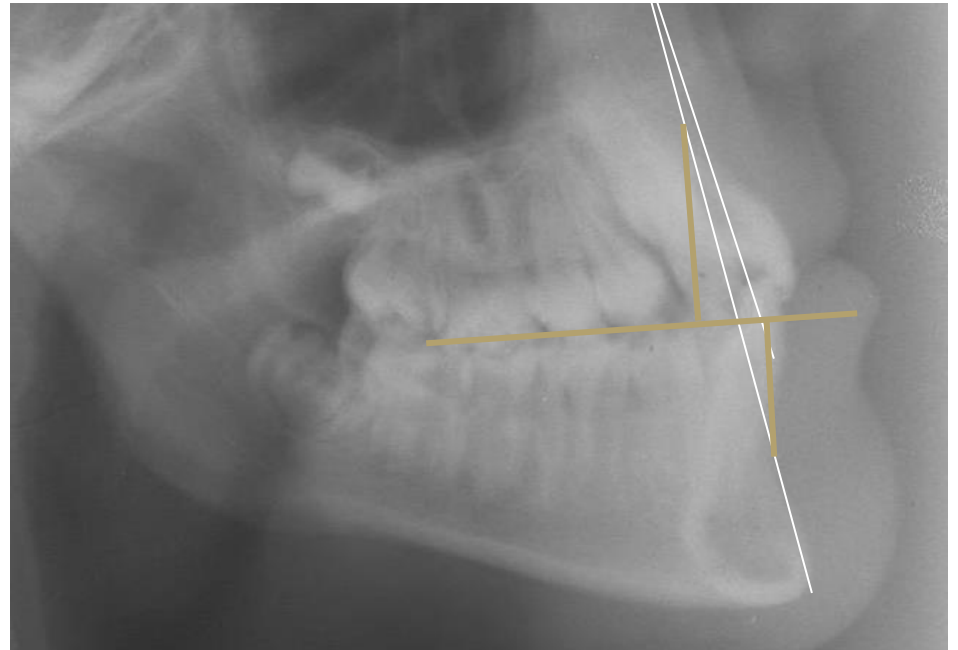
GxPicture
Pai
Dra Tala

Szkeletális diagnózis



ANB szög=+1.5°

WITS: -6mm



Dentális diagnózis



Dentális diagnózis



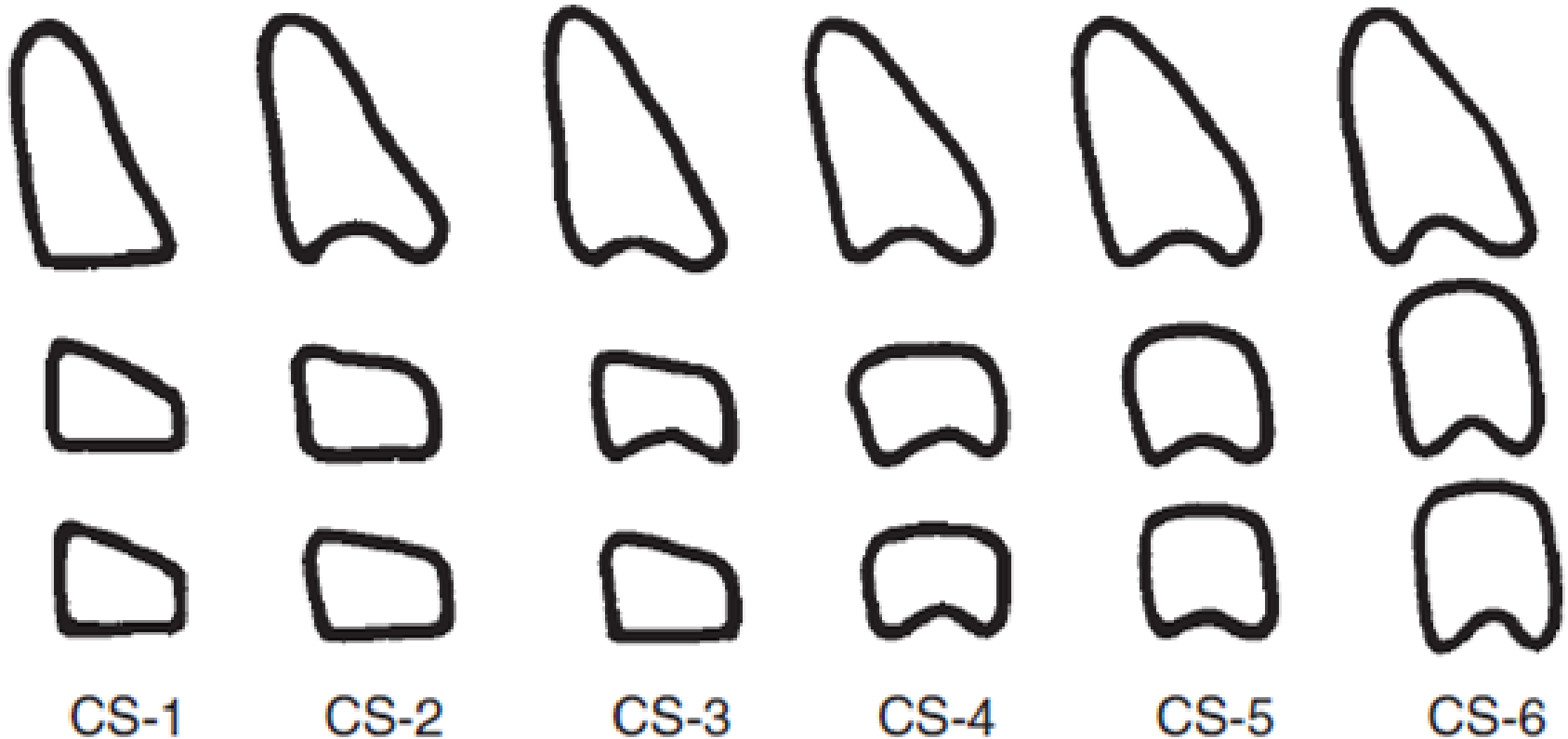
Dentális diagnózis



ANB: 2°

WITS: -6mm

Class III kezelés időzítése



Graber, Contemporary Orthodontics 2012. Ch 14. Optimizing Orthodontic and Dentofacial Orthopedic Treatment Timing

CVMS



CVMS 1

CVMS 2

CVMS 3

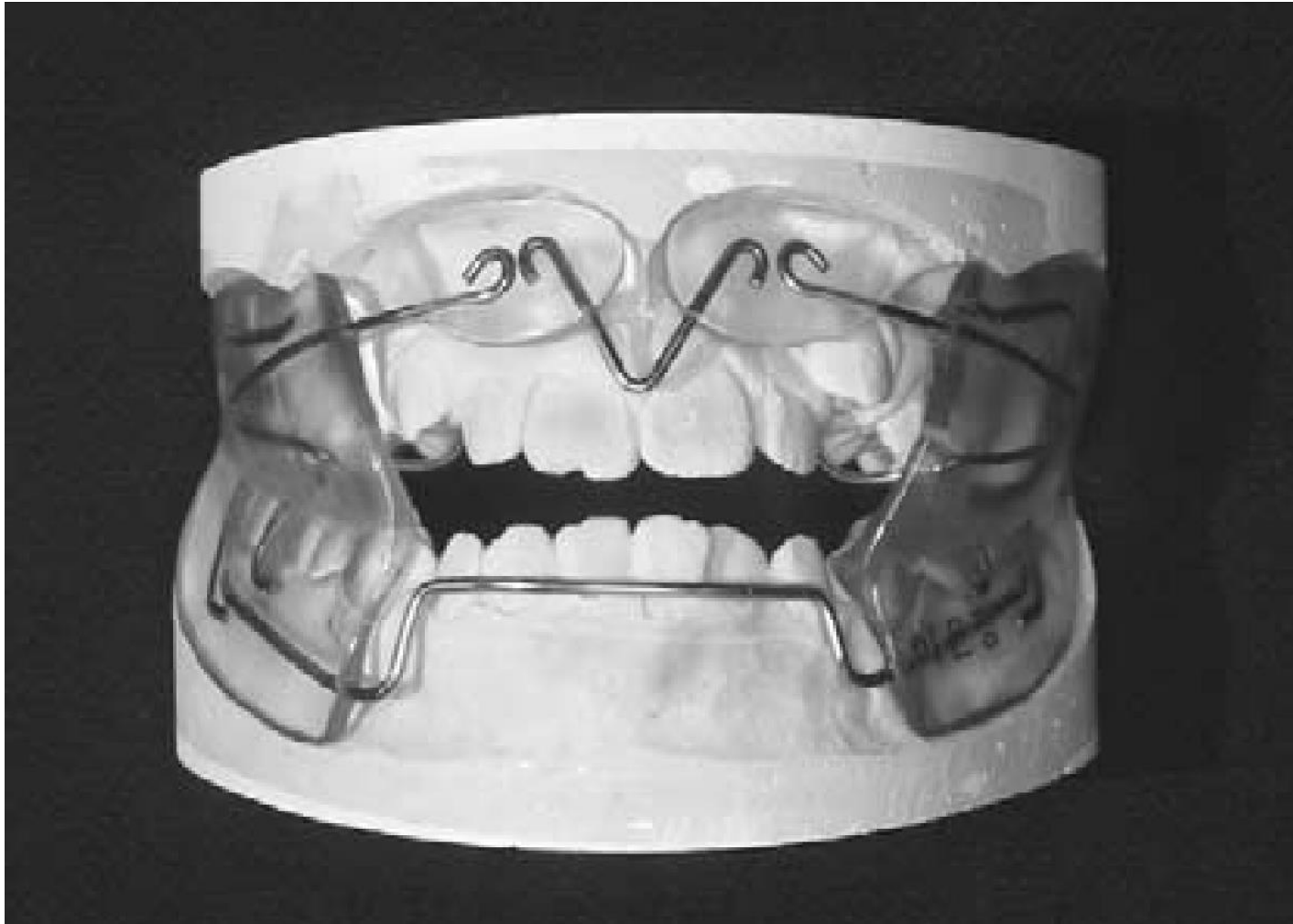
CVMS 4

CVMS 5

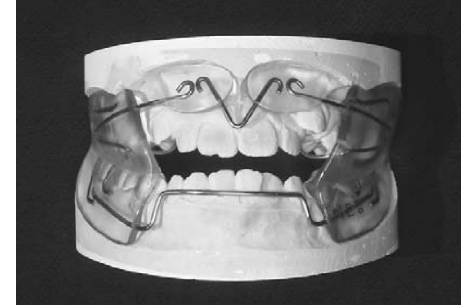
CVMS 6

Graber, Contemporary Orthodontics 2012. Ch 14. Optimizing Orthodontic and Dentofacial Orthopedic Treatment Timing

Fränkel III



Fränkel III



Baik et al. 2004, AJODO: 30 prepubertal noncleft patients mean age 8.0 ± 1.2 years, at least *14 hours* per day, mean treatment duration, 1.3 ± 0.6 years

The treatment effects were mainly from backward and downward rotation of the mandible and linguoversion of the mandibular incisors

Levin AS, Levin AS, McNamara JA Jr, Levin AS, McNamara JA Jr, Franchi L, Levin AS, McNamara JA Jr, Franchi L, Baccetti T

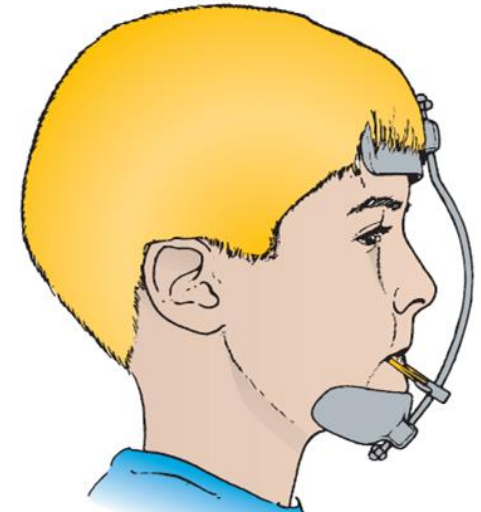
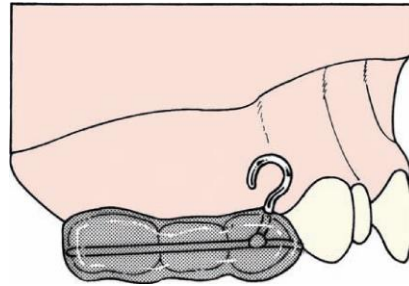
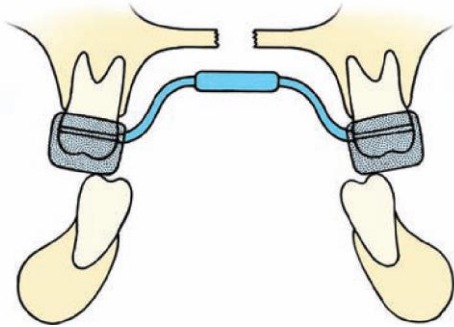
Franchi L, Baccetti T, Fränkel C . 2008. AJODO: 32 prepubertal noncleft patients, good compliance, 2.5+3 years active treatment and retention.

Long-term results of FR-3 therapy in patients with good compliance consisted of significant maxillary modifications and induced changes in mandibular morphology. Long-term appliance wear (more than 5 years) should be emphasized when considering treatment outcomes.

Falck F, Falck F, Zimmermann-Menzel K, J Orofac Orthop. 2008

Patients treated with the FR-3 consisted of **56 subjects**. Maxillary landmarks (point A, nasospinale), and the upper incisor (root included) did move significantly farther forward in the treated group than in the control group ($p < 0.01$). The gonial angle decreased by 7.17 degrees in the FR-3 group, as opposed to 2.07 degrees in the untreated group ($p < 0.001$). No significant differences were noted in mandibular-length growth (Ar-Pog, Ar-Go, Go-Pog).

Hyrax + arcmaszk

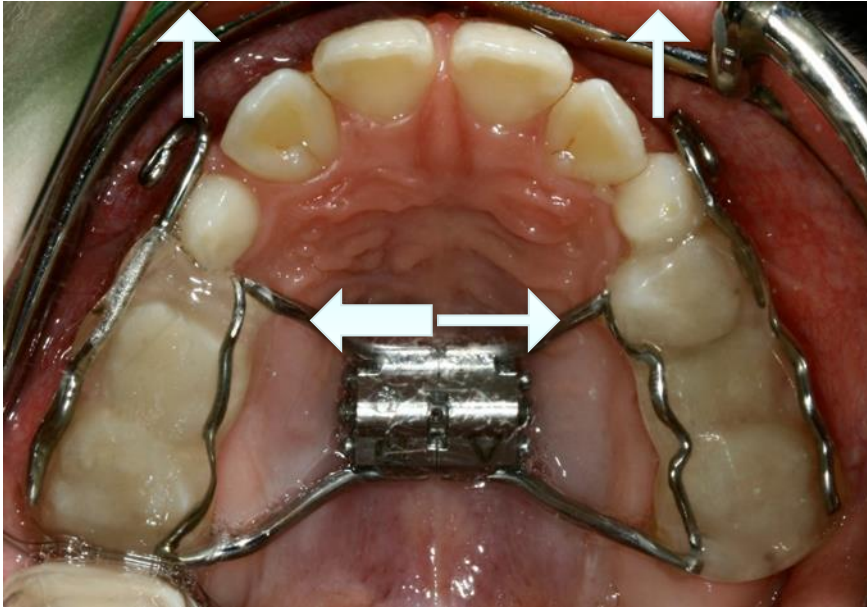


Graber, Contemporary Orthodontics 2012. Ch 14. Optimizing Orthodontic and Dentofacial Orthopedic Treatment Timing

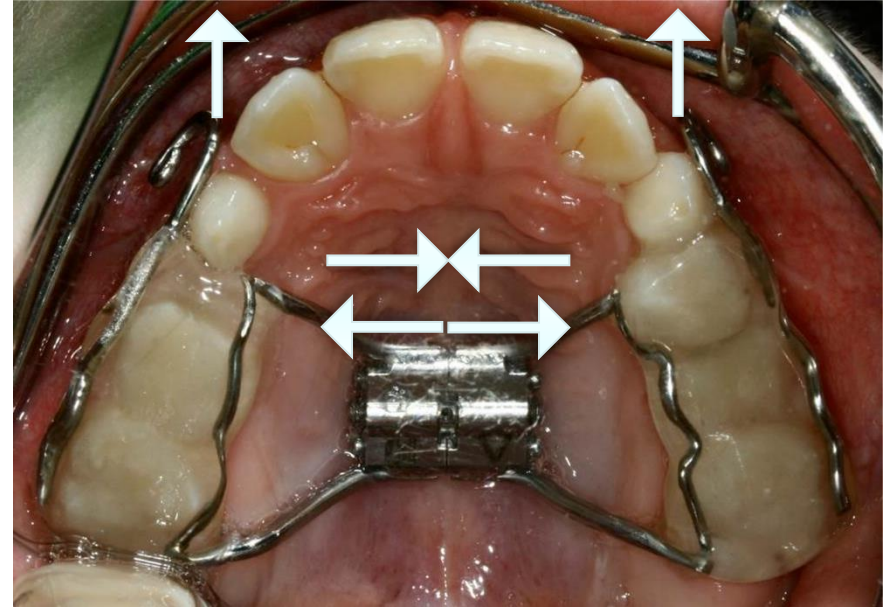
Significant improvements of SNA angle, ANB angle, overjet, and molar relationship remained stable during the posttreatment period. No significant effect was found in the mandibular skeletal measures

Cozza et al.2010.AJODO

RME + ARCMASZK (Rapid Maxillary Expansion)



Alt-RAMEC + ARCMASZK (Alternating Rapid Maxillary Expansion and Constriction)



Liou EJ: Effective maxillary orthopedic protraction for growing Class III patients: a clinical application simulates distraction osteogenesis.: Prog Orthod. 2005;6(2):154-71.

Masucci C1, Franchi L, Giuntini V, Defraia E.: Short-term effects of a modified Alt-RAMEC protocol for early treatment of Class III malocclusion: a controlled study.: Orthod Craniofac Res. 2014 Nov;17(4):259-69. doi: 10.1111/ocr.12051. Epub 2014 Jul 7.

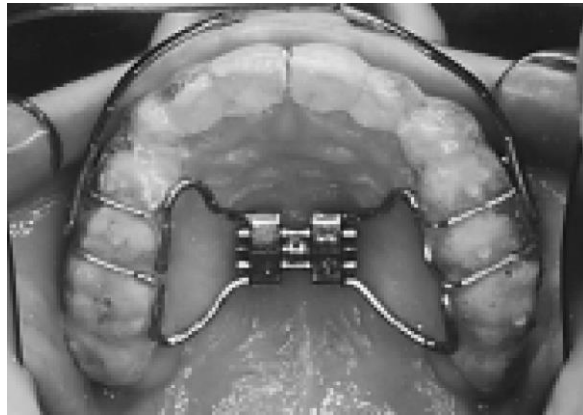
Alt-RAMEC + Liou spring



Liou and Tsai, 2005. CPCJ

Hyrax + Módosított arcmaszk

Alcan et al. 2000. AJODO



F=750g

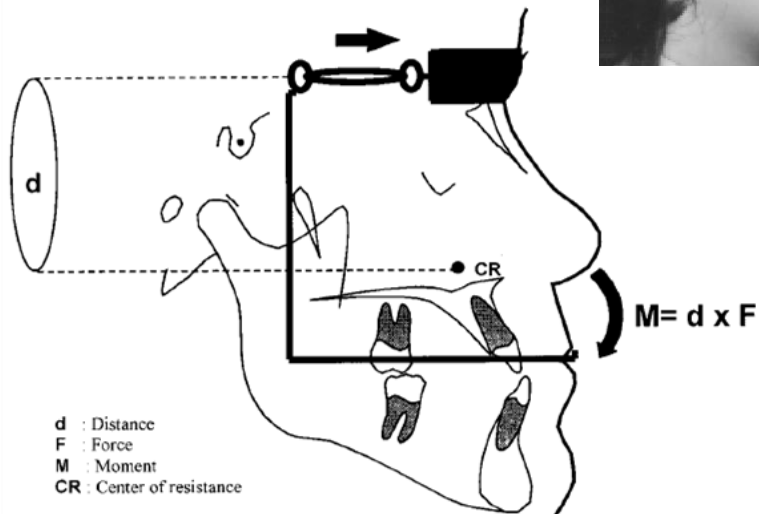
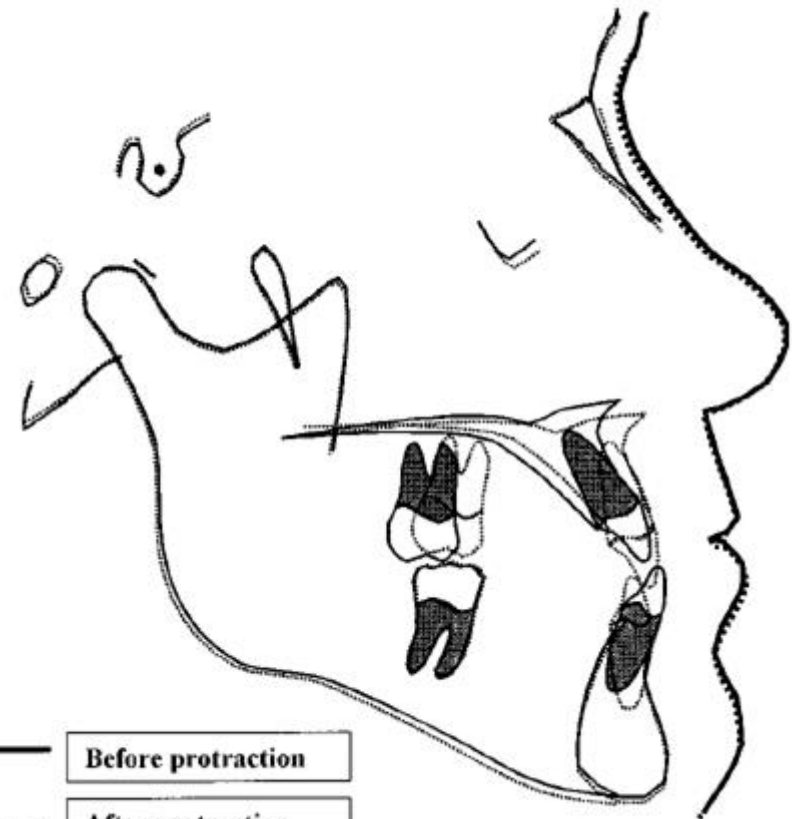


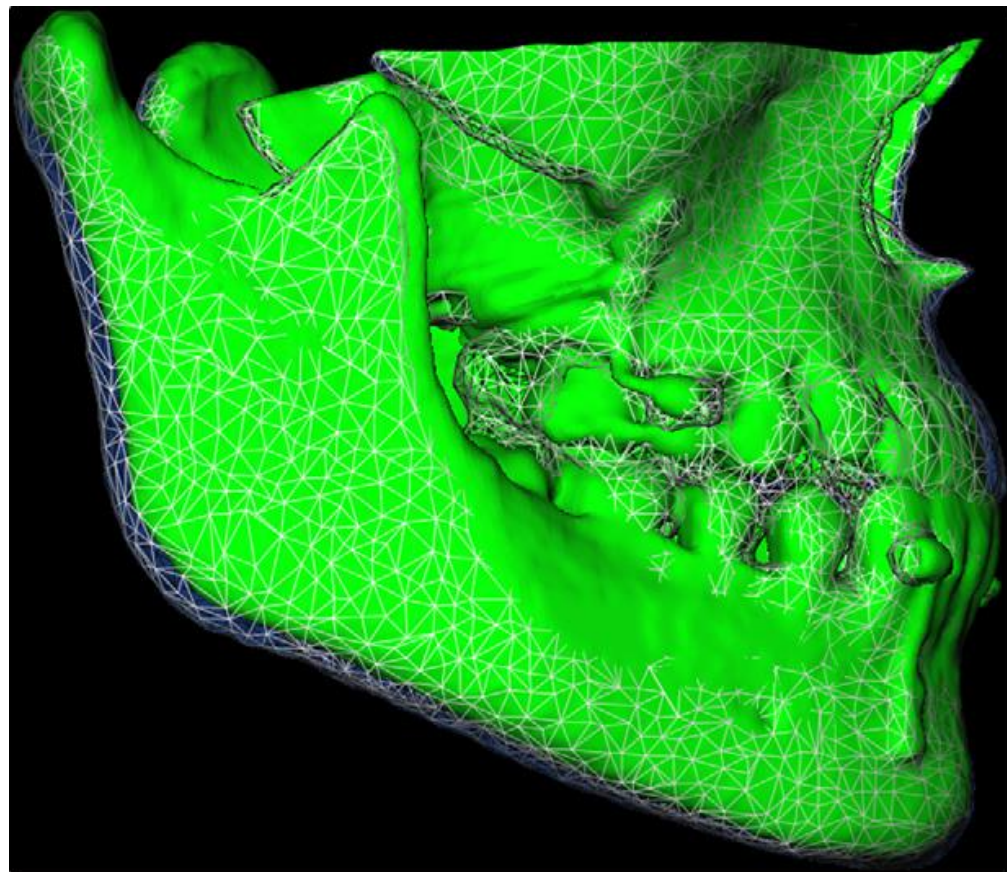
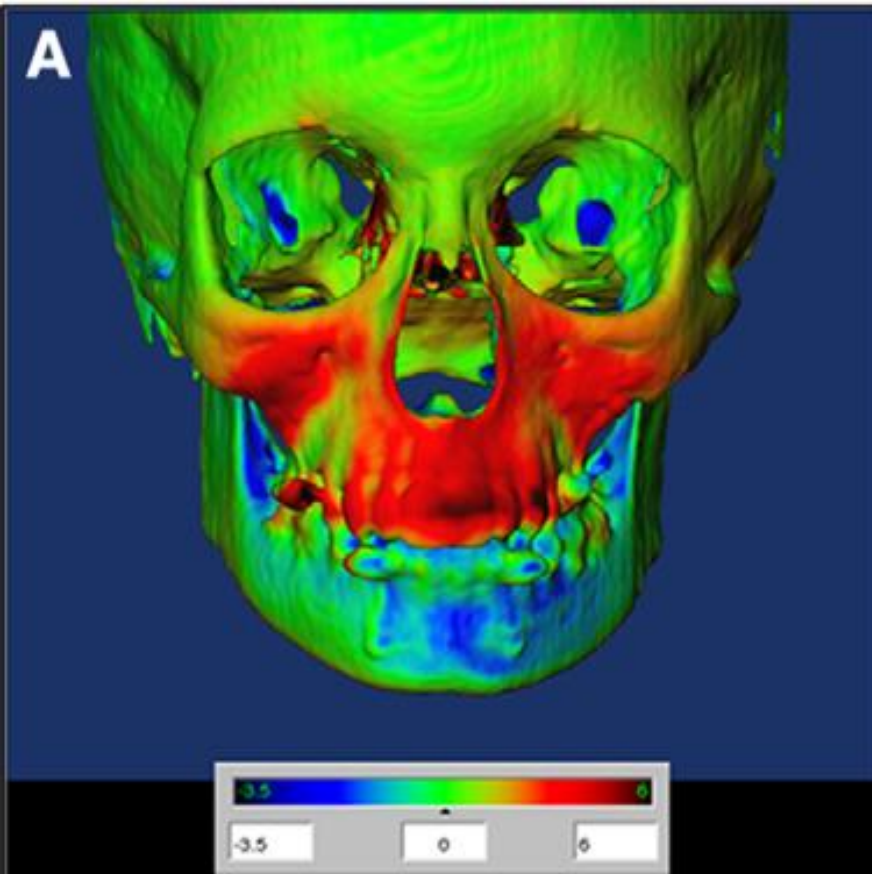
Fig 5. Force and moment system of MMPH.



Bone Anchored Maxillary Protraction (BAMP)



De Clerck et al., 2010. J Oral Maxillofacial Surg



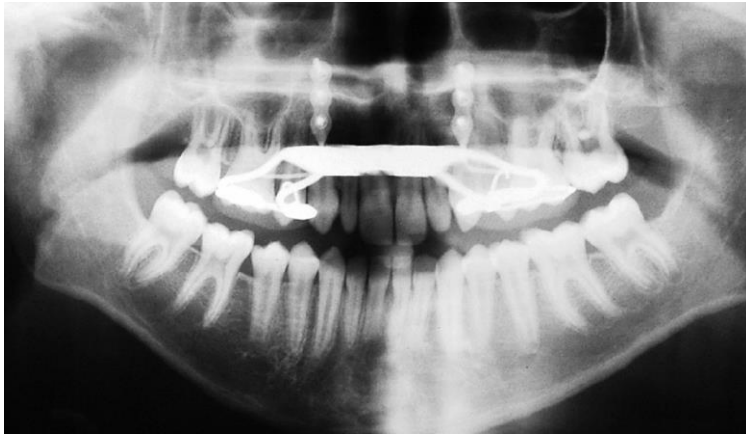
Remodeling of the glenoid fossa at the anterior eminence and bone resorption at the posterior wall
De Clerck et al. 2012. AJODO

Hybrid-hyrax + mentoplate



Wilmes et al., 2011. JCO

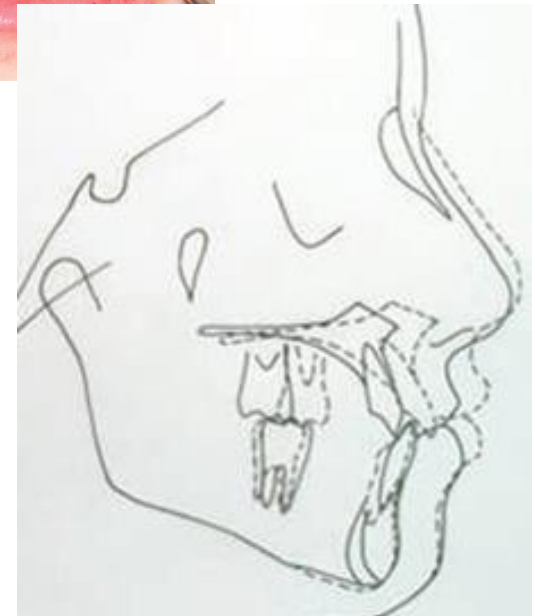
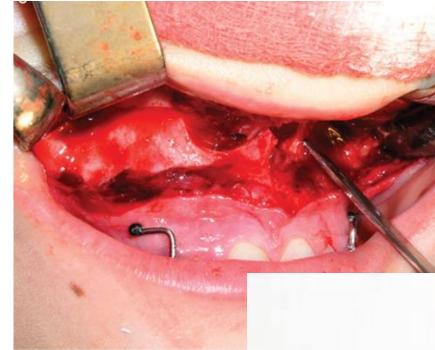
Alt-RAMEC + arcmaszk + minilemez



15 patients with a mean skeletal age of 11.6 ± 1.59 years undergoing 8 weeks of Alt-RAMEC followed by maxillary protraction, maxilla moved forward by 2 mm

Kaya et al., 2011. Angle Orthodontist

SARME + Face mask



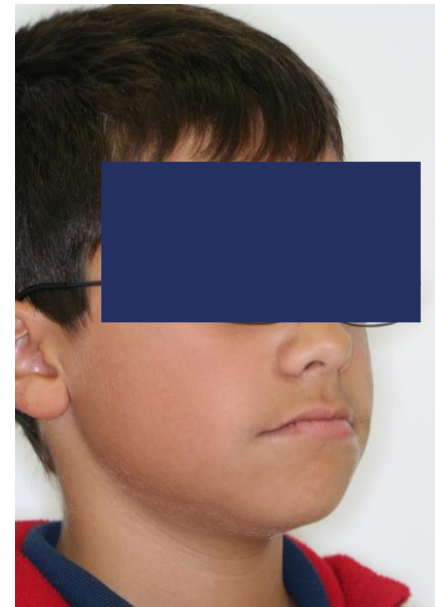
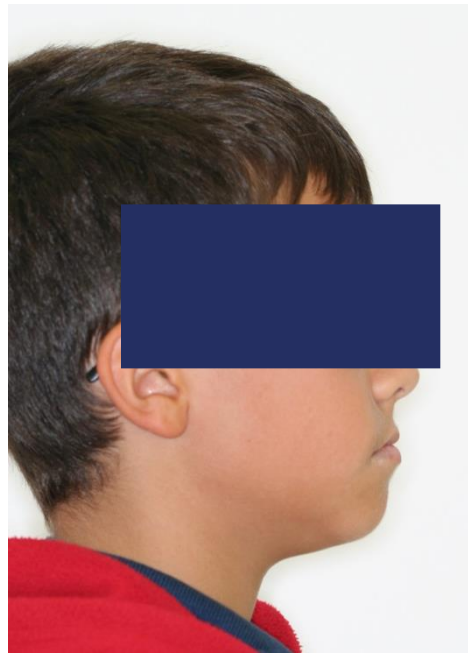
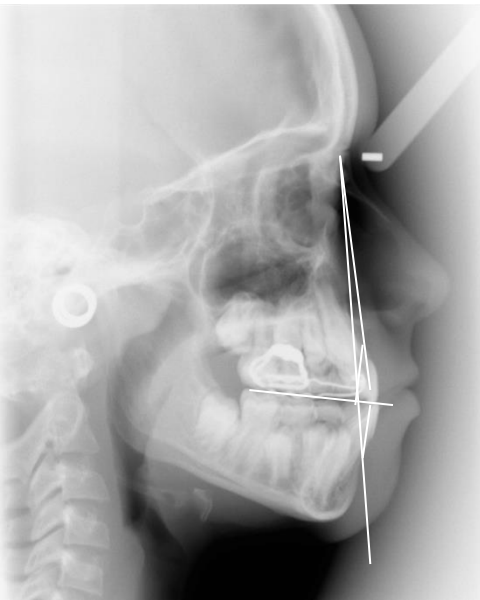
Kücükeles et al., Angle Orthodontist, Vol 81, No 1, 2011

In the short term, statistically significant maxillary advancement was achieved with surgically assisted maxillary protraction. However, in the long term, these sagittal changes were not stable, whereas RME and FM provided stability.

Nevzatoğlu S, Küçükkeleş N. Angle Orthod. 2014 Nov

Long-term results of surgically assisted maxillary protraction vs regular facemask.

Hyrax + Delaire maszk

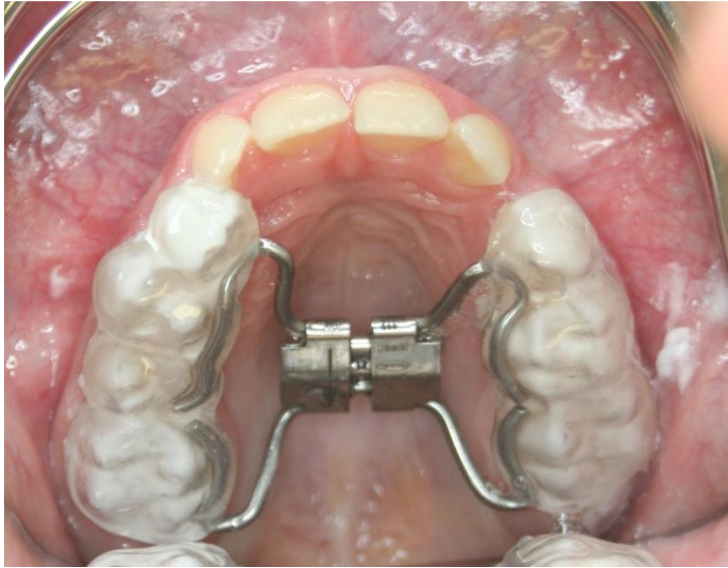


ANB: 2°

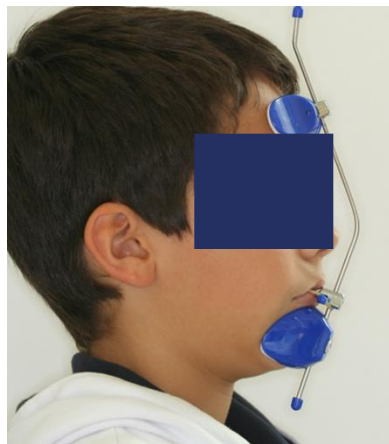
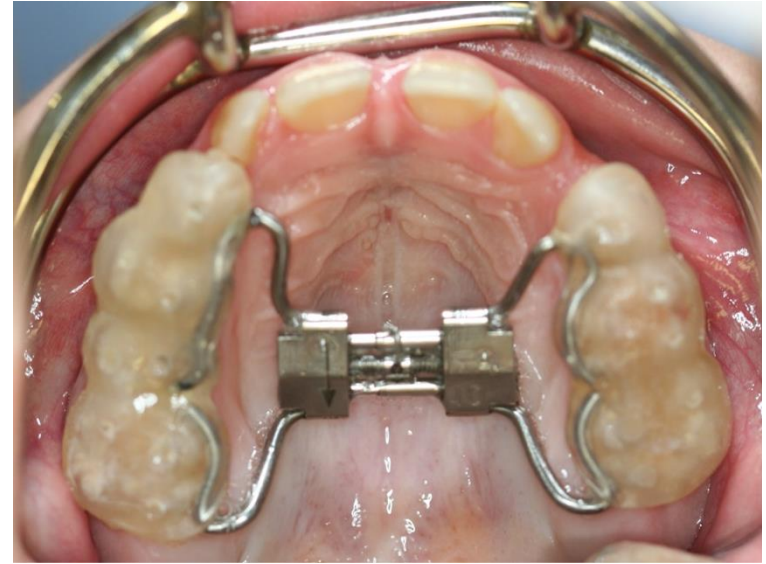
WITS: -3mm

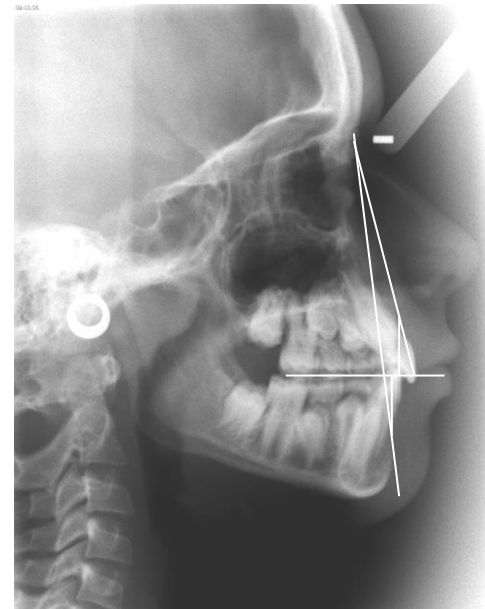
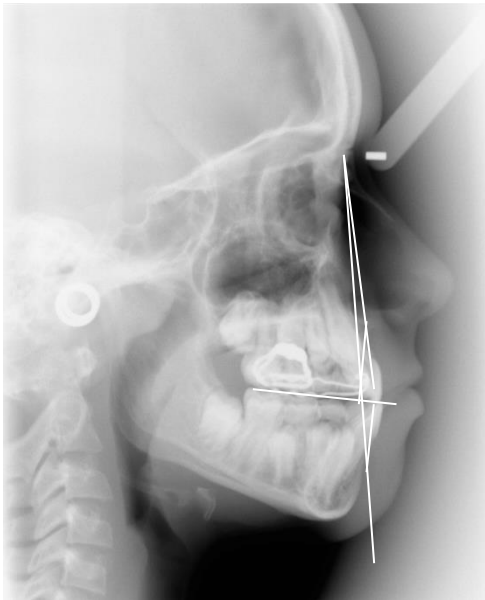
CVMI: 2-3

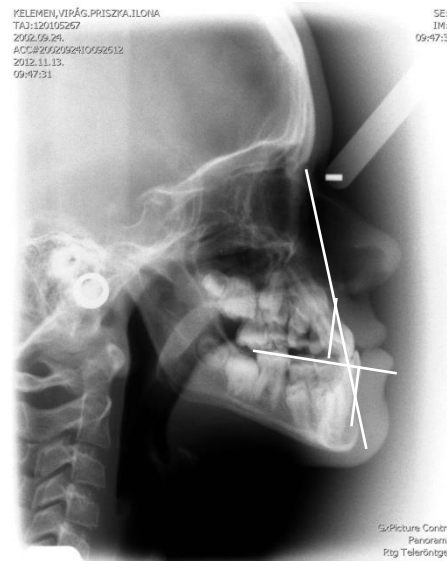
Hyrax + Delaire maszk



Maxilla
transzverzális
tágítása







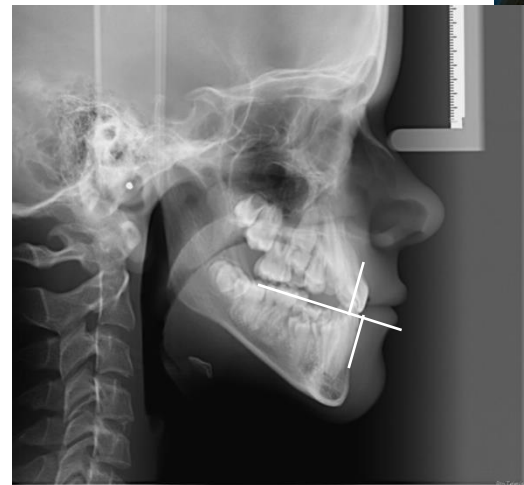
ANB: 0°

WITS: -11mm

CVMI: 3



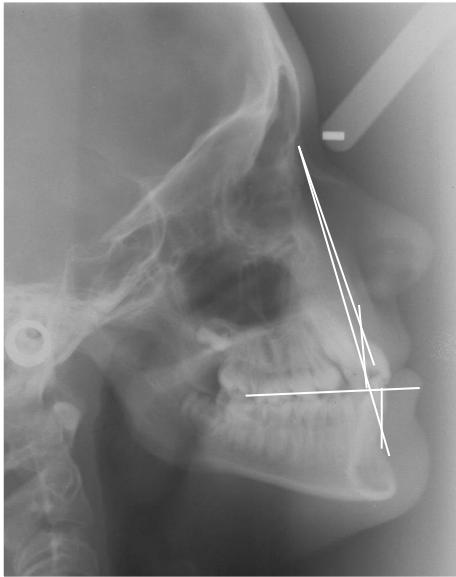
Alt-RAMEC + arcmaszk





09-4731





ANB: 2°

WITS: -6mm

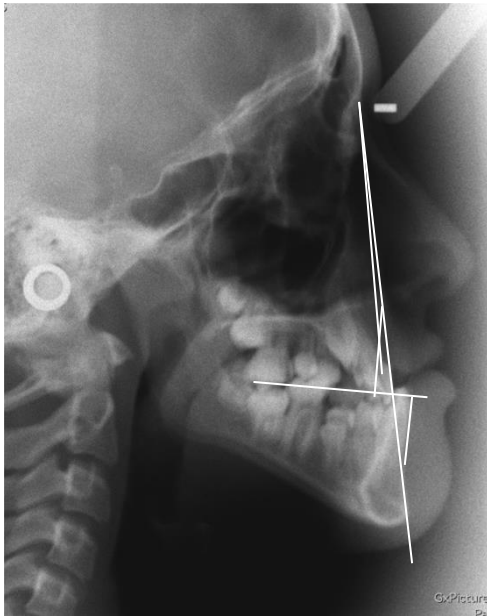


ANB: 2°

WITS: -6mm

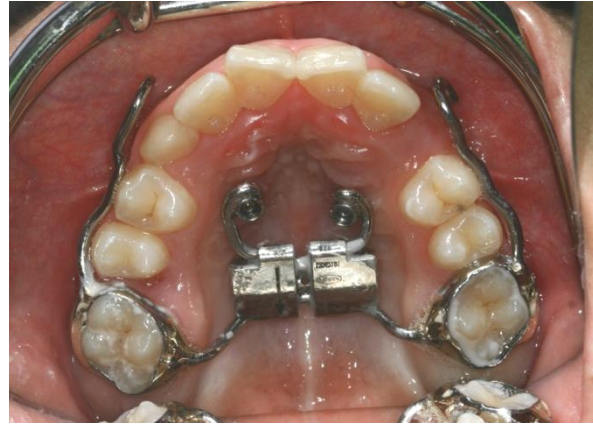
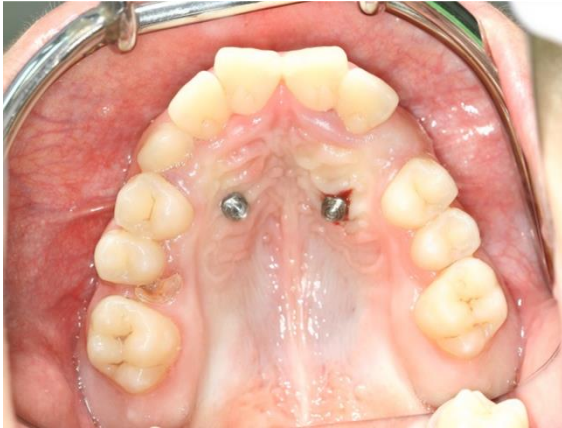
CVMS: 3-4





ANB: -2°
WITS: -11mm
CVMI: 4

Hybrid hyrax + Alt-Ramec + Arcmaszk



4x ki – 3x vissza

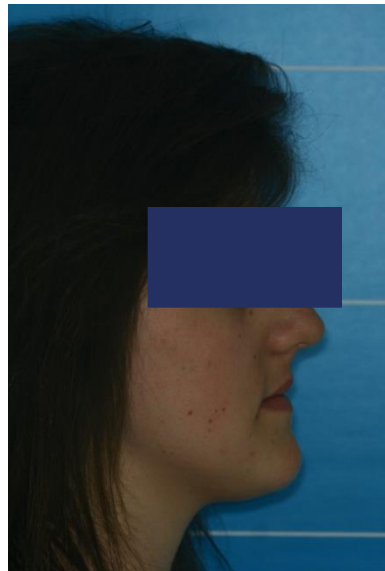
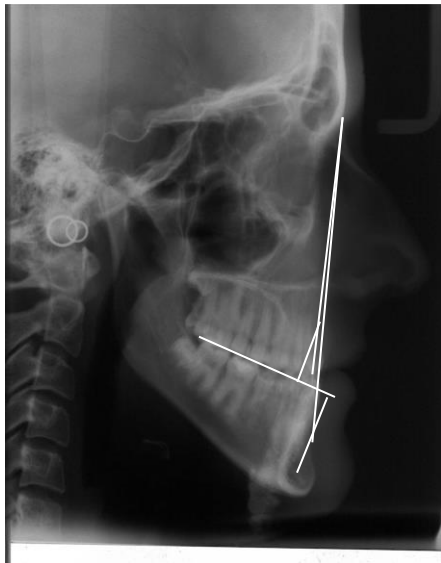








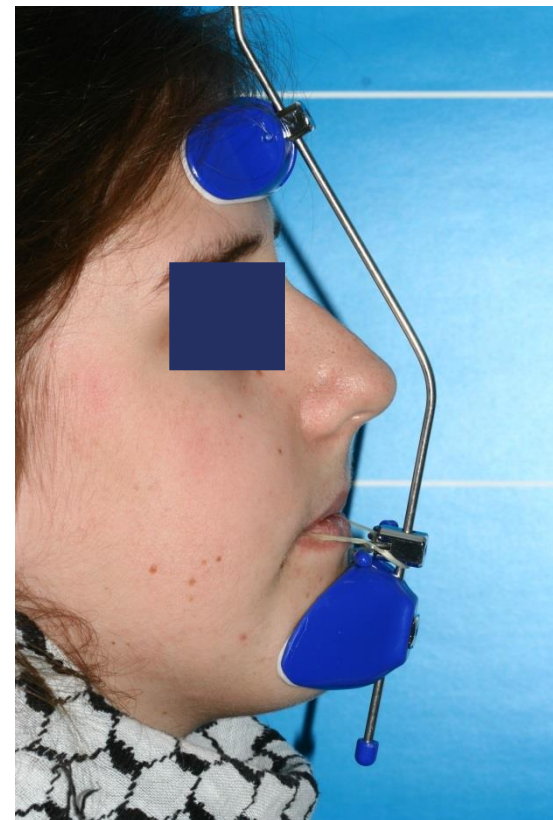
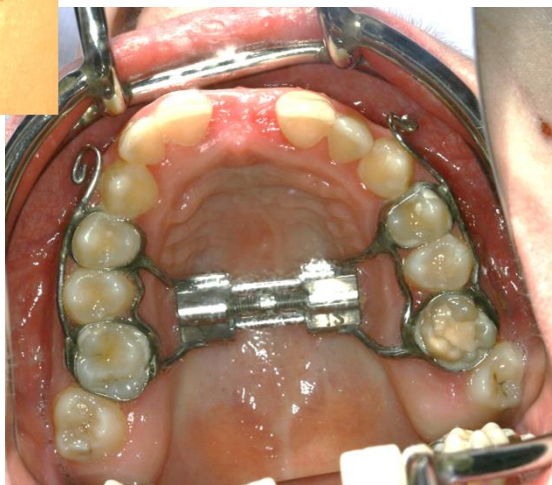
SARME + Arcmaszk



ANB: -2°

WITS: -12mm

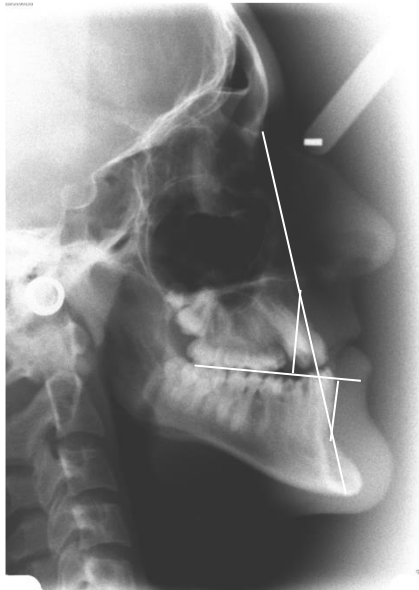
CVMI: 6



Orthognát sebészet: Dr. Bogdán Sándor



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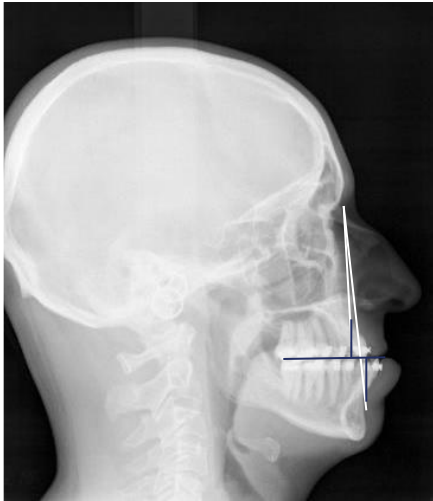
ANB: 0°

WITS: -15mm

CVMI: 6



Le Fort I osztéotómia



ANB: -1°

WITS: -6mm

CVMI: 6

Le Fort I oszteotómia



Ortognát sebészet: Dr. Nagy Krisztián

Le Fort I oszteotómia

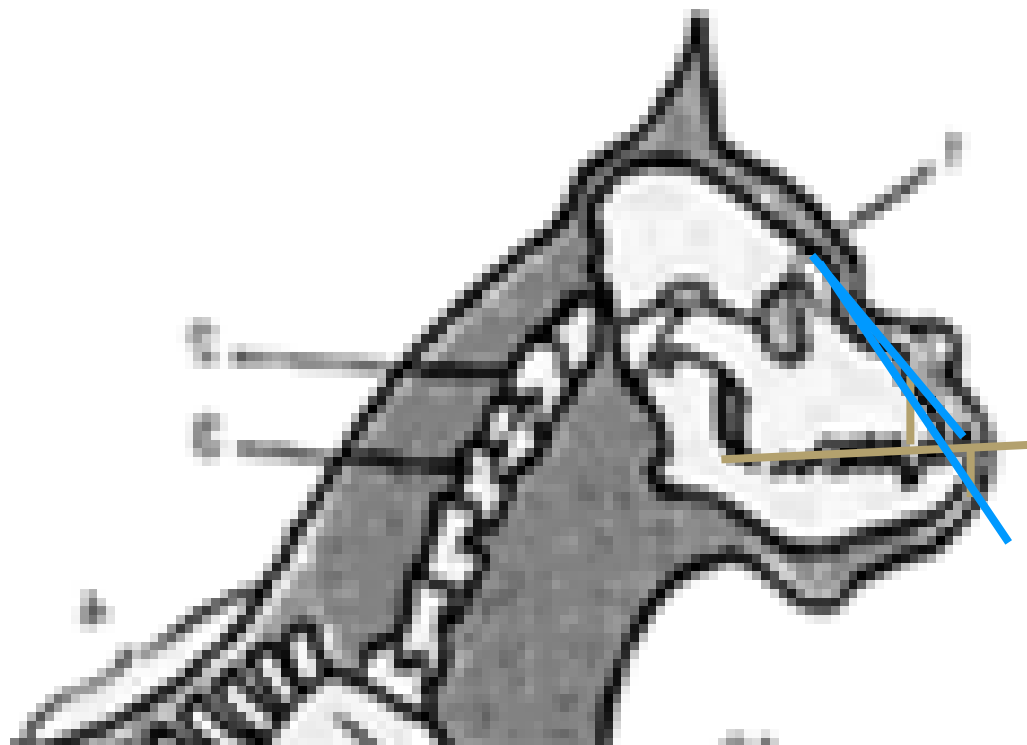


Ortognát sebészet: Dr. Nagy Krisztián

Bimaxilláris oszteotómia



Ortognát sebészet: Dr. Bogdán Sándor



Köszönöm a figyelmet