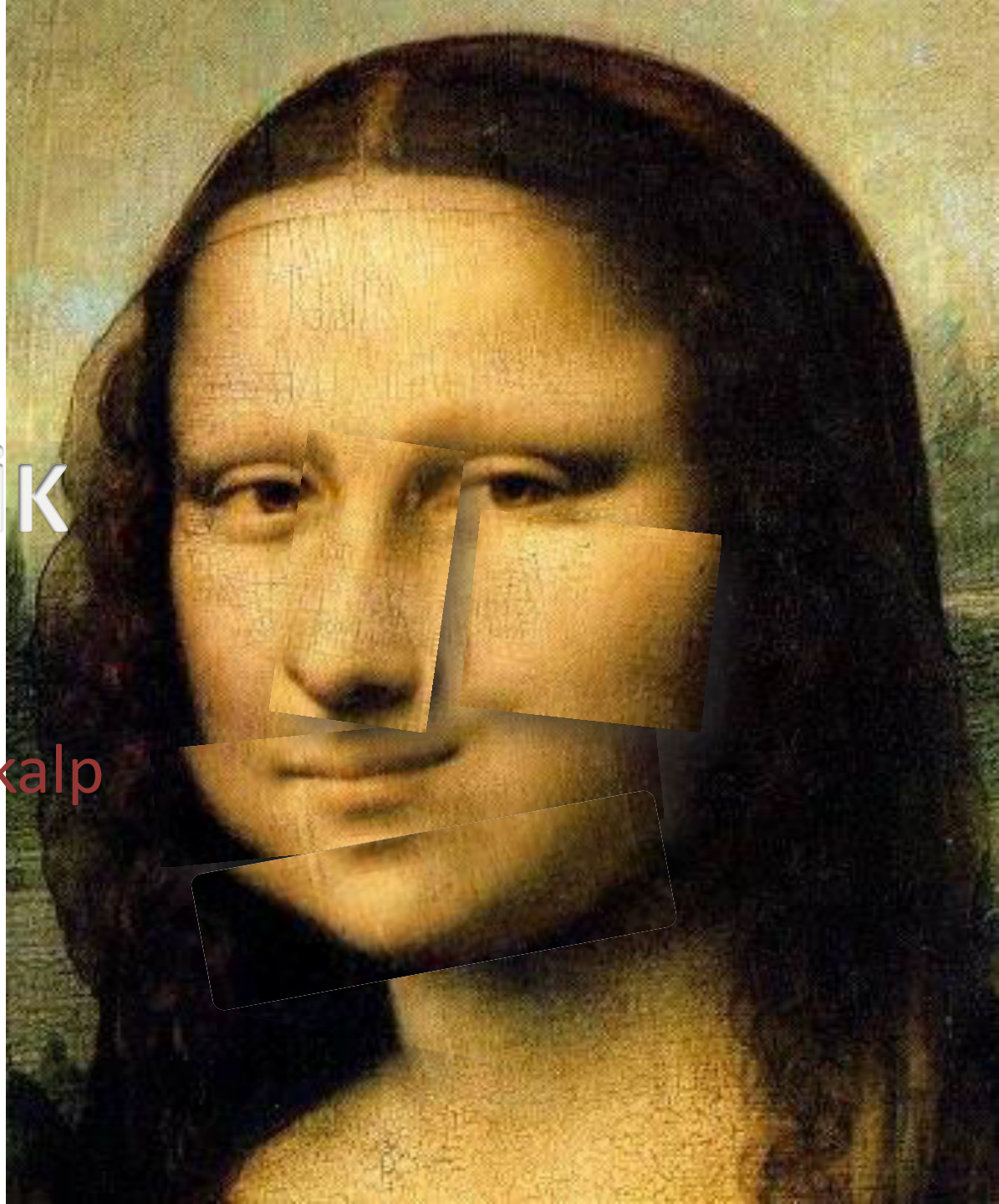


ORTOGNATİK CERRAHİ

Prof. Dr. Hatice Gökalp



Prensip

- Dentoalveolar kompensasyonu dekompanse etmek
- Mevcut malokluzyonu daha ağırlaştırmak



Problemi tespit etmek için

Ortodontik materyal elde edilir

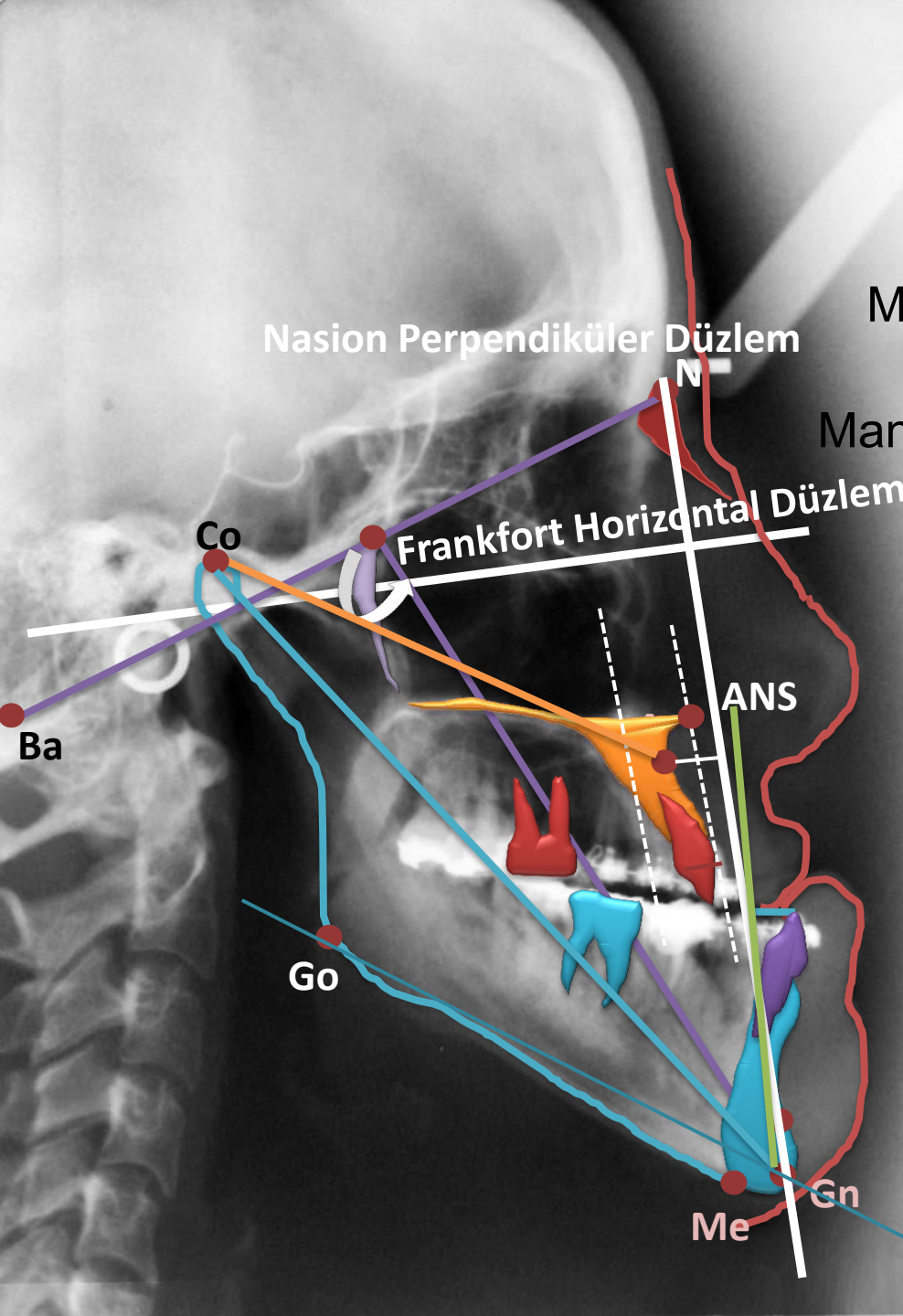
- Lateral Sefalometrik Film
- Postero-Anterior Sefalometrik Film
- Panoramik Film
- Ekstraoral ve İntraoral Fotoğraflar
- Ortodontik Model
- CT
- Eklem MRI

Lateral Sefalometrik Film



- Yumuşak Doku Analizi
- Sert Doku Analizi

Referans Düzlemler



Nasion Perpendiküler Düzlem

N

Co

Frankfort Horizontal Düzlem

Ba

ANS

Go

Me

Gn

Maksillanın kafa kaidesine göre konumu

Mandibulanın kafa kaidesine göre konumu

Maksillanın efektif uzunluğu

Mandibulanın efektif uzunluğu

Yüzün vertikal boyutu

Fasiyal eksen açısı

Üst keser dişin konumu

Alt keser dişin konumu

Referans Düzlemler

Maksillanın kafa kaidesine göre konumu

Mandibulanın kafa kaidesine göre konumu

Maksillanın efektif uzunluğu

Mandibulanın efektif uzunluğu

Yüzün vertikal boyutu

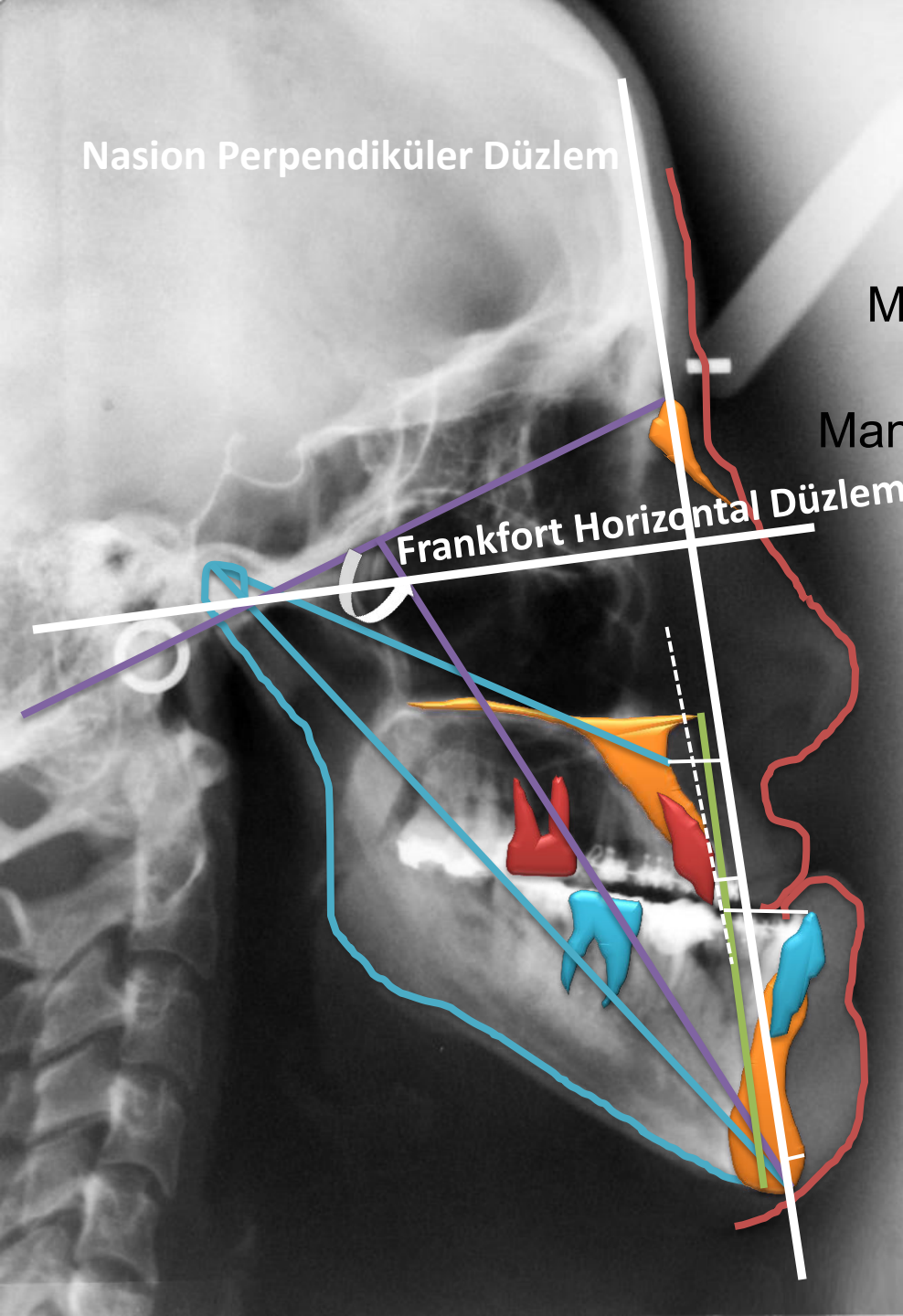
Fasiyal eksen açısı

Üst keser dişin konumu

Alt keser dişin konumu

Nasion Perpendiküler Düzlem

Frankfort Horizontal Düzlem

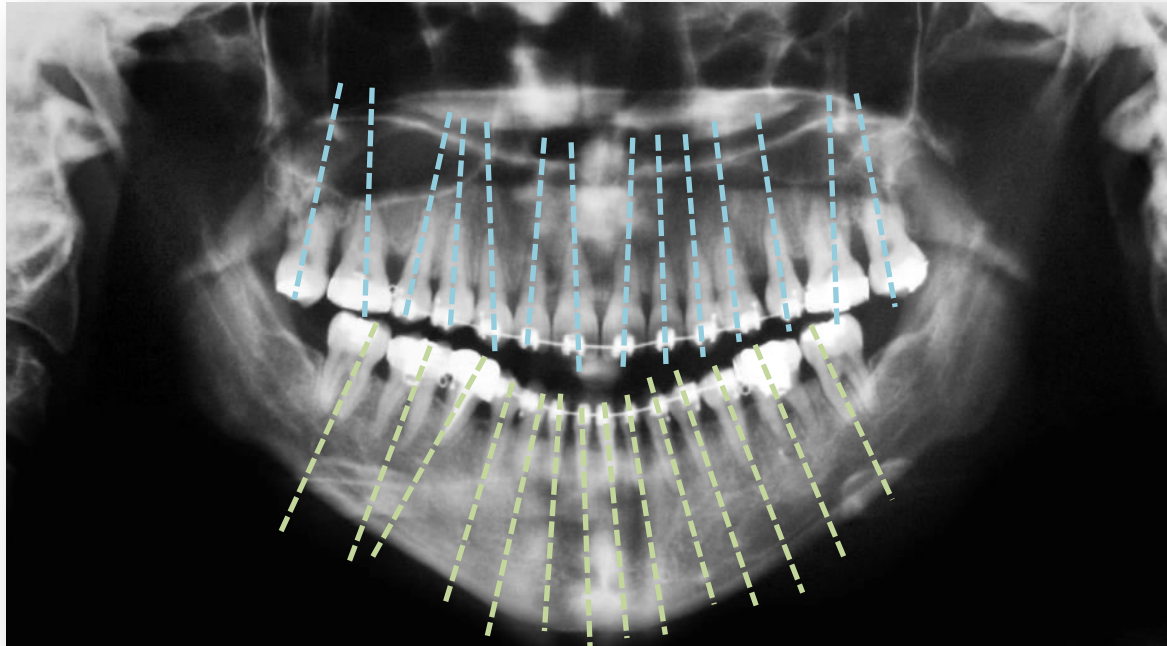


Postero-Anterior Sefalometrik Film

- İskeletsel Asimetri
- Dental Asimetri

Panoramik Film

- Dişlerin mesio-distal eksen eğimleri
- Gömülü dişler
- Patolojik oluşumlar
- Mandibular kanal seyri



FOTOĞRAF

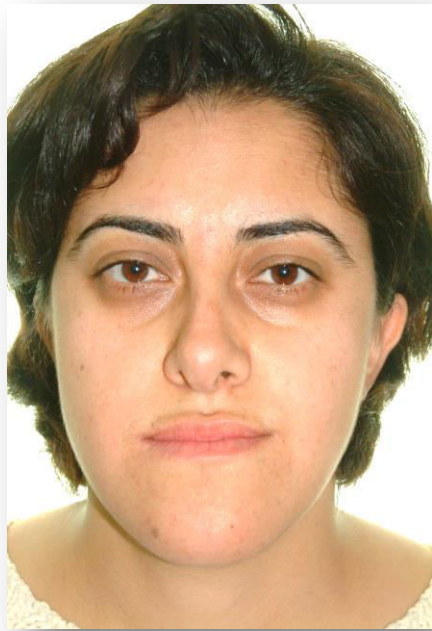


ekstraoral

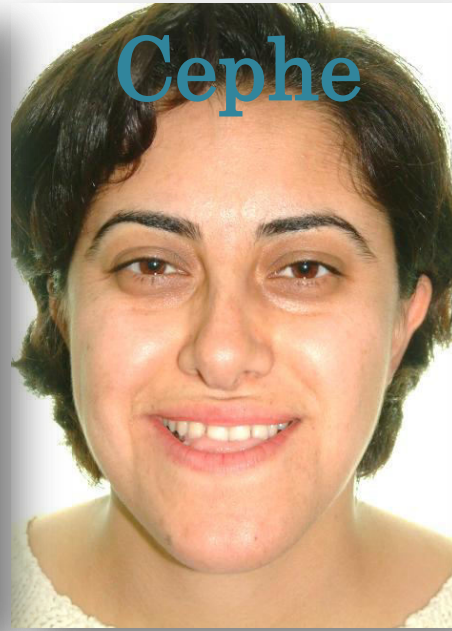


intraoral

Cephe



Gülerken Cephe



Sağ 3/4 Profil



Sağ Profil



Sol 3/4 Profil



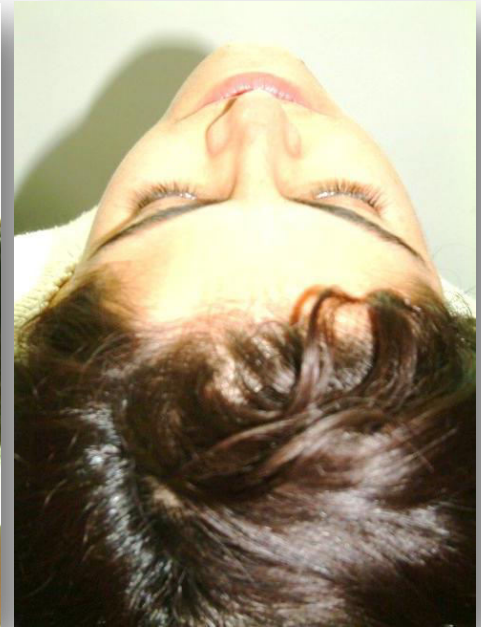
Sol Profil



Submento
verteks



Vertomenteks



Sağ
yan



Mandibular
Okluzal

Cephe



Overjet

Sol
yan



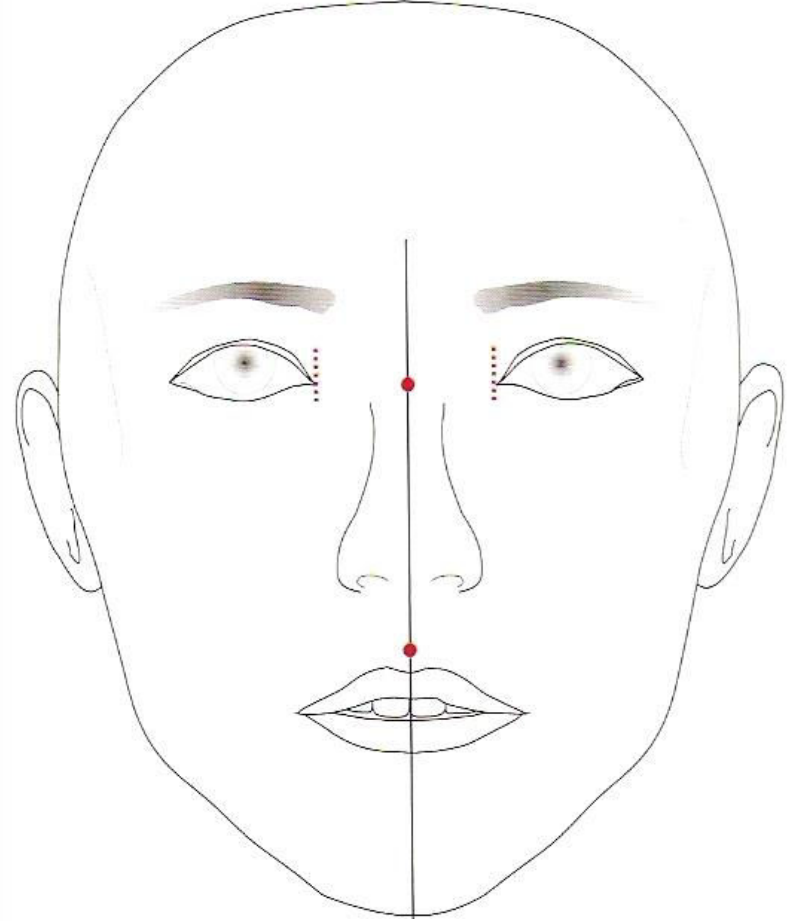
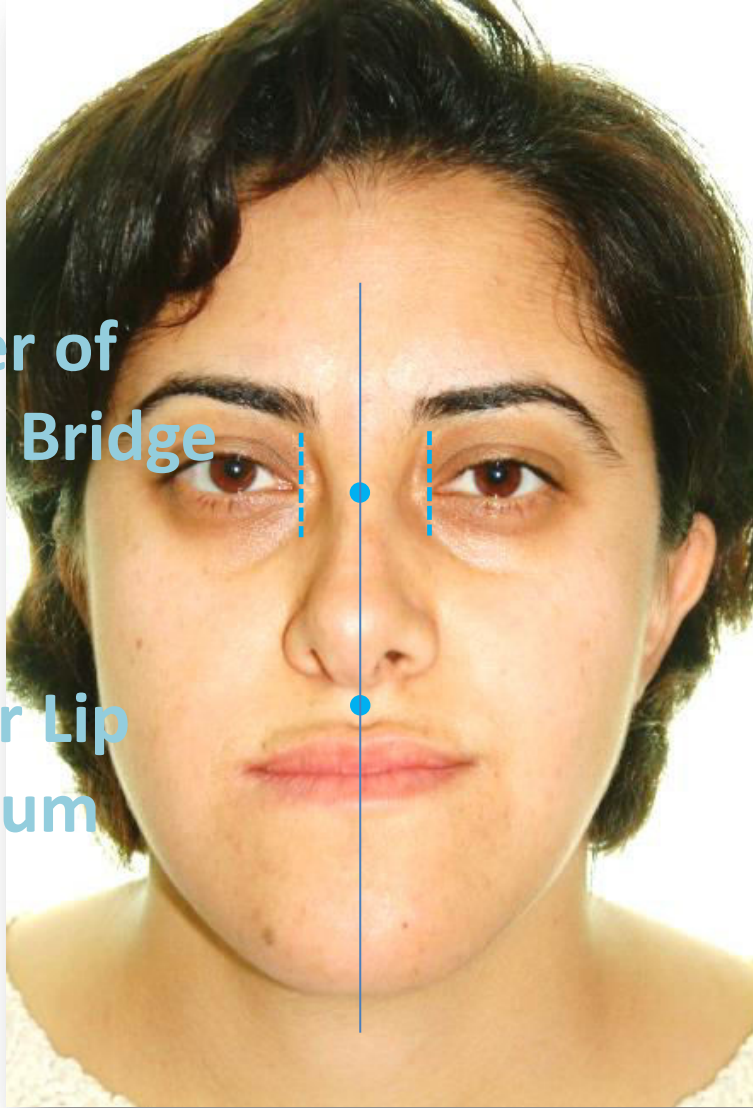
Maksiller
Okluzal

Frontal Fotoğraf Analizi

Yüz simetrisi

Center of
Nasal Bridge

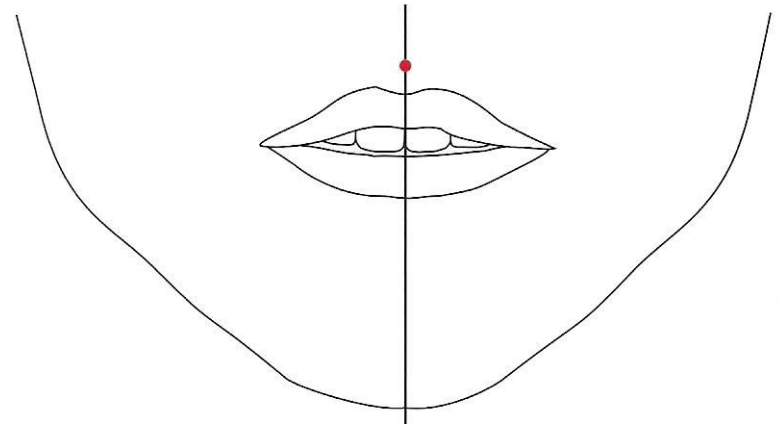
Upper Lip
Philtrum



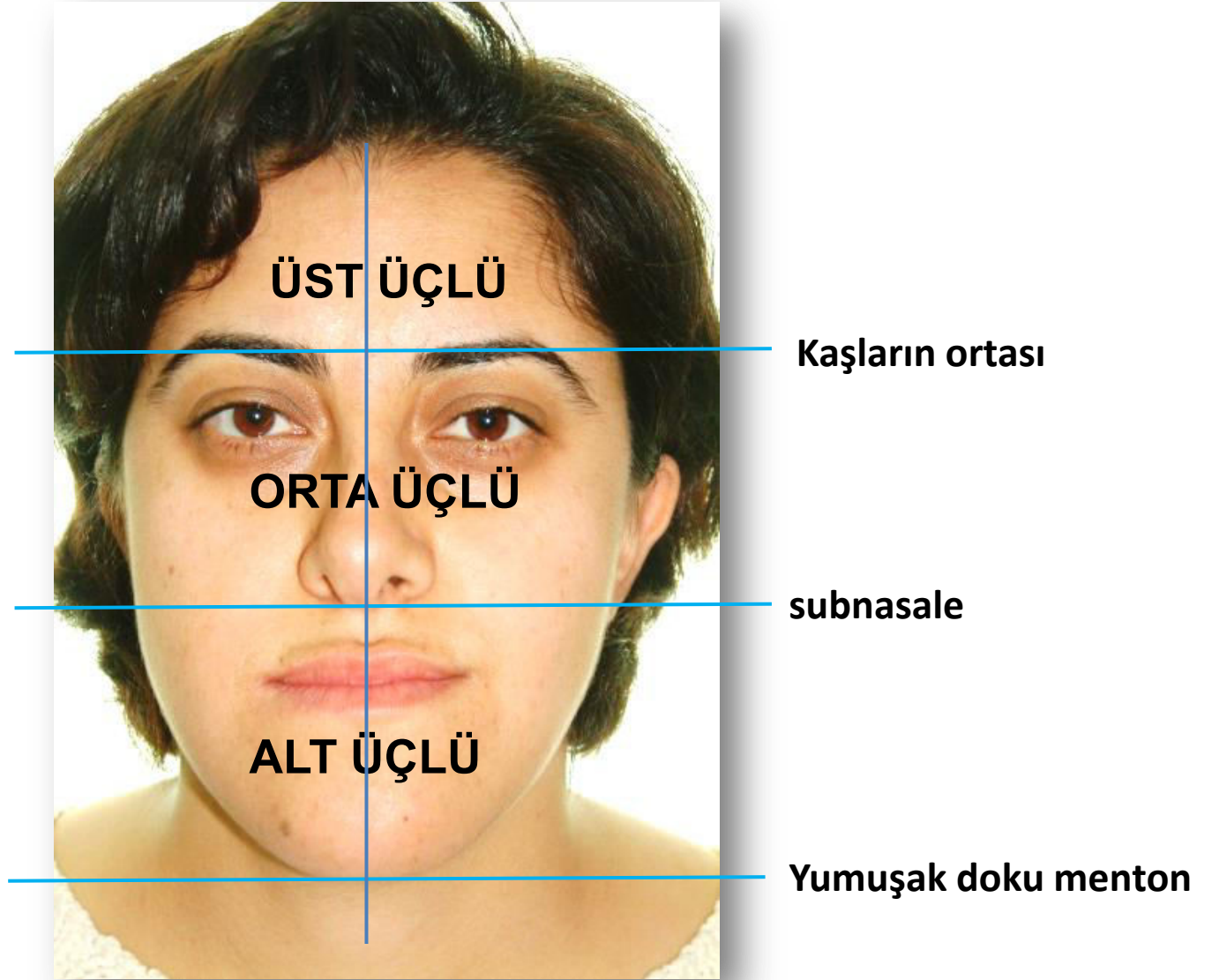
Yüzün Orta Hattı

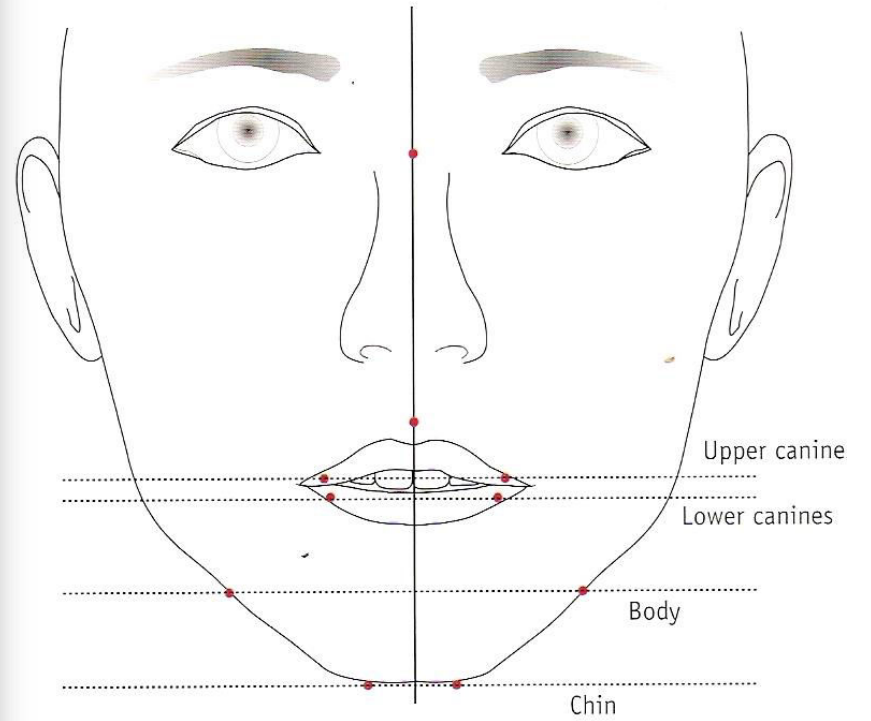
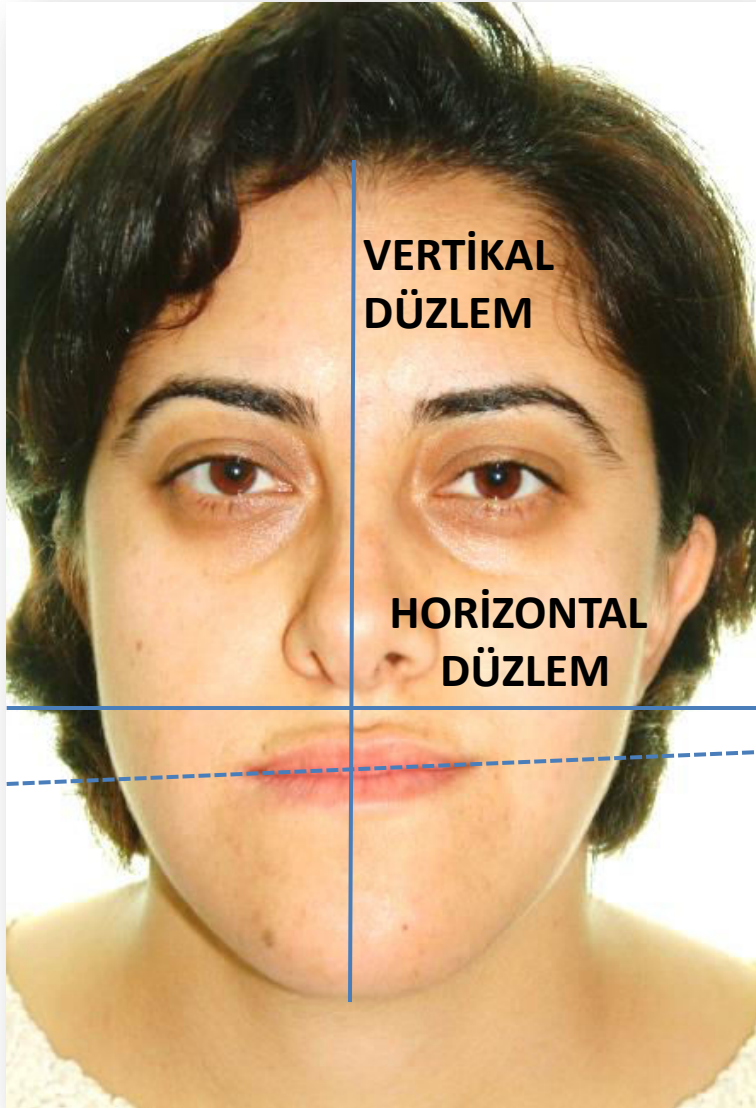


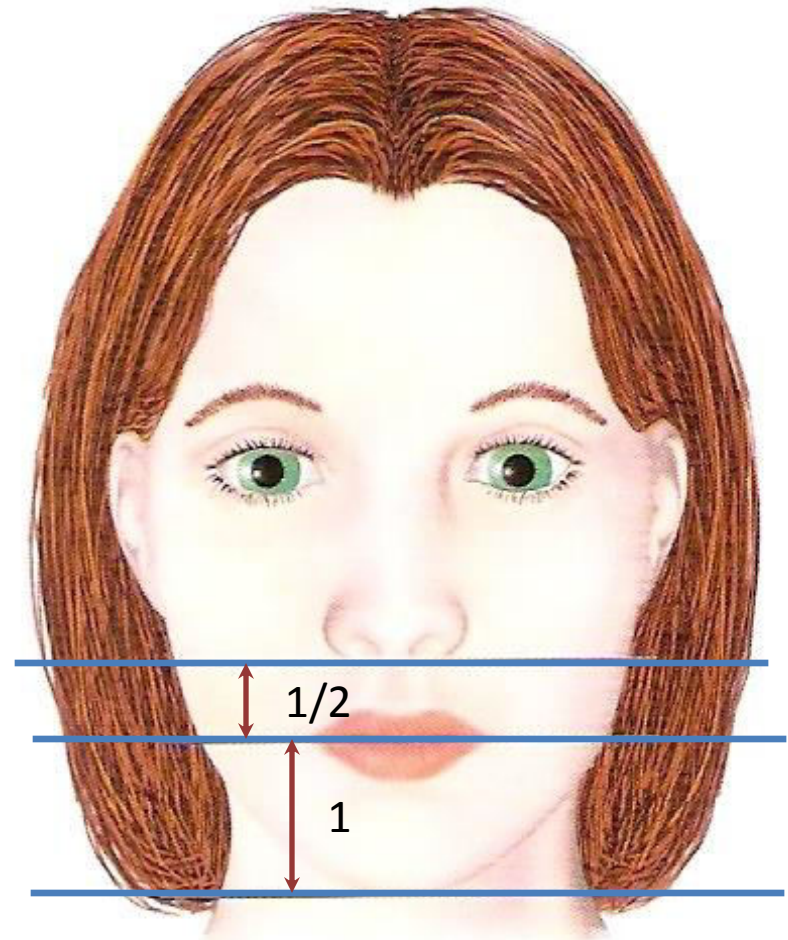
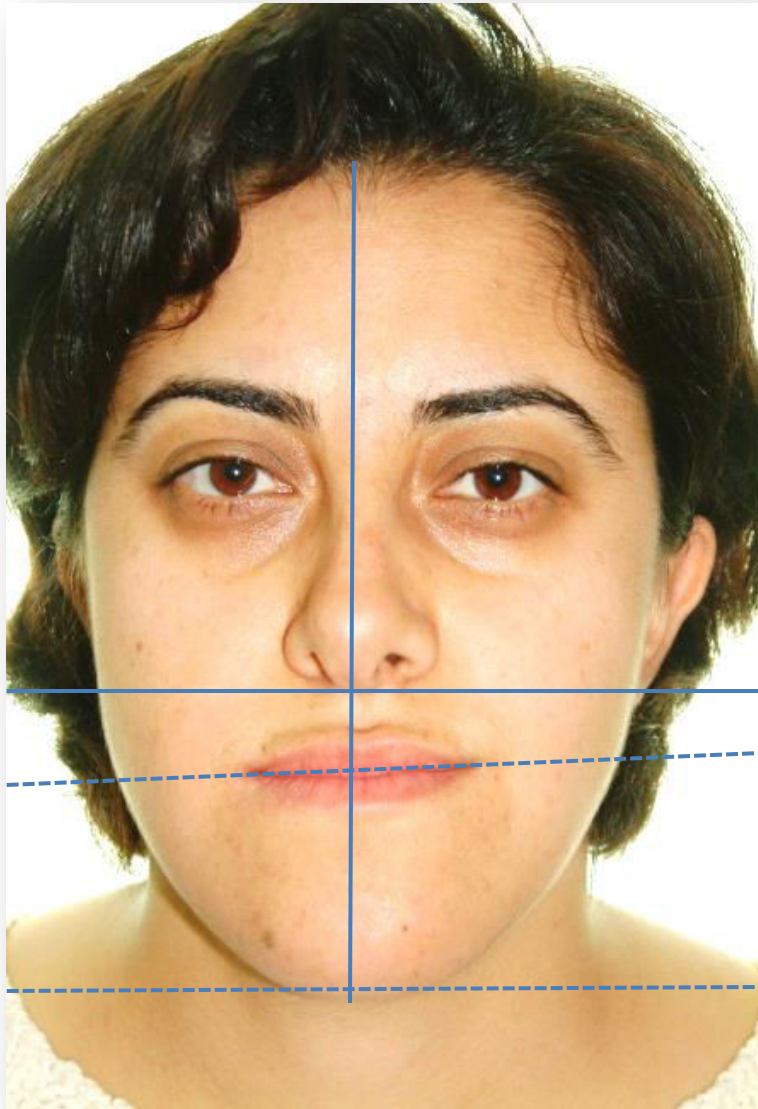
Dental olarak alt ve üst keser dişlerin ortası yüzün orta hattı ile çakışmalıdır



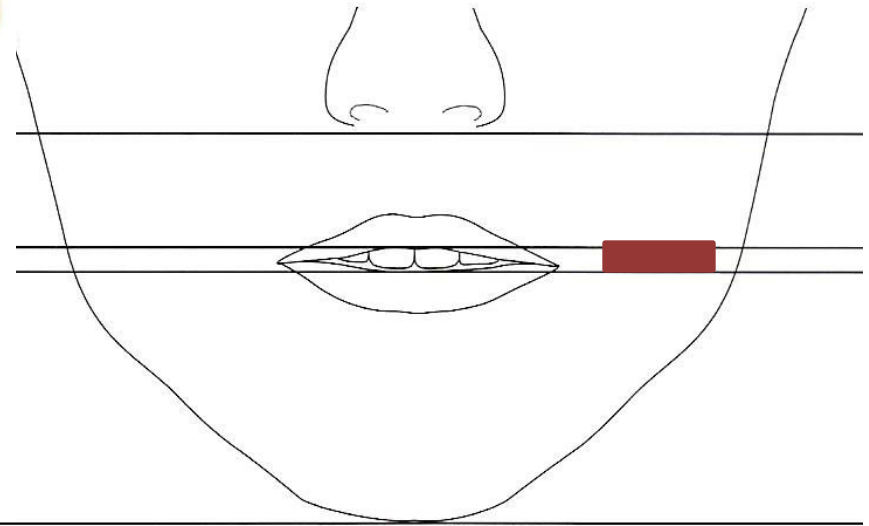
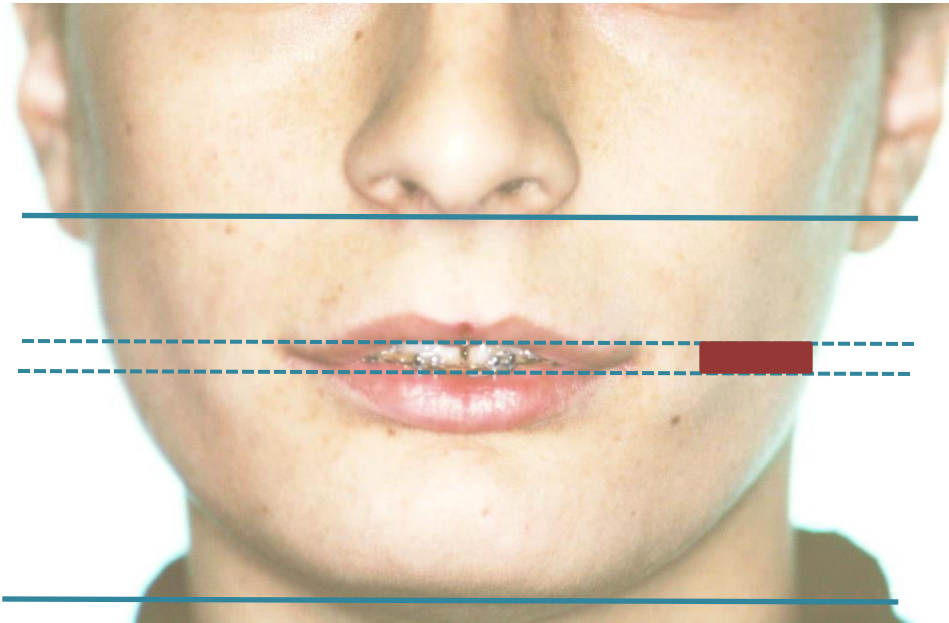
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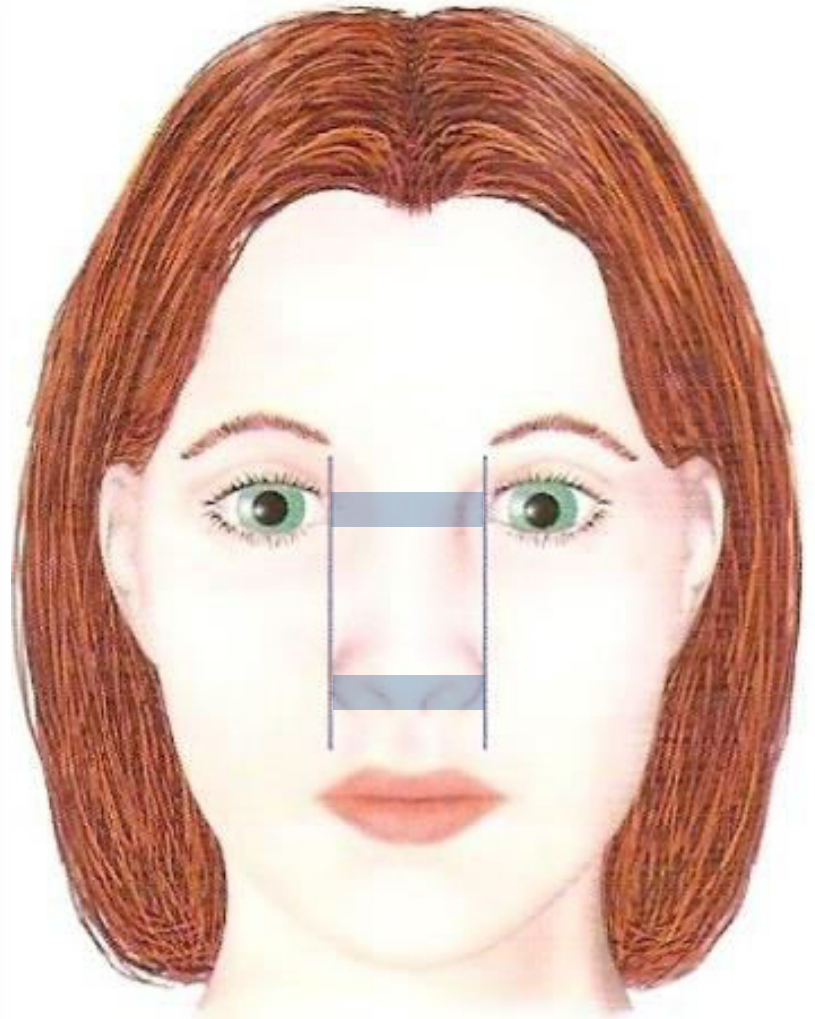
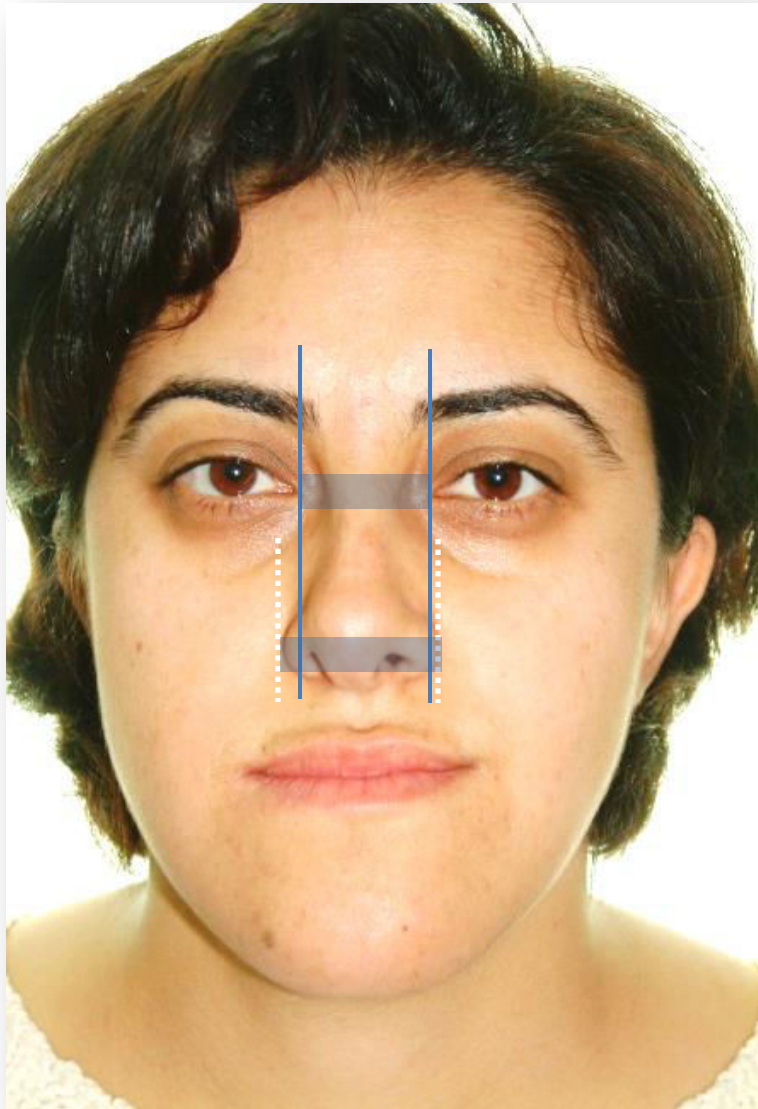


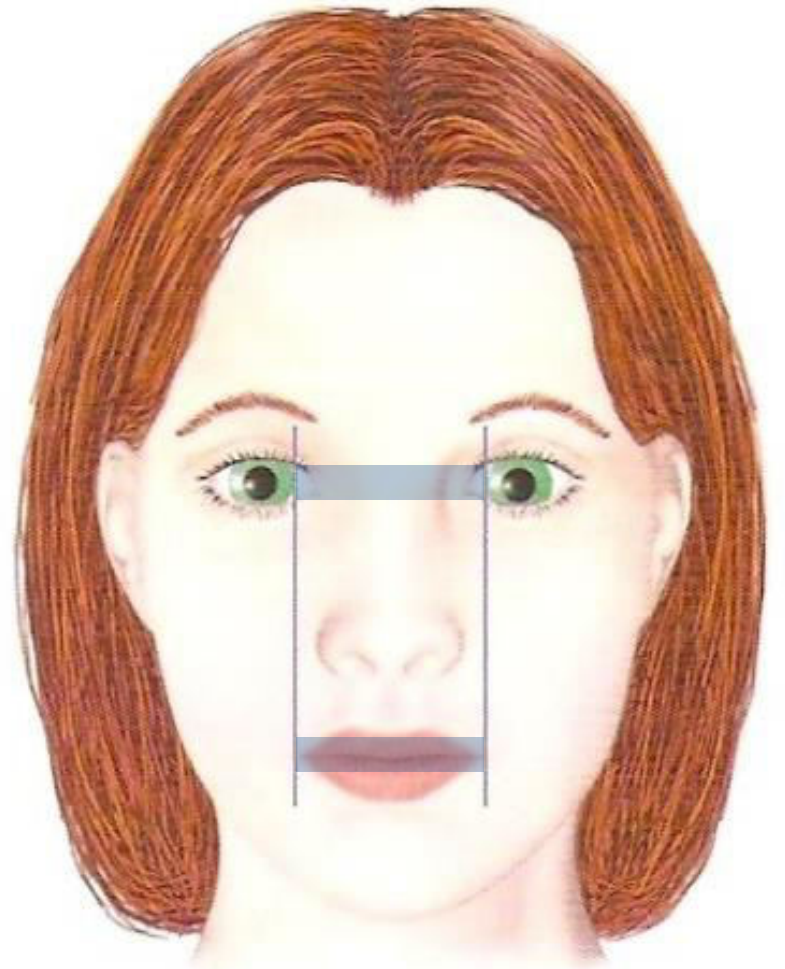
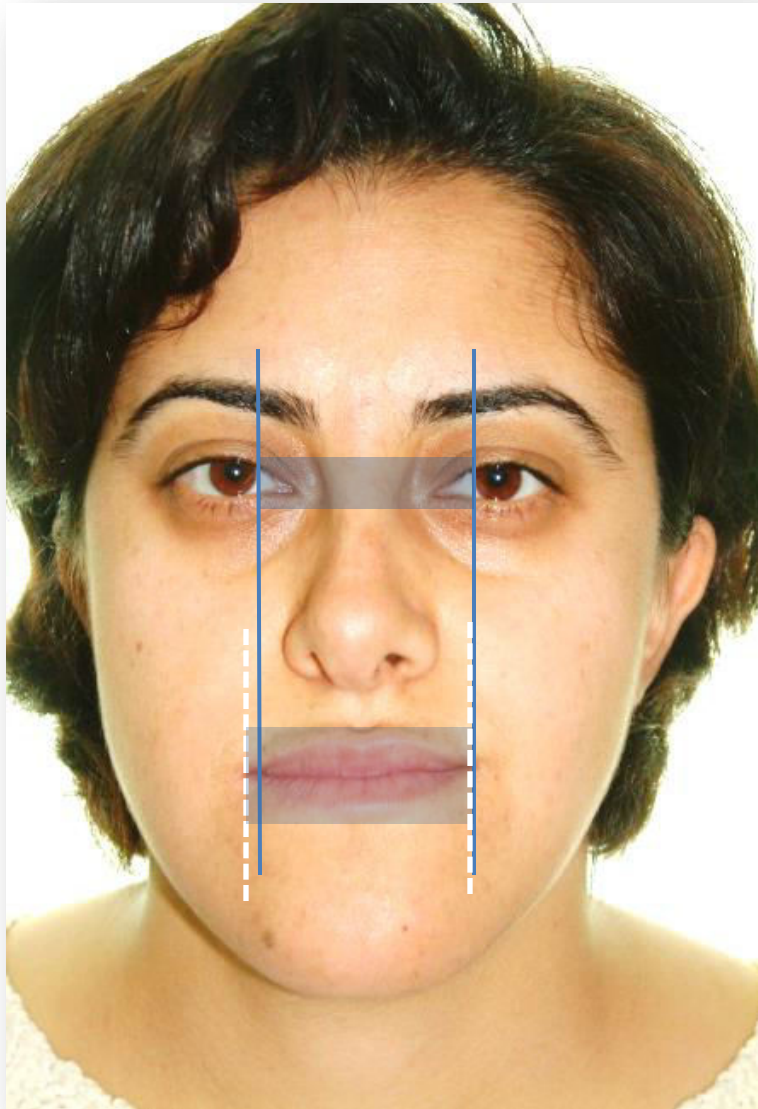




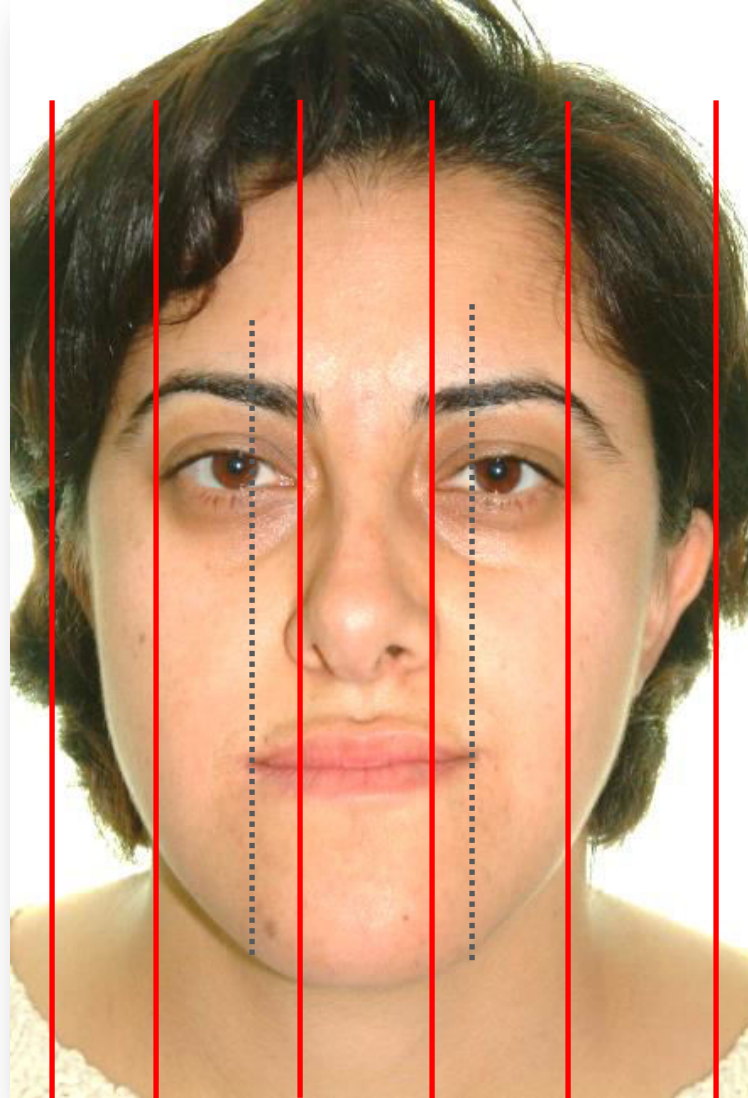
Interlabial Gap







Yüzün mesiodistal çapı 5 eşit göz genişliğine bölünmeli



**Yüz Profil Açısı
165-175°**

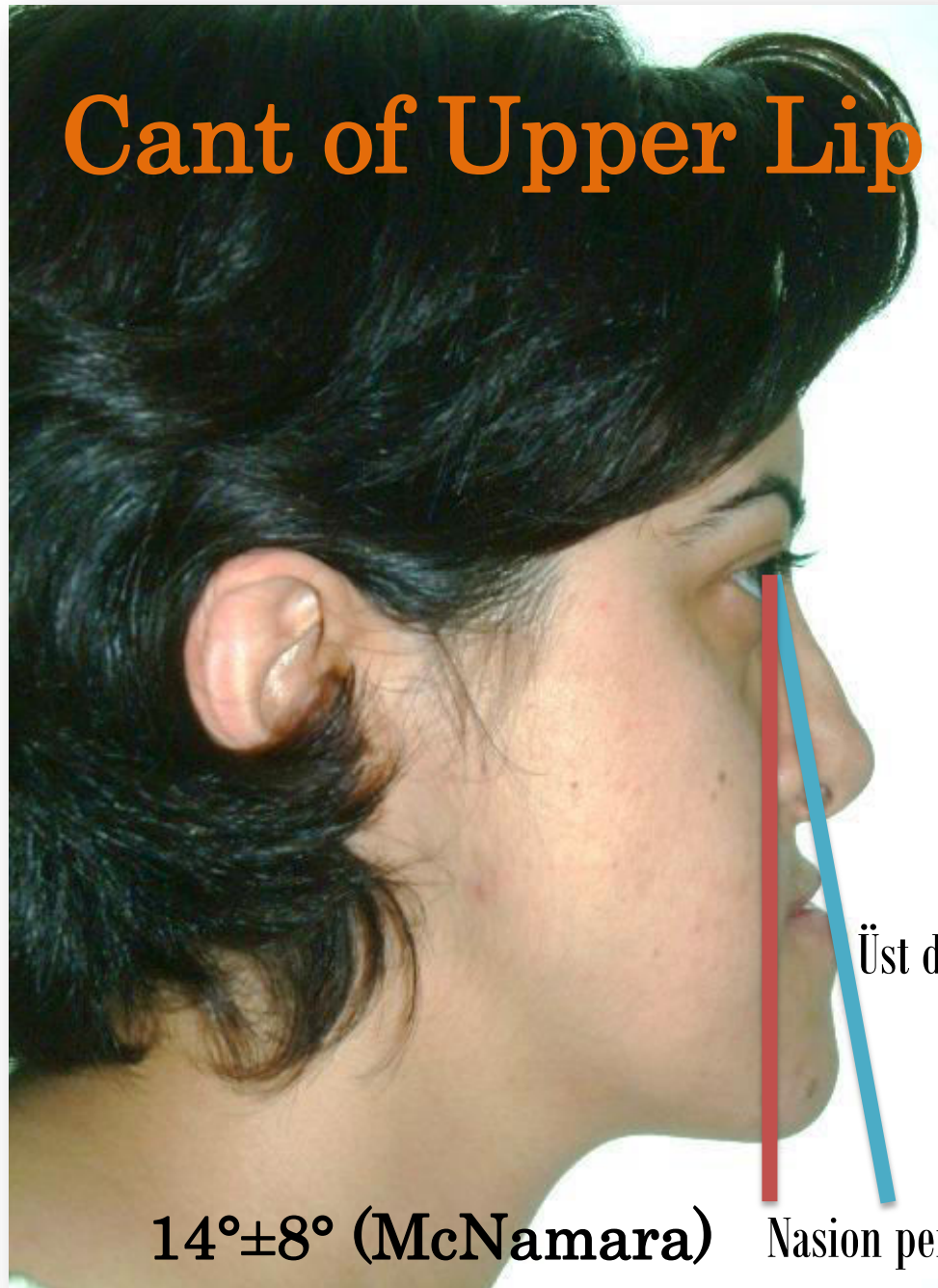


- Yüz Profil Açısı
- 165-175°

Nasolabial Açısı
85-105°



Cant of Upper Lip



$14^{\circ} \pm 8^{\circ}$ (McNamara)

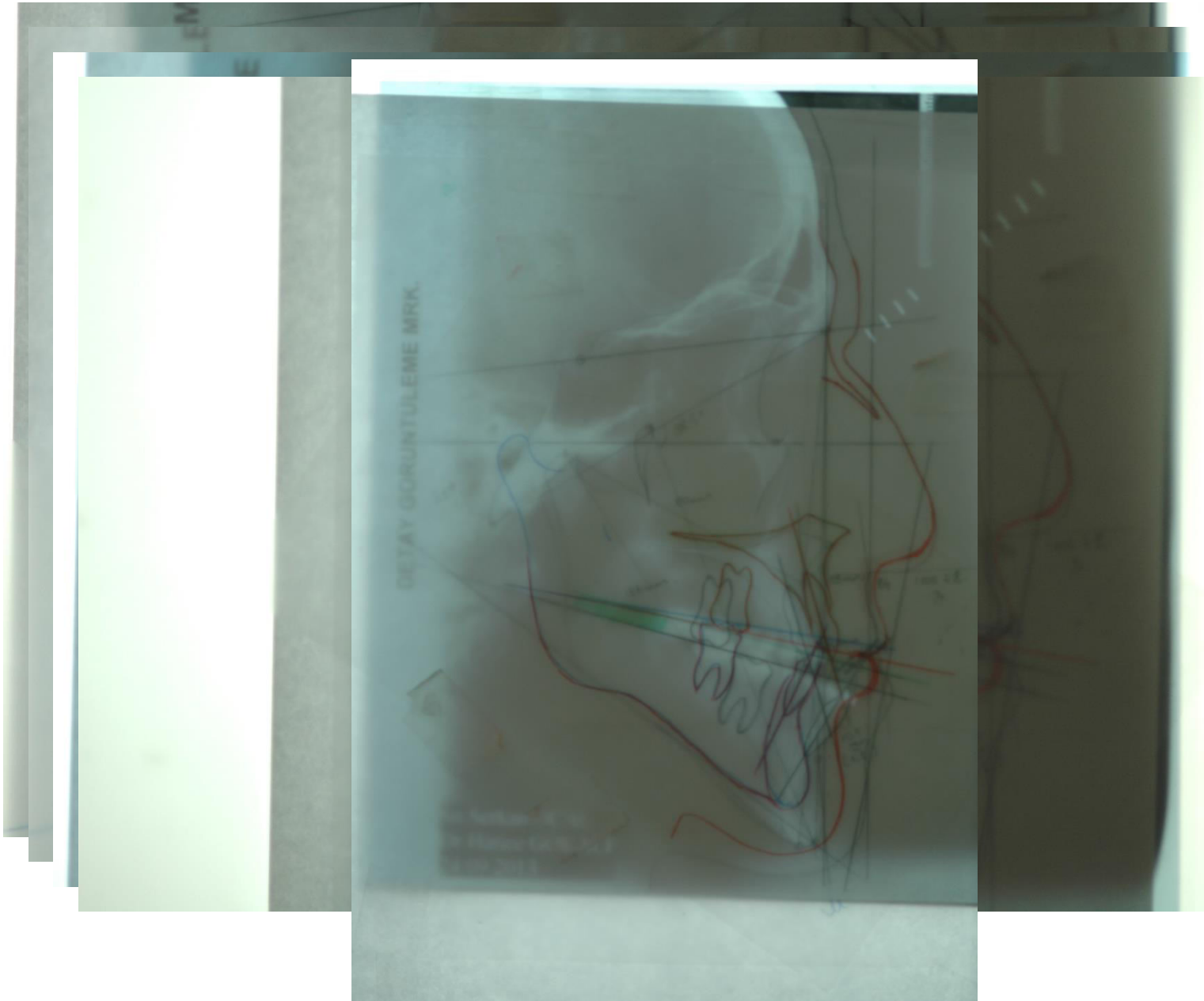
Nasion perpendicular

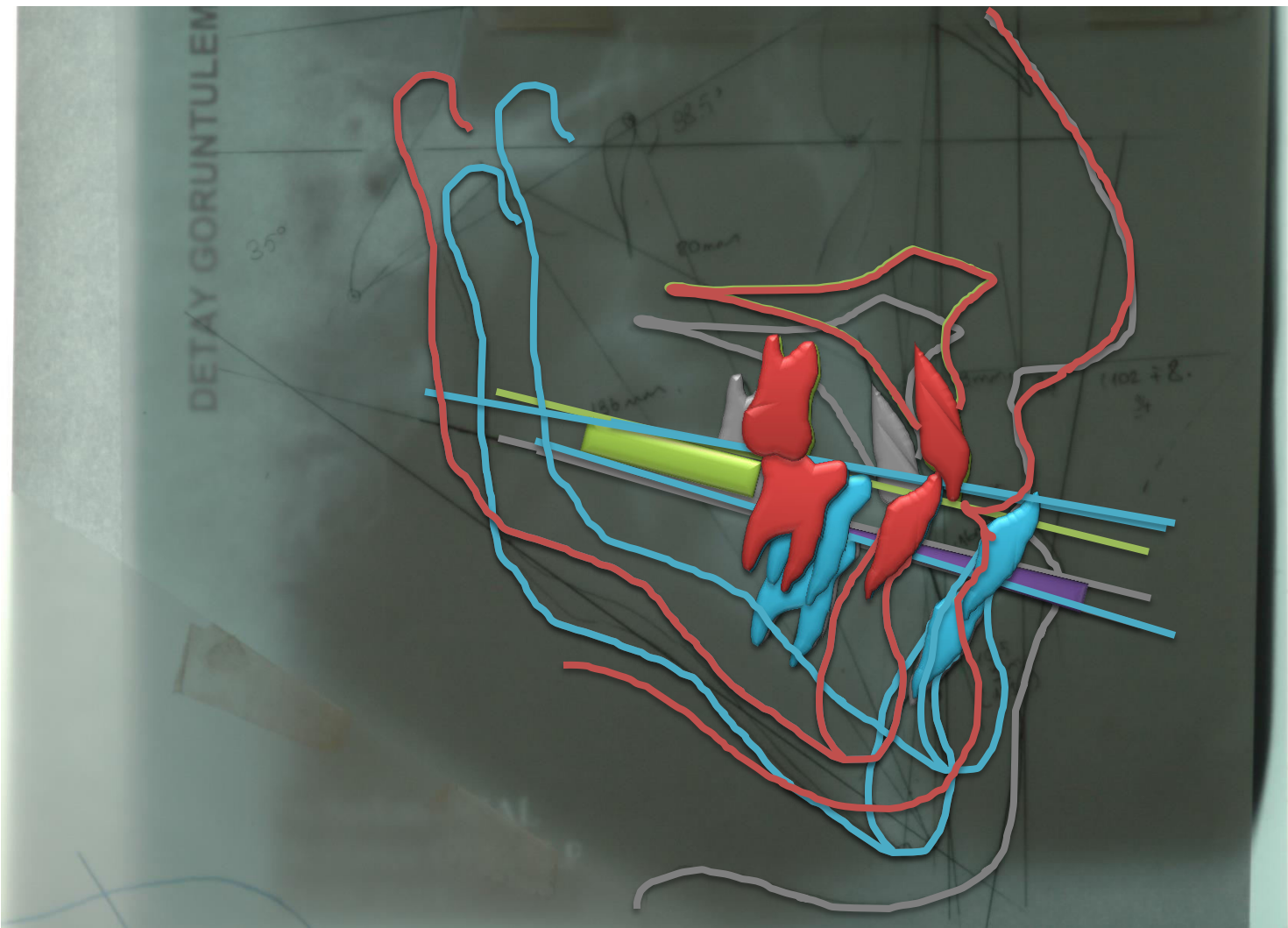
Üst dudak tegeti





SEFALOMETRIK SET UP



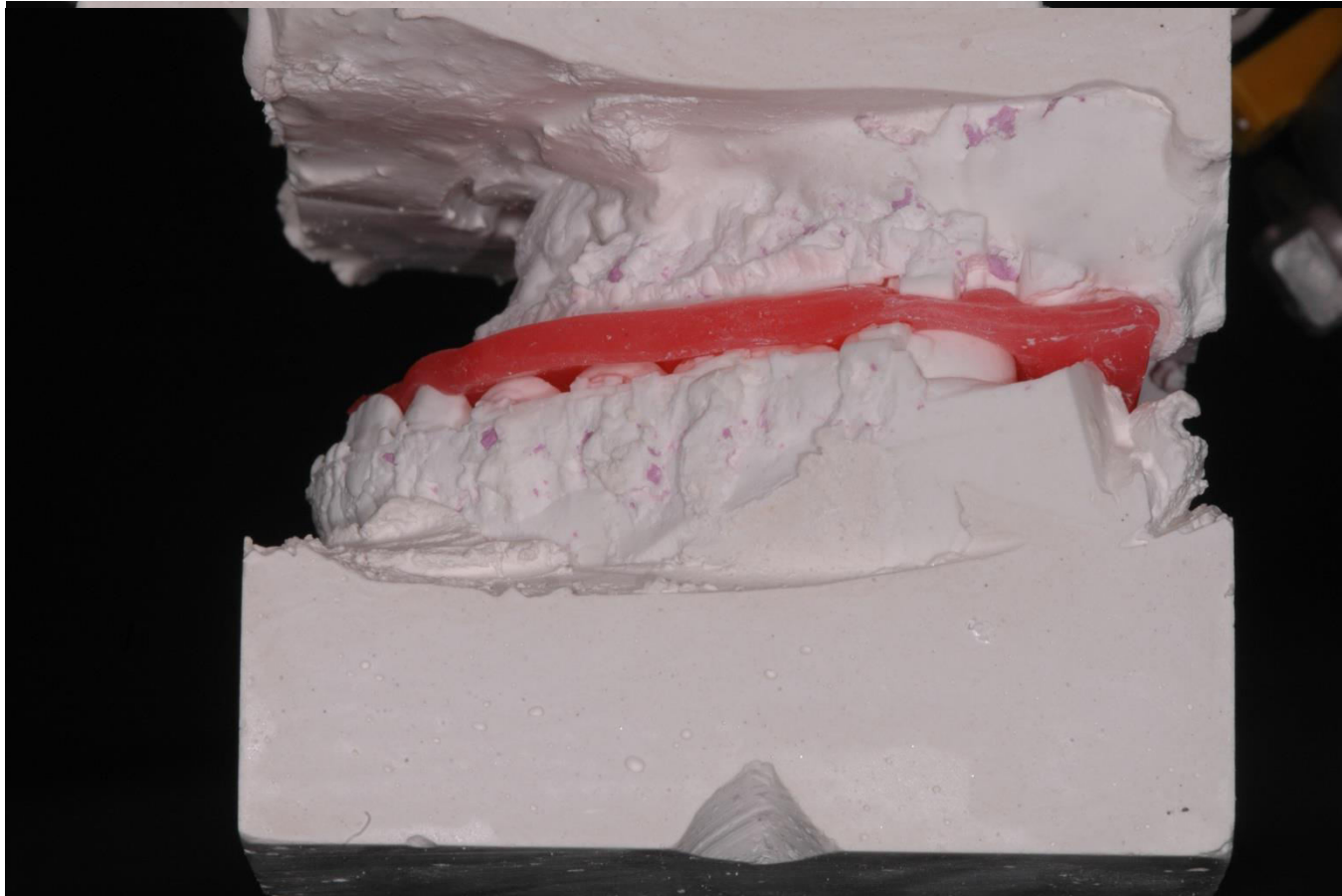


FACE BOW TRANSFERI





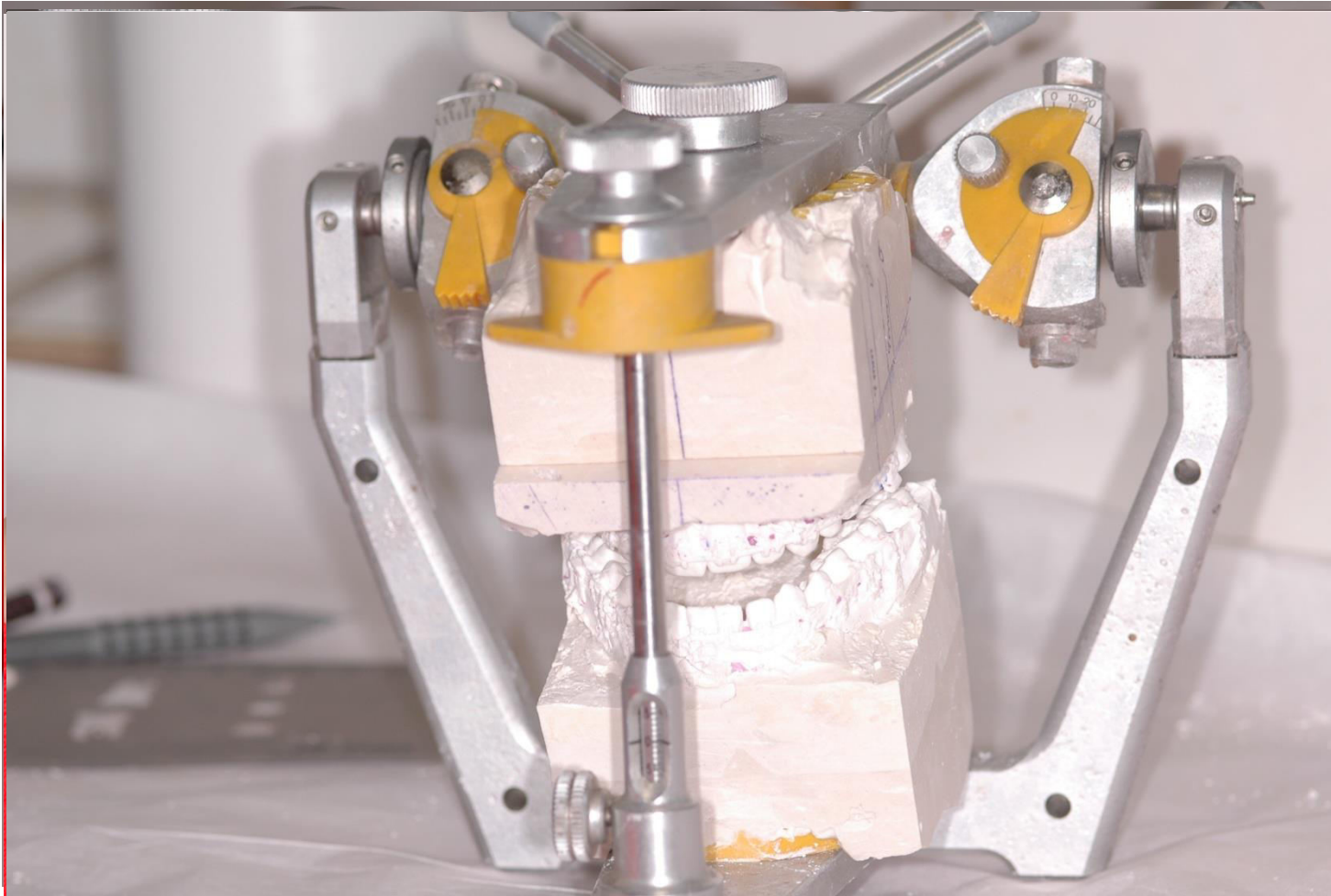
ORTODONTIK MODELLER



MODELLERIN ARTIKÜLATÖRE ALINMASI



MODEL SET UP



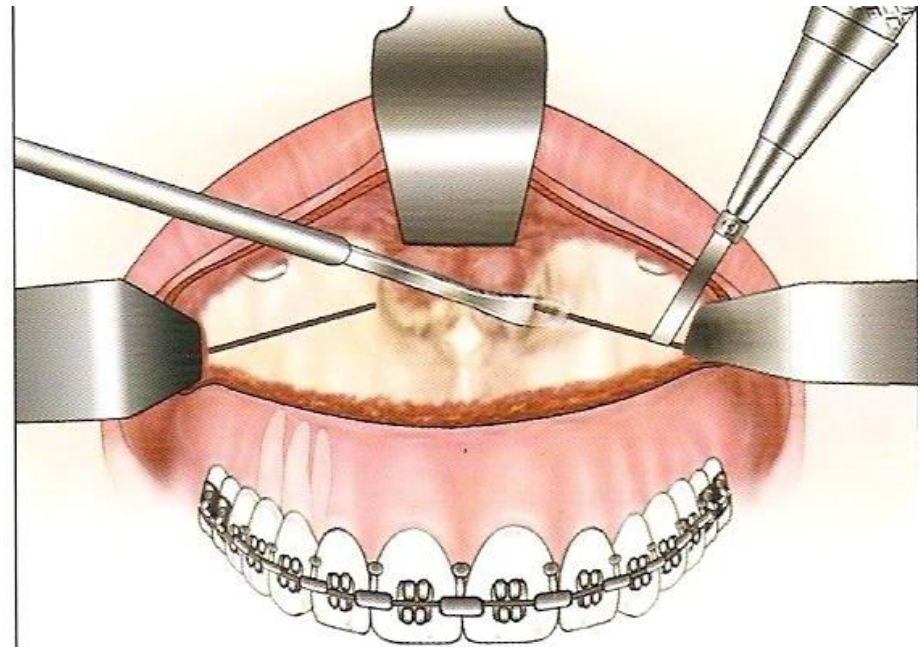
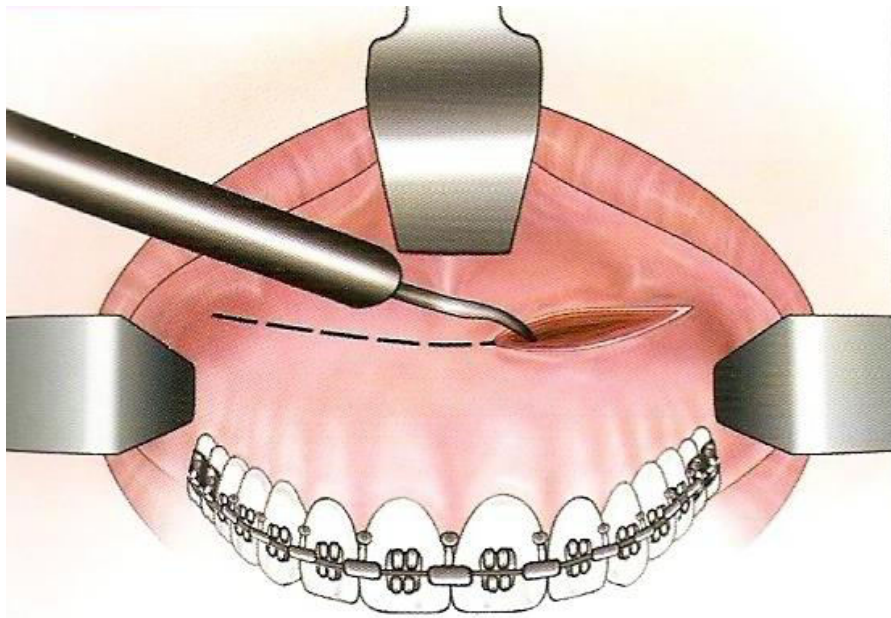
MAKSİLLER CERRAHİ

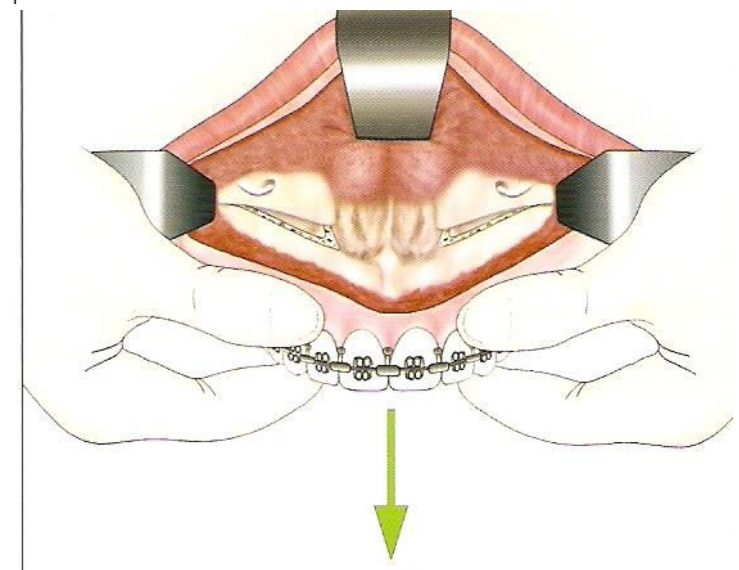
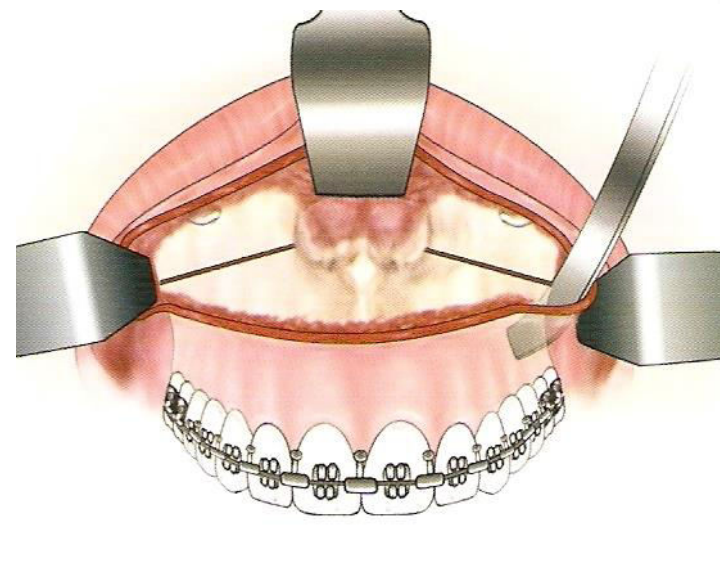
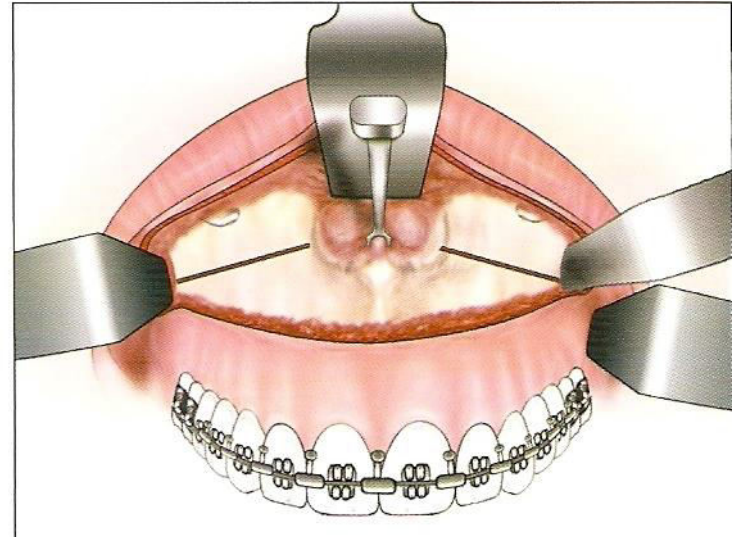
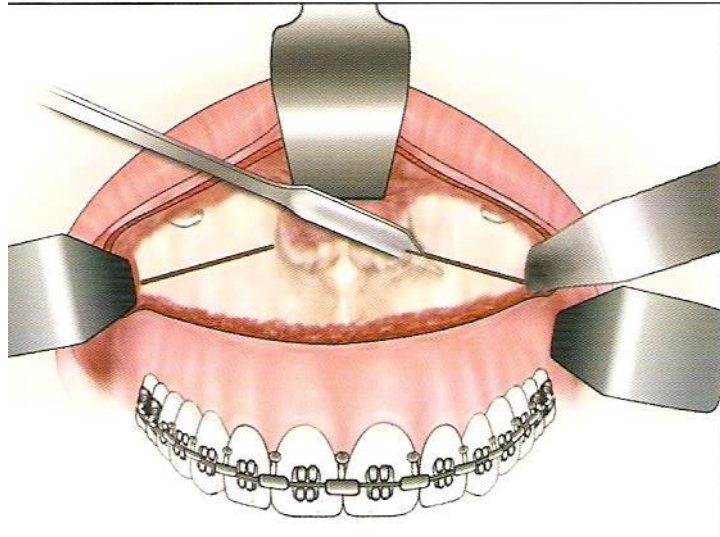
Classic Le
Fort I
Osteotomy

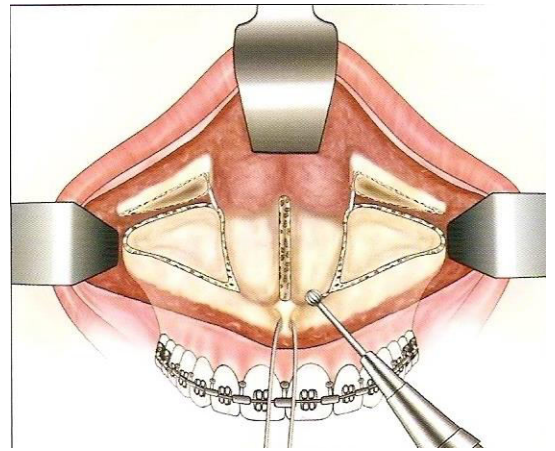
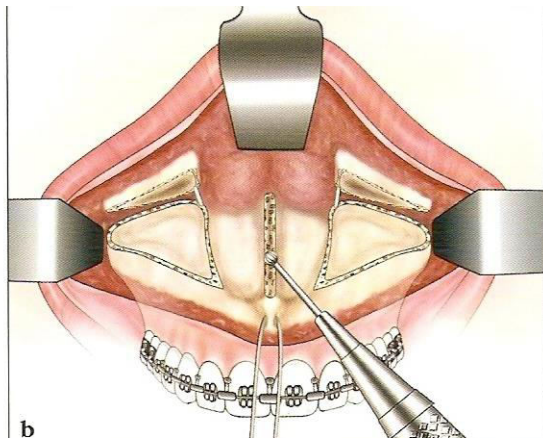
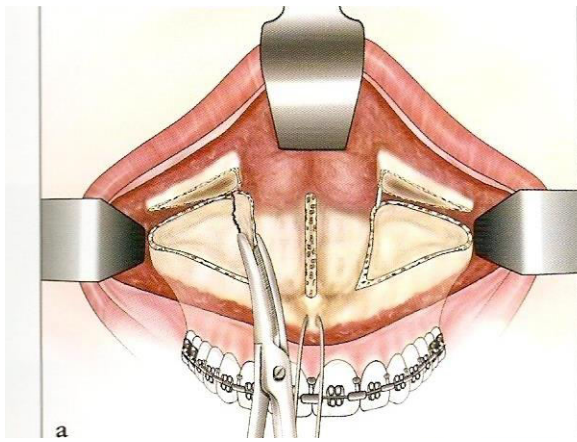
Bell High
Osteotomy

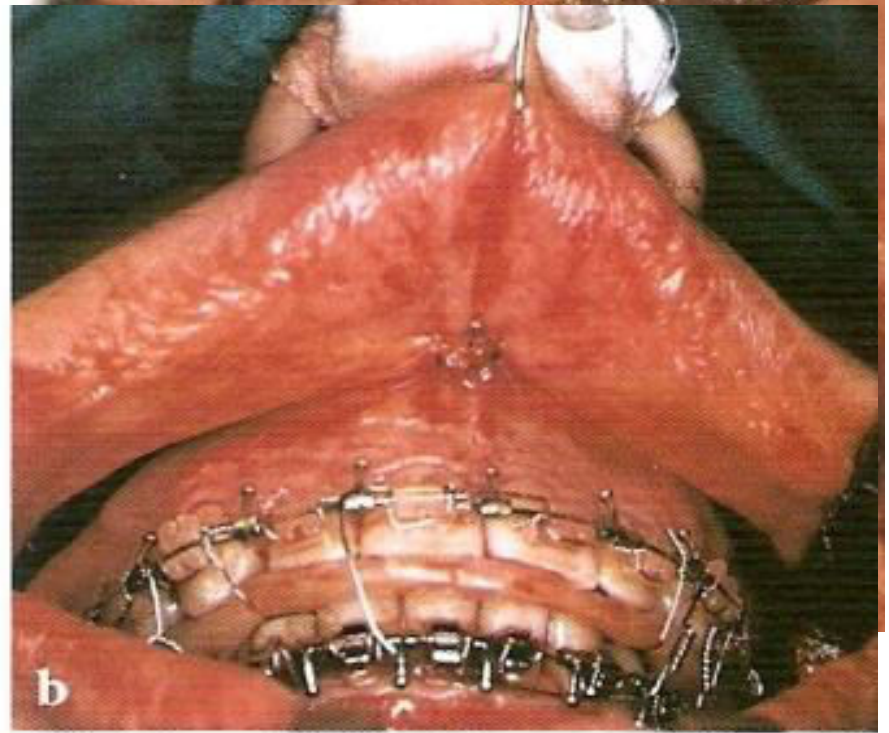
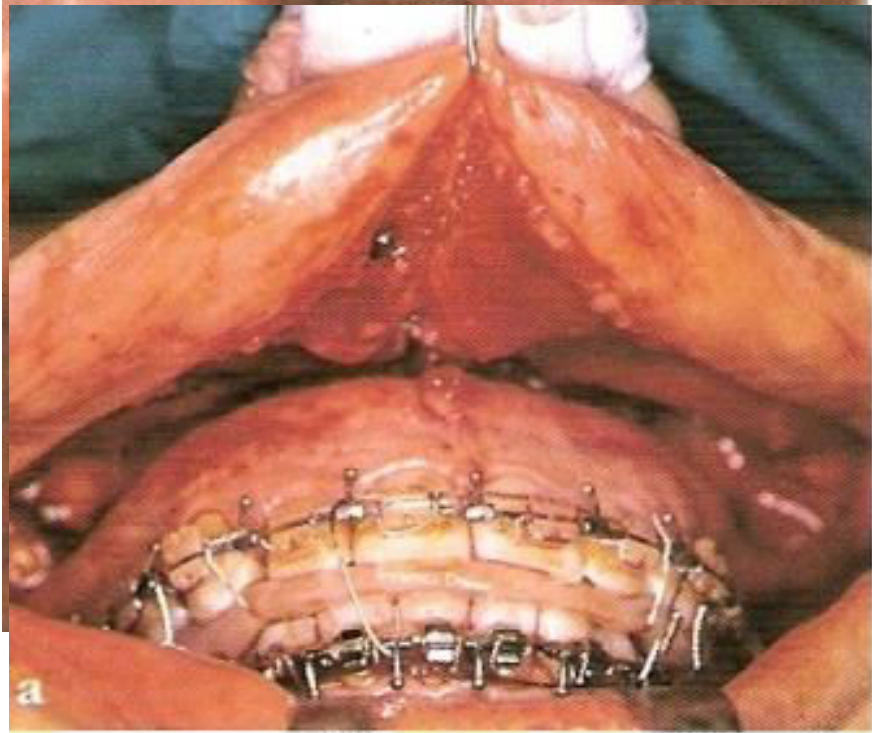
Multiple-
Piece Le Fort
I Osteotomy

Classic Le Fort I Osteotomy

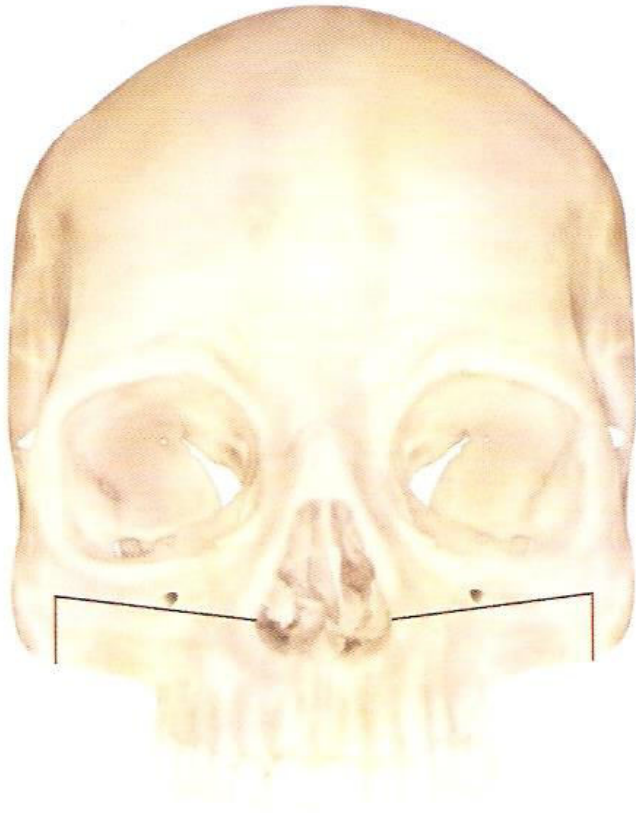




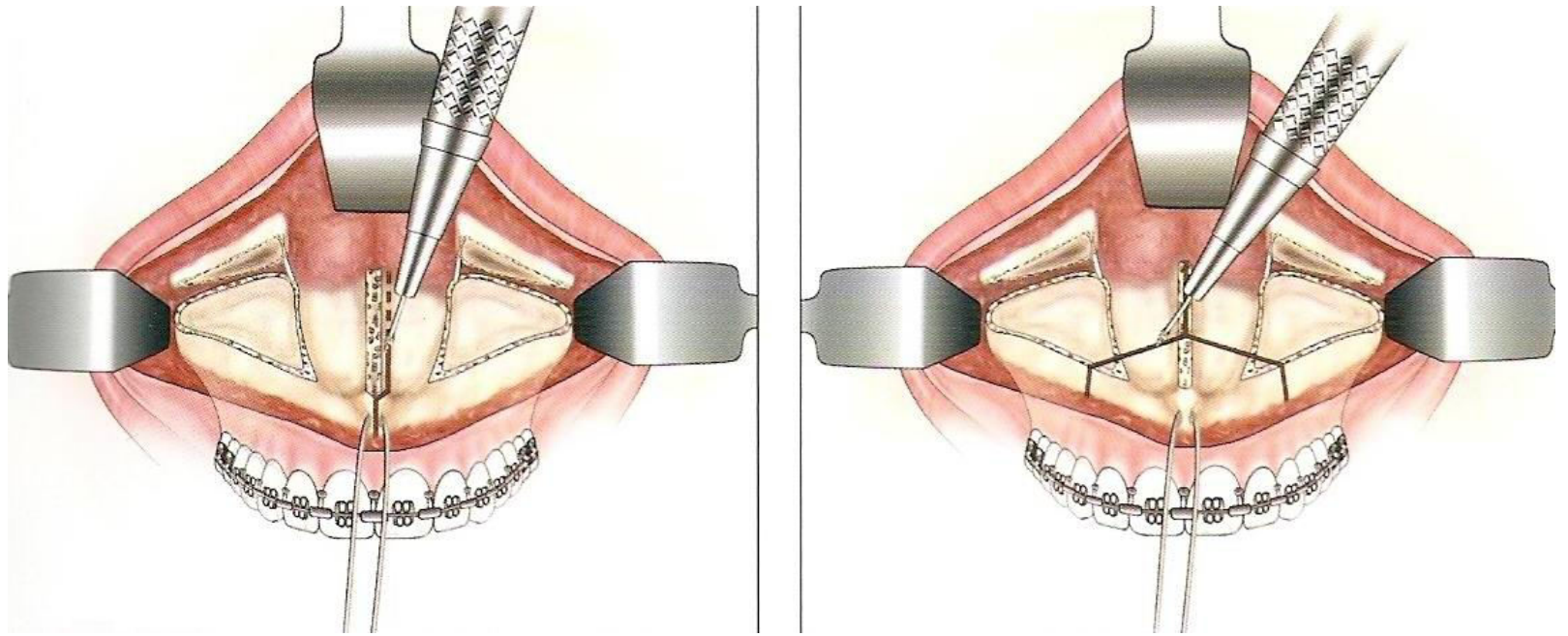




Bell High Osteotomy



Multiple-Piece Le Fort I Osteotomy



MANDİBULAR CERRAHİ

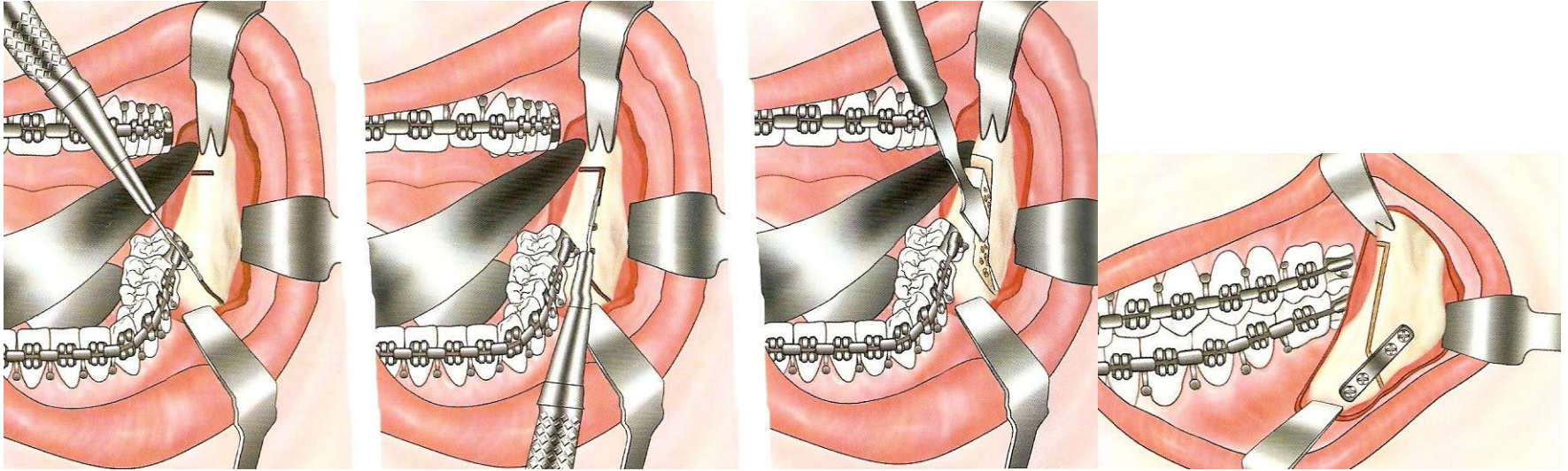
Sagittal
Ramus
Osteotomy

Vertical
Ramus
Osteotomy

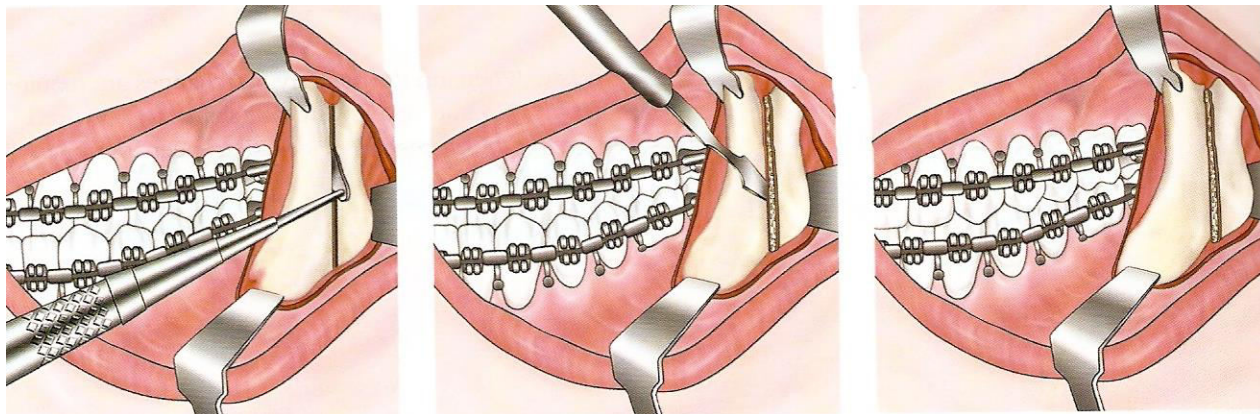
Segmental
Corpus
Osteotomy

Chin
Osteotomy

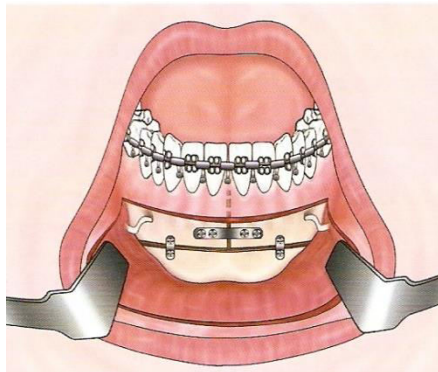
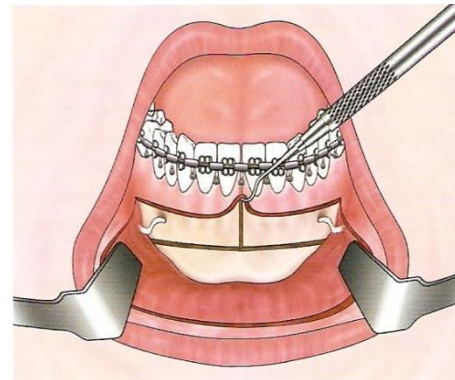
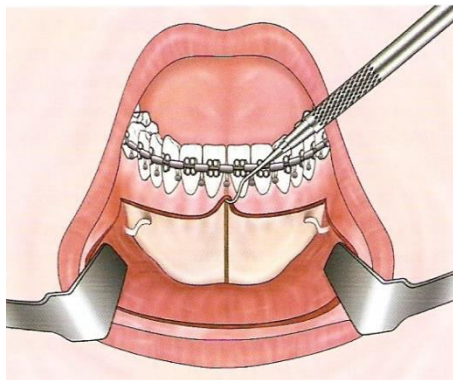
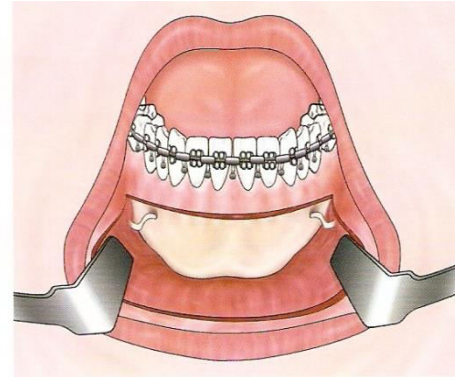
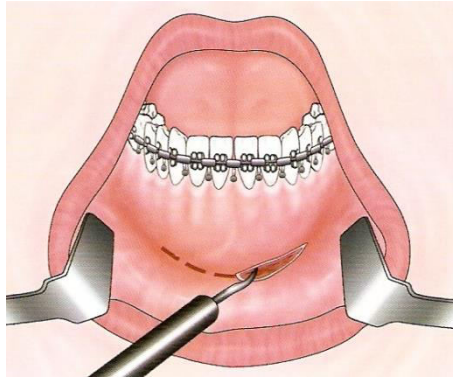
Sagittal Split Ramus Osteotomi



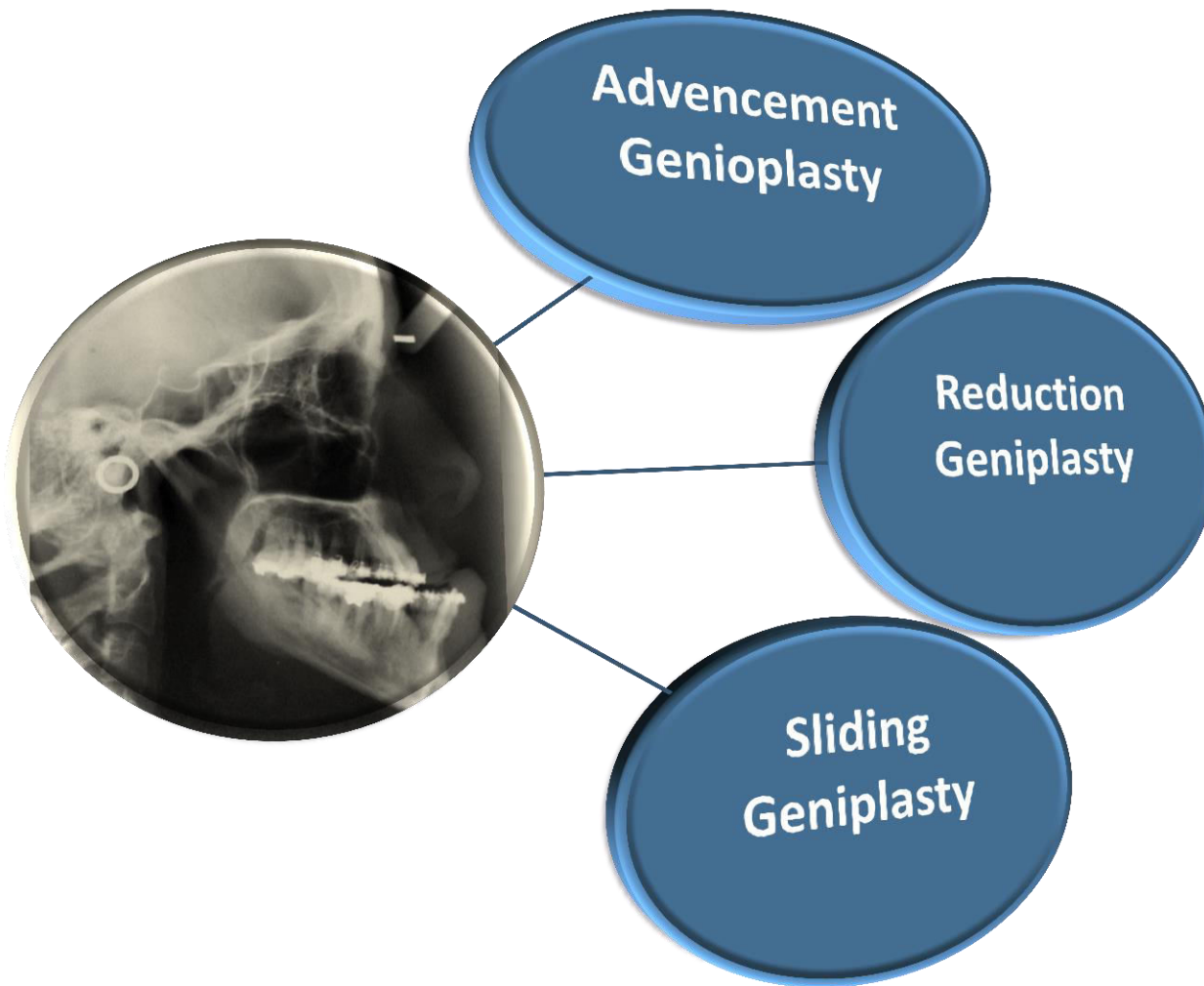
Vertikal Ramus Osteotomi



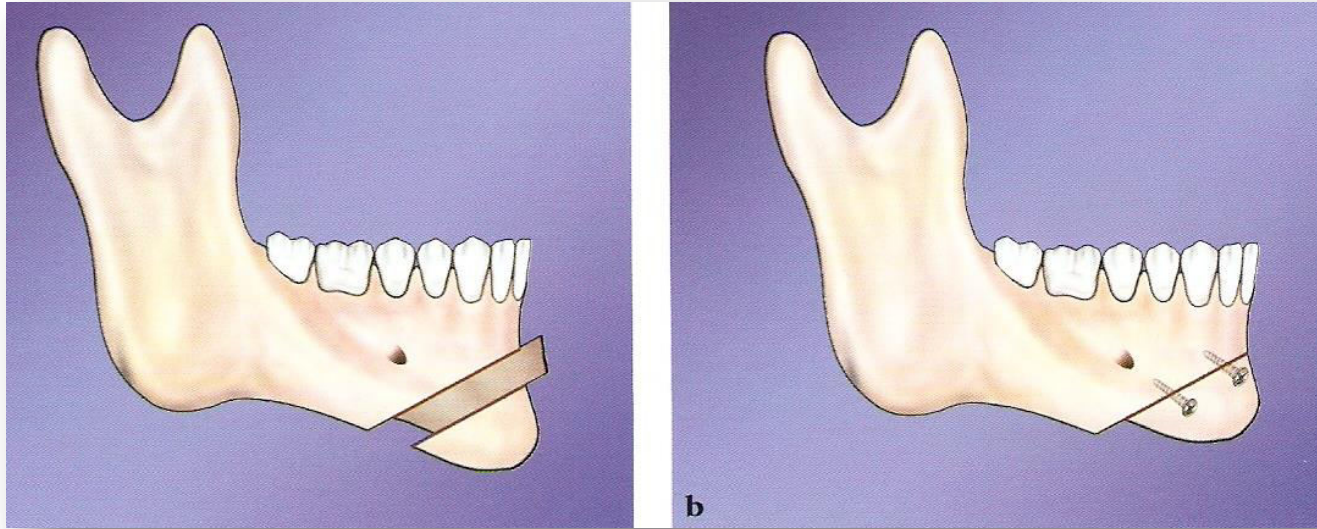
Chin Osteotomy



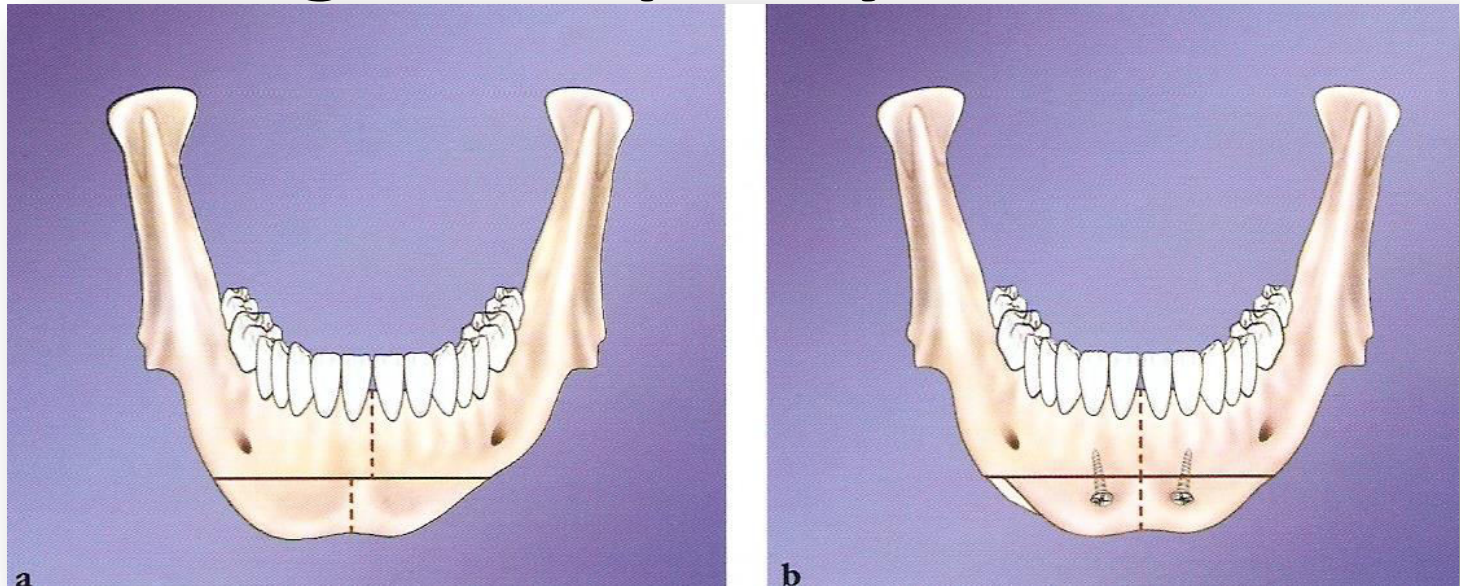
Genioplasty



Reduction Genioplasty



Sliding Genioplasty



FIKSASYON

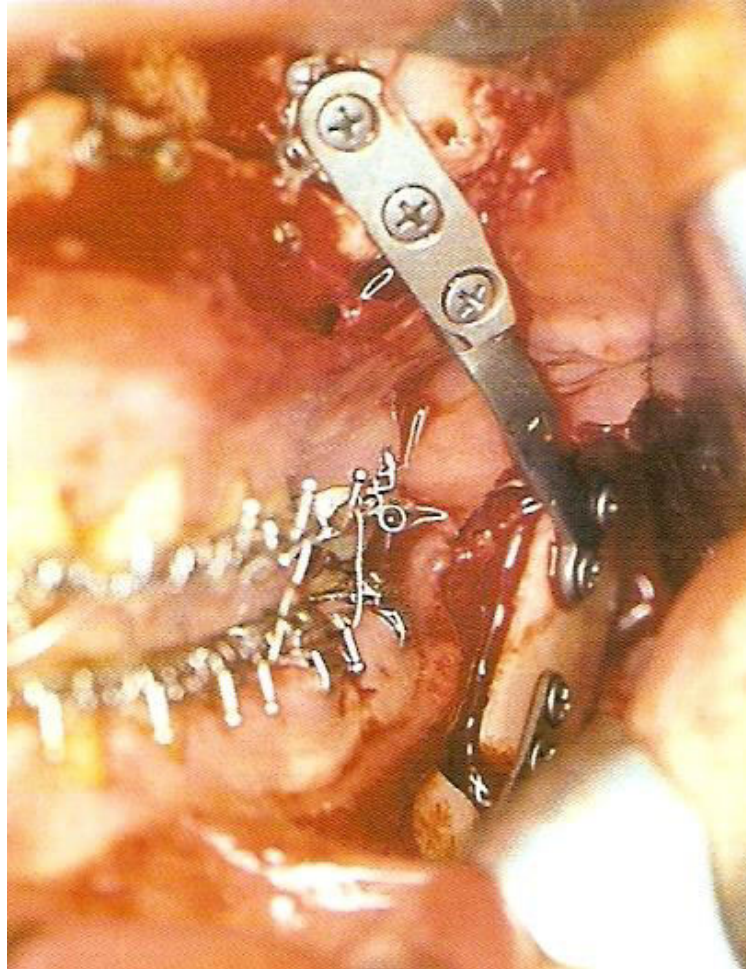


plakla

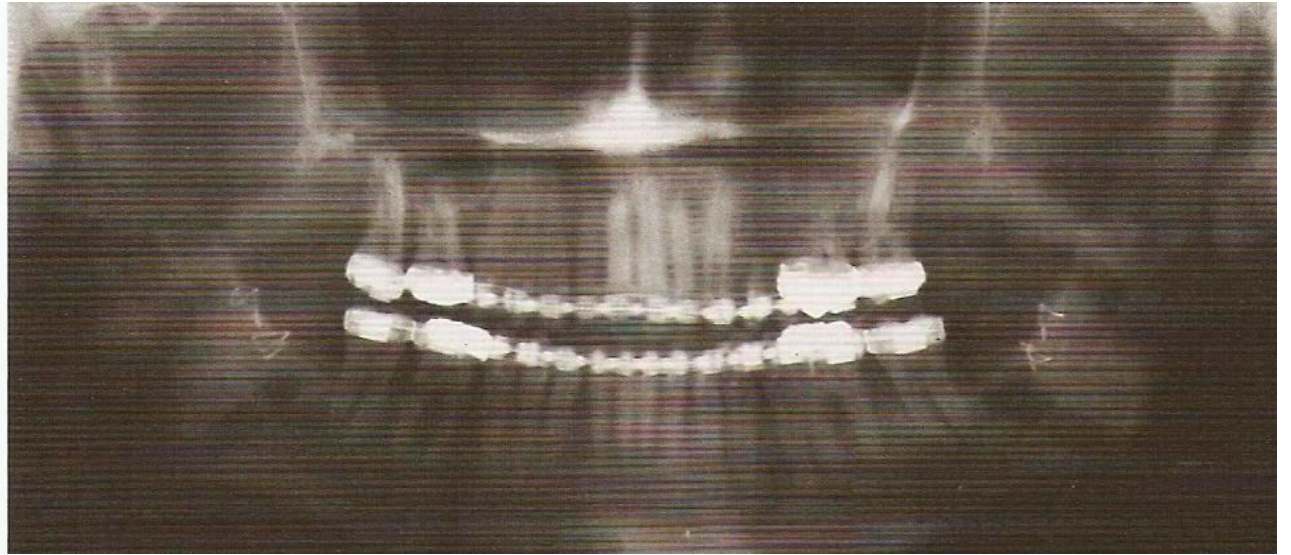


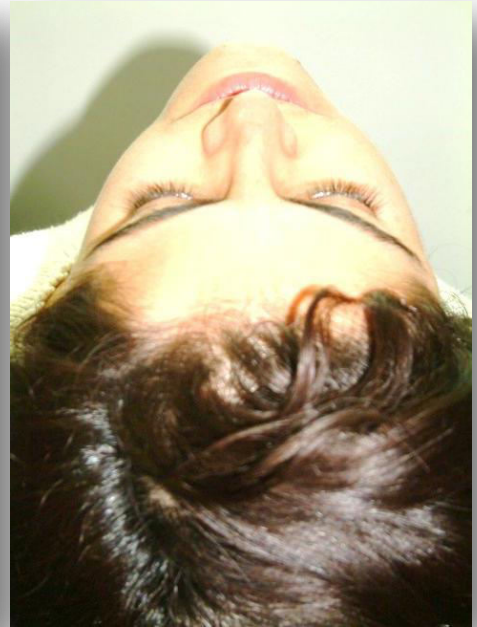
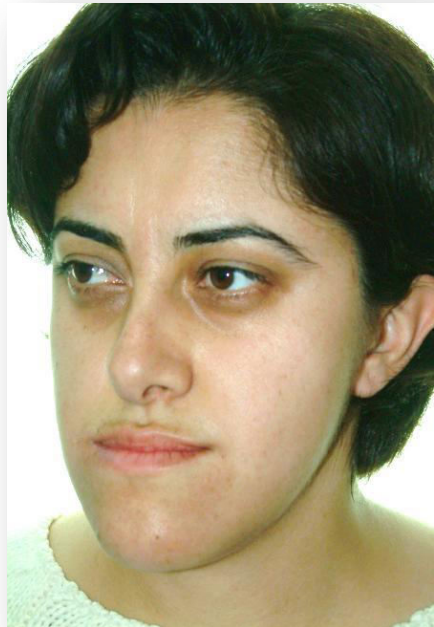
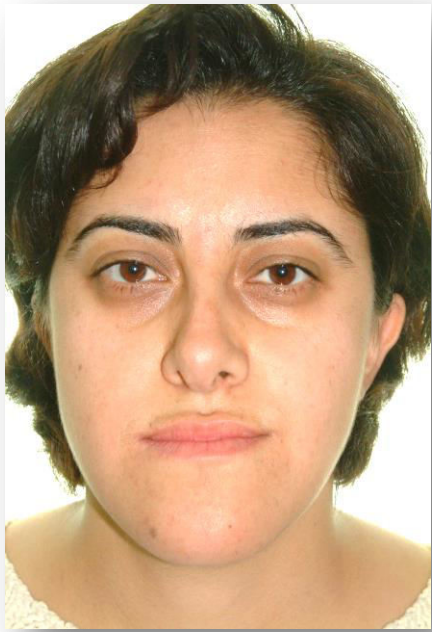
telle

Rigid Fiksasyonu



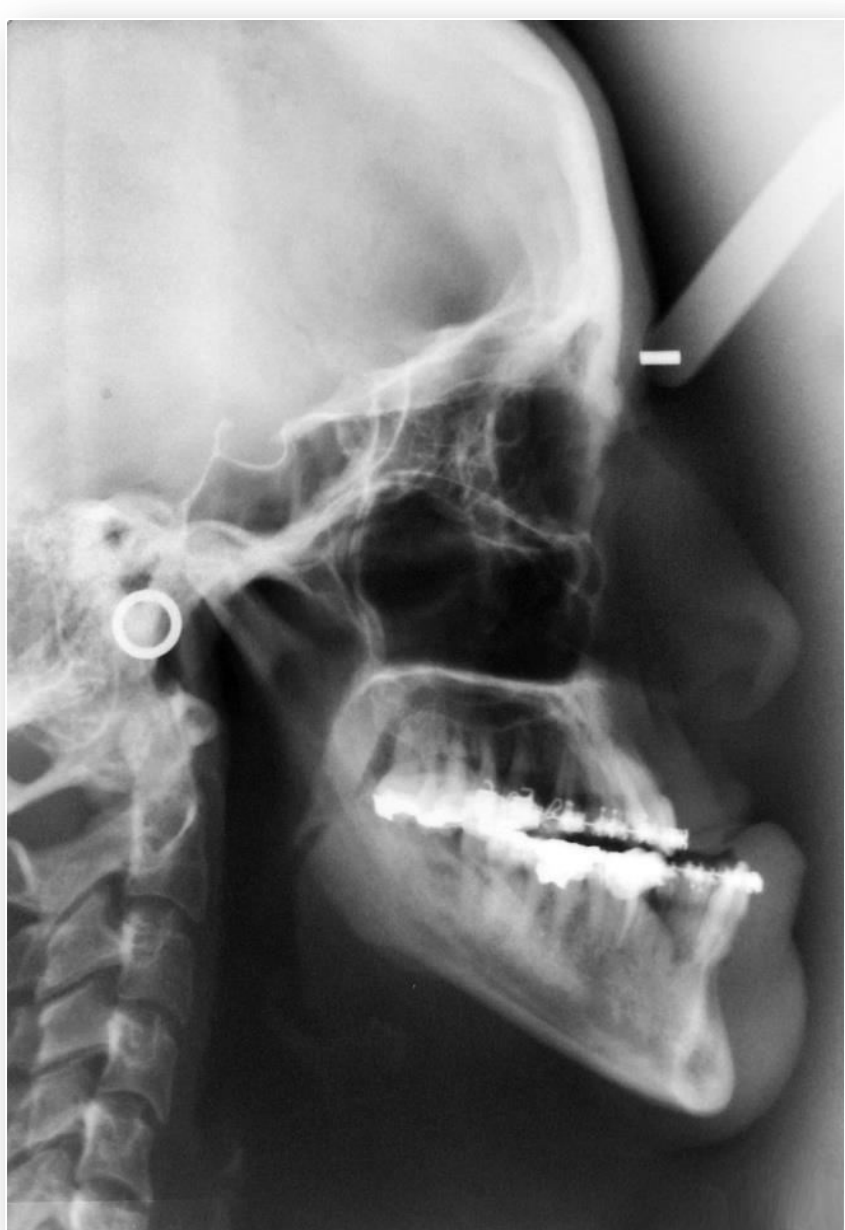
Tel Fiksasyonu

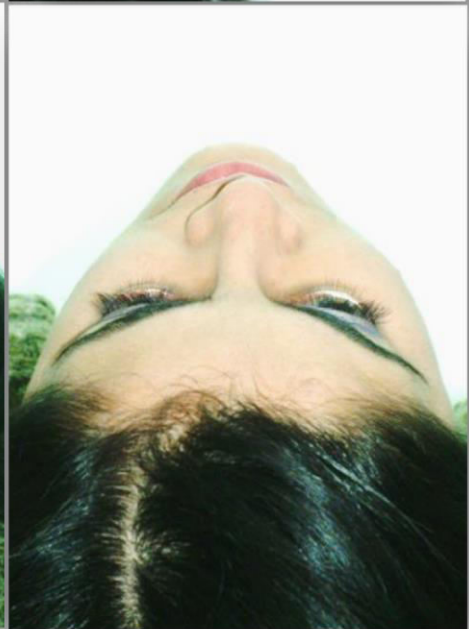
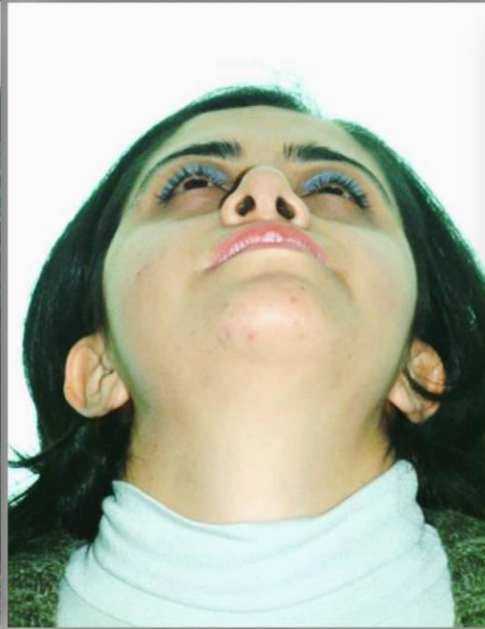
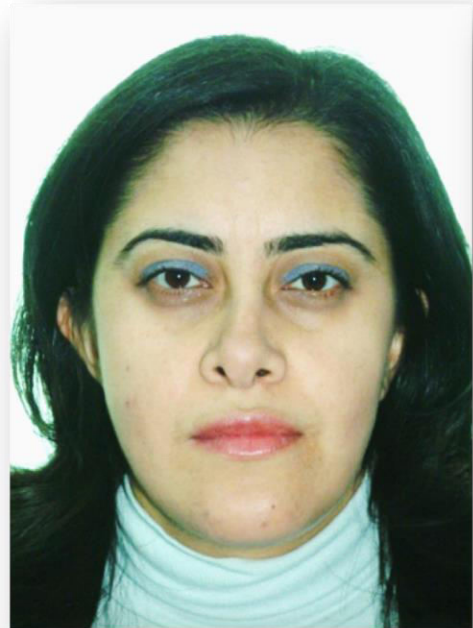








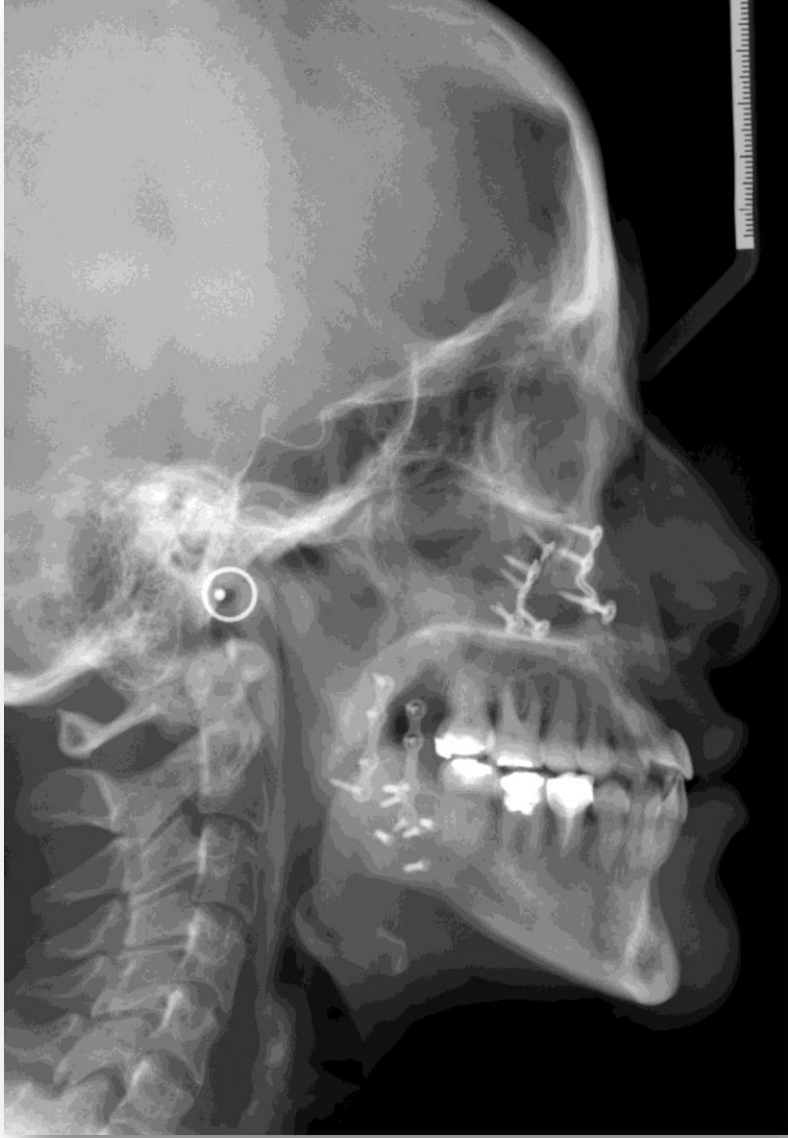






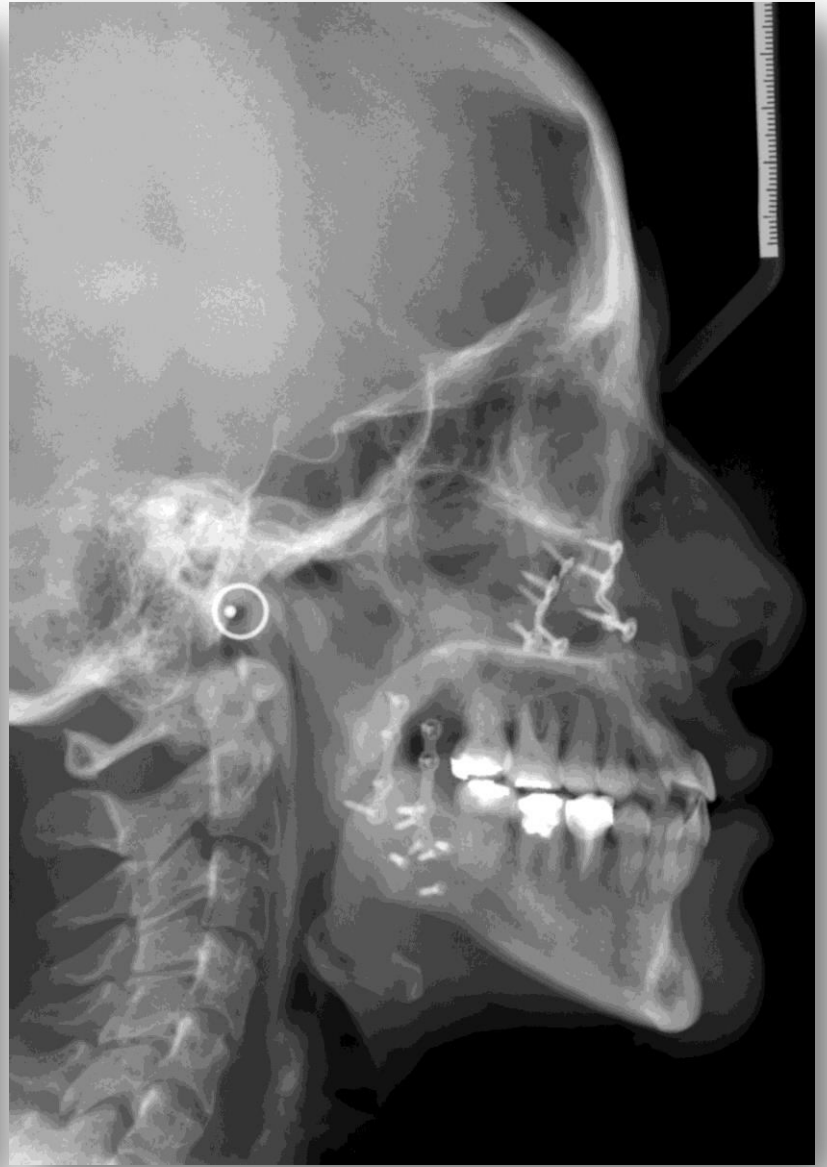
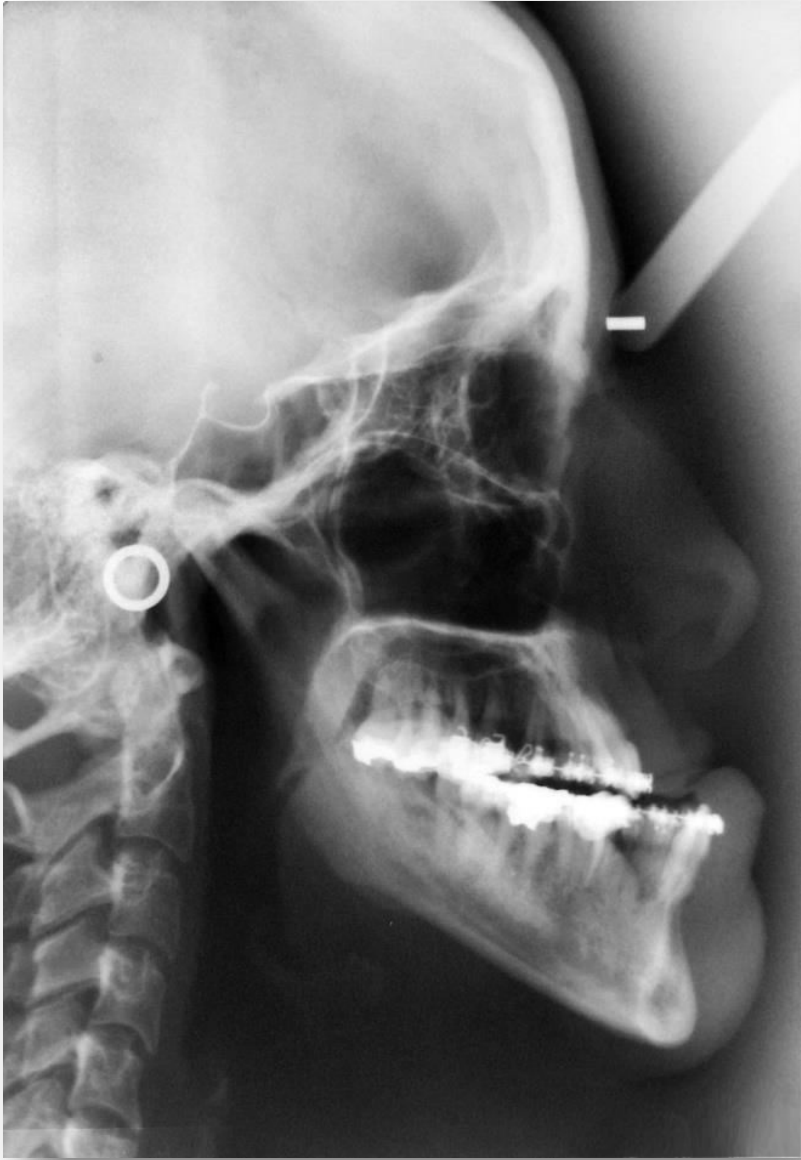














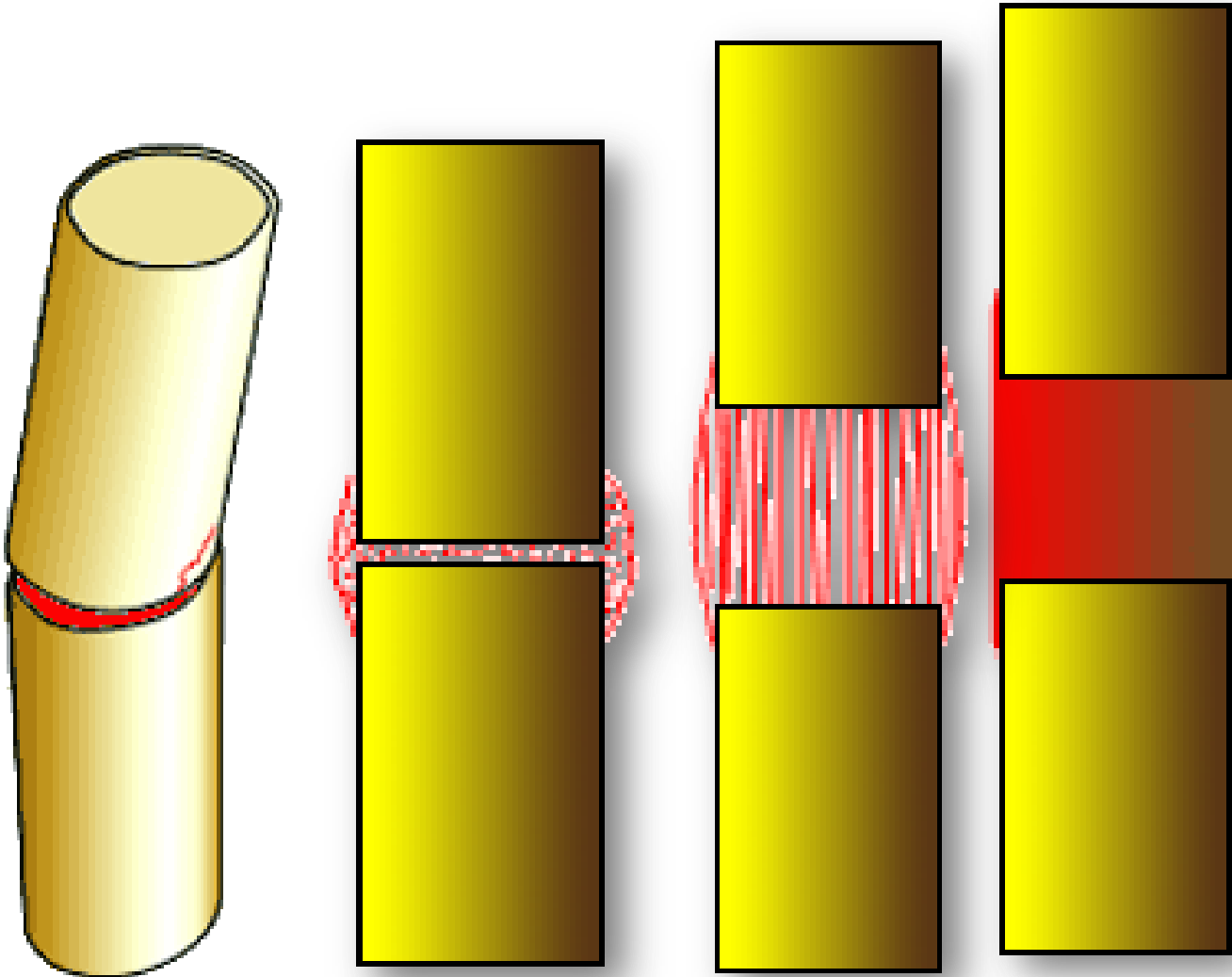
DISTRACTION OSTEOGENESIS

Prof. Dr. Hatice Gökalp

A.Ü.Diş Hekimliği Fakültesi Ortodonti Anabilim Dalı



Distraksiyon Osteogenezis



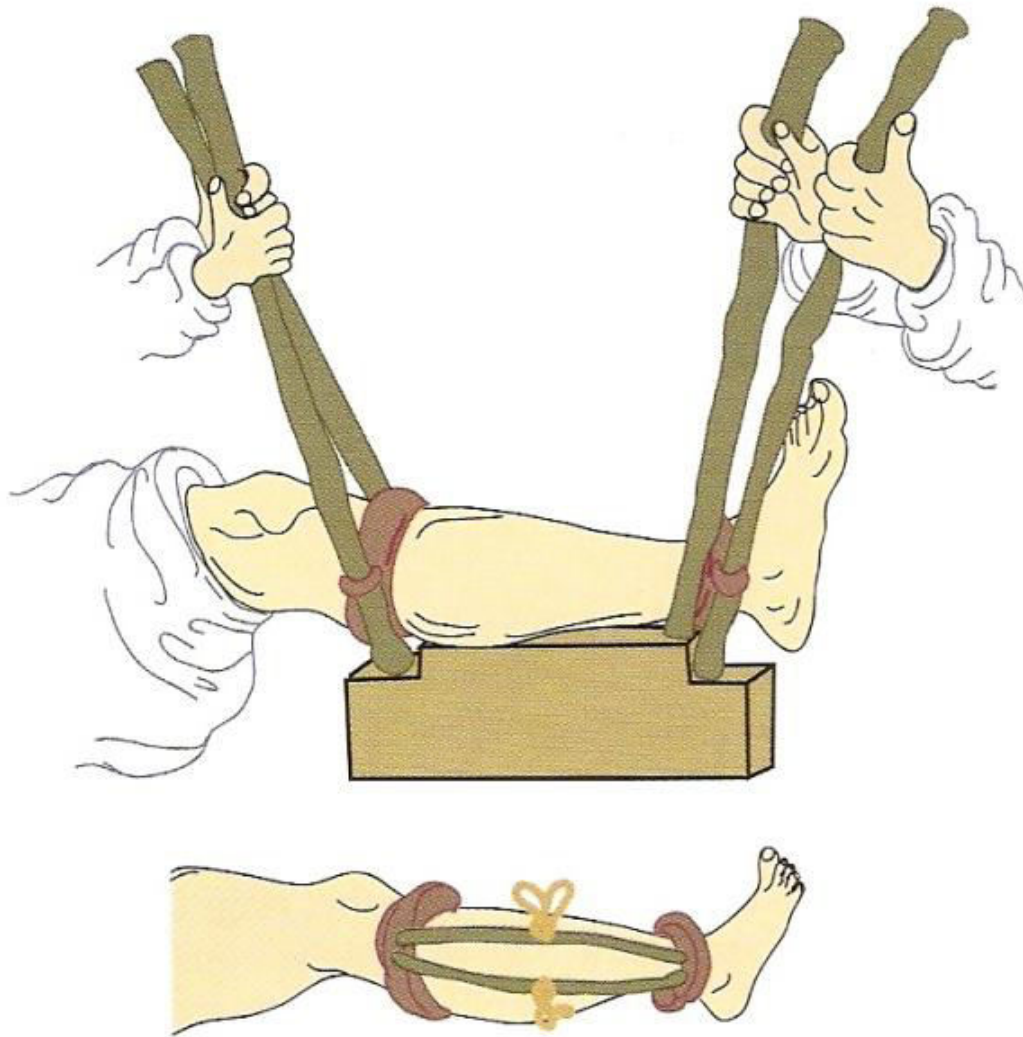
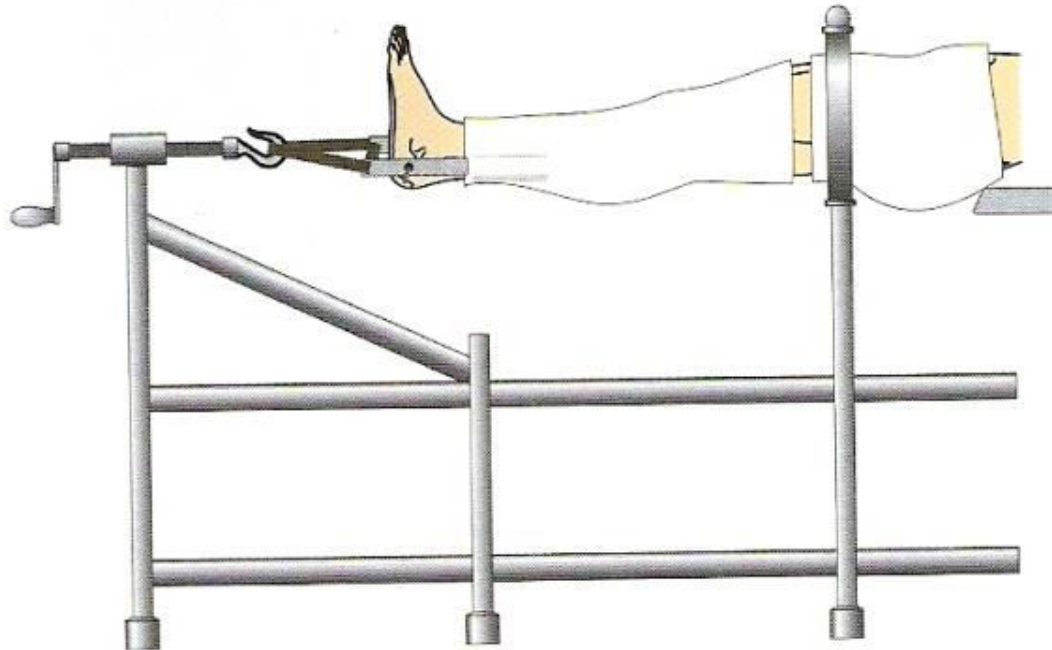
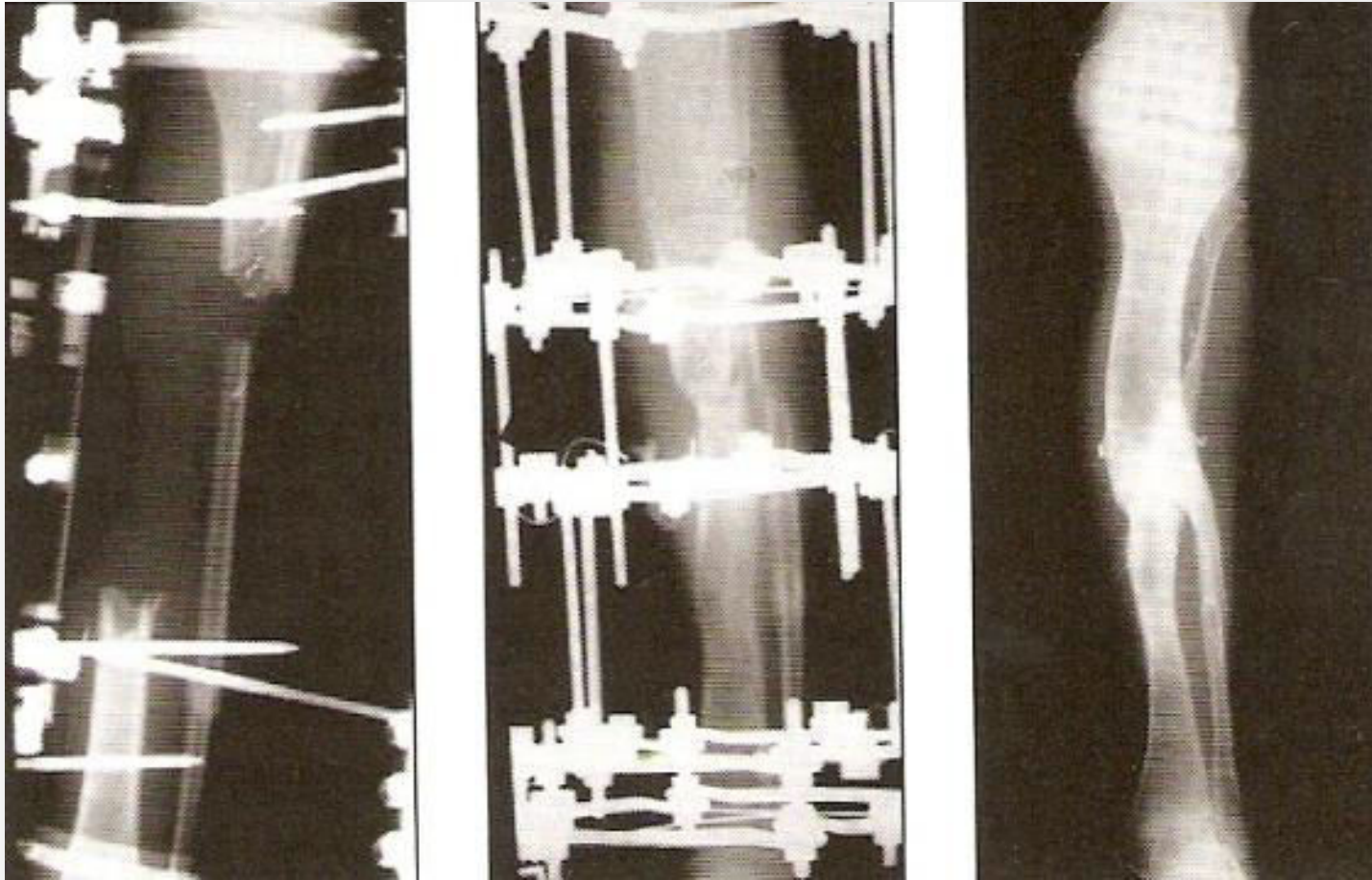


Fig. I-1 Fracture reduction technique and external fixation device of Hippocrates.

Codivilla Device (20 yy)



Gavril Ilizarov, 1951



Gavril Ilizarov, 1951

- Supperiosteal osteotomy-Kortikotomi
- 5-7 gün latent periyod
- Distraksiyon-4X1 bir defada 0.25 mm günde 1 mm



İlizarov Effect

- Büyüyen ve yeni oluşan dokularda stres-gerilim etkisi
- Kemik ve eklemlerin şekillenmesinde yüklenme ve kanlanmanın etkisi



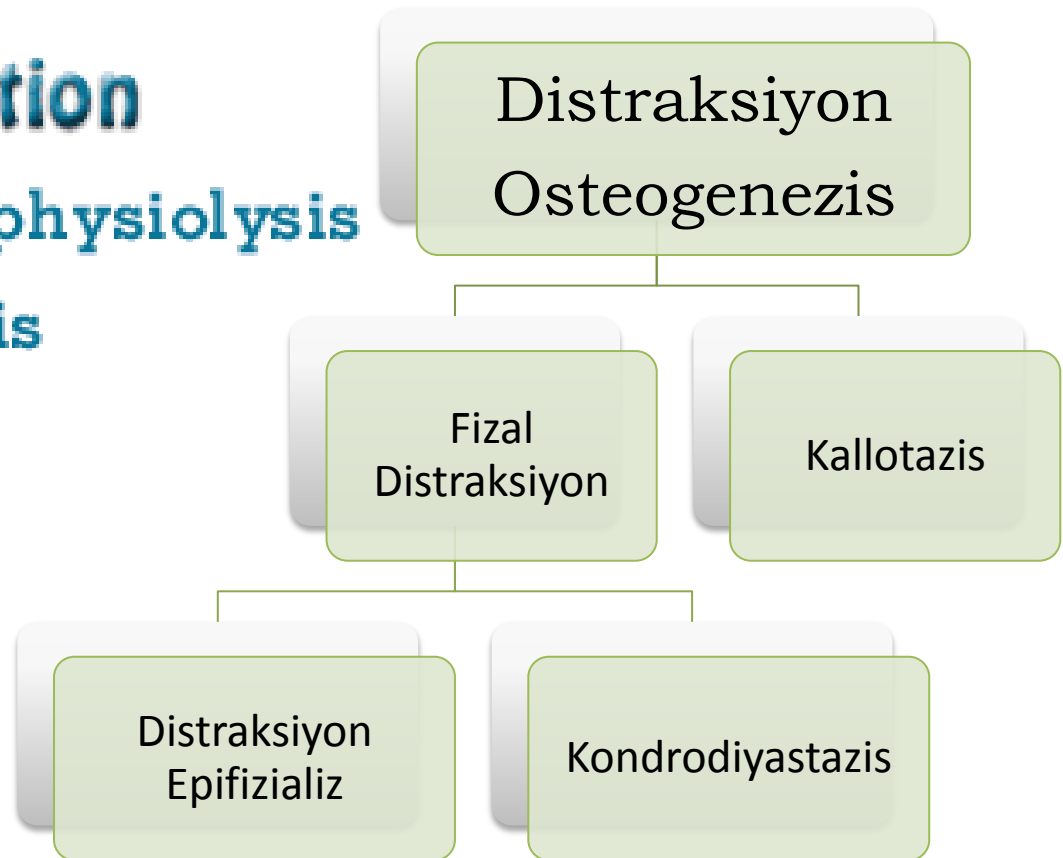
DISTRACTION OSTEOGENESIS

Callotasis

Physeal Distraction

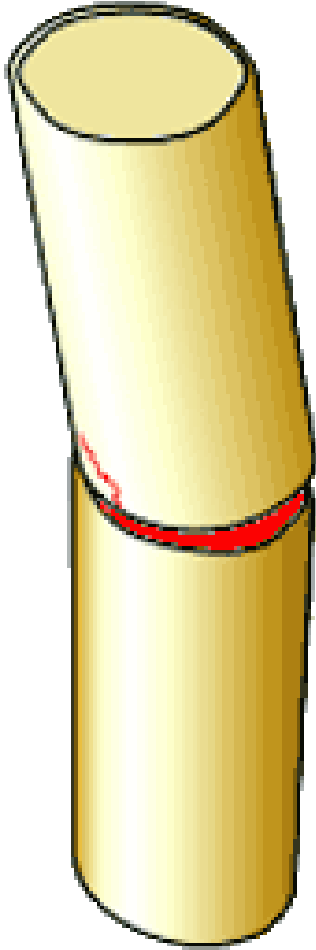
Distraction Epiphysiolysis

Chondrodiatasis



Callotasis

- Osteotomi veya fraktür ile kemik segmentinin bütünlüğünün bozulduğu yerde şekillenen onarıcı kallusun tedrici olarak esnetilmesidir.



Osteotomy

Callotasis



Callum

Latince-
Kemik segmenti
arasındaki skar

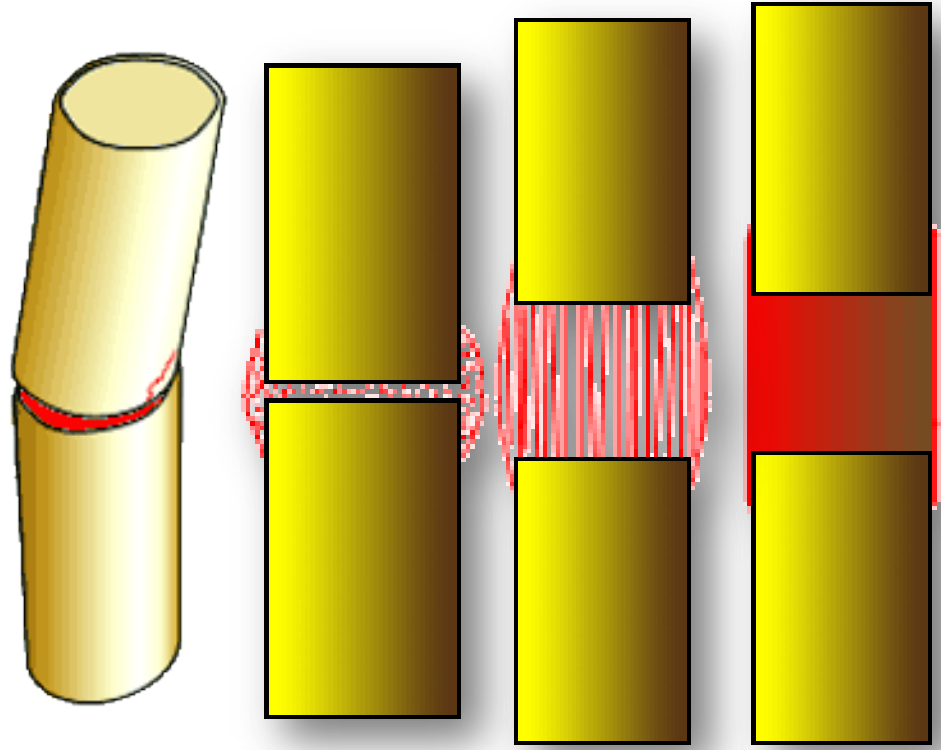
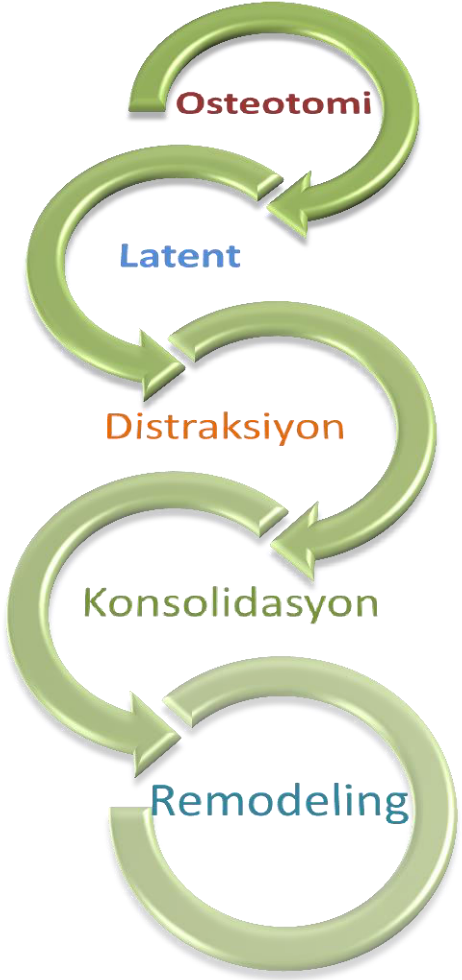


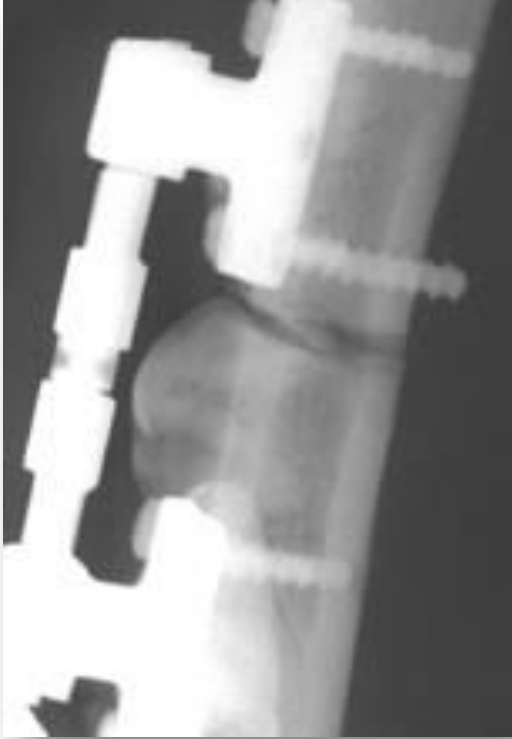
taois

Antik Yunan-
germe

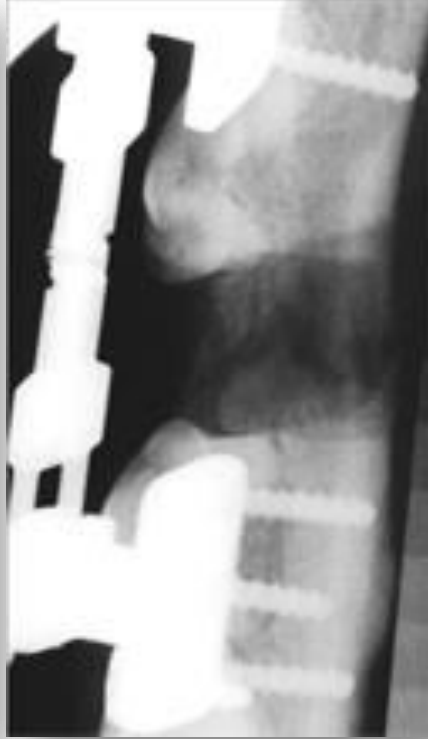
Callotasis 5 periyod

Osteotomy





A



B



C

Distraksiyon osteogenezis ile bilateral olarak mandibulası 10 mm uzatılan bir köpeğe ait radyografi **A: latent periyod**, **B: distraksiyon periyod**, ve **C: konsolidasyon periyod** .

DISTRACTION APPLIANCES

Extraoral

- Unidirectional
- Bidirectional
- Multidirectional

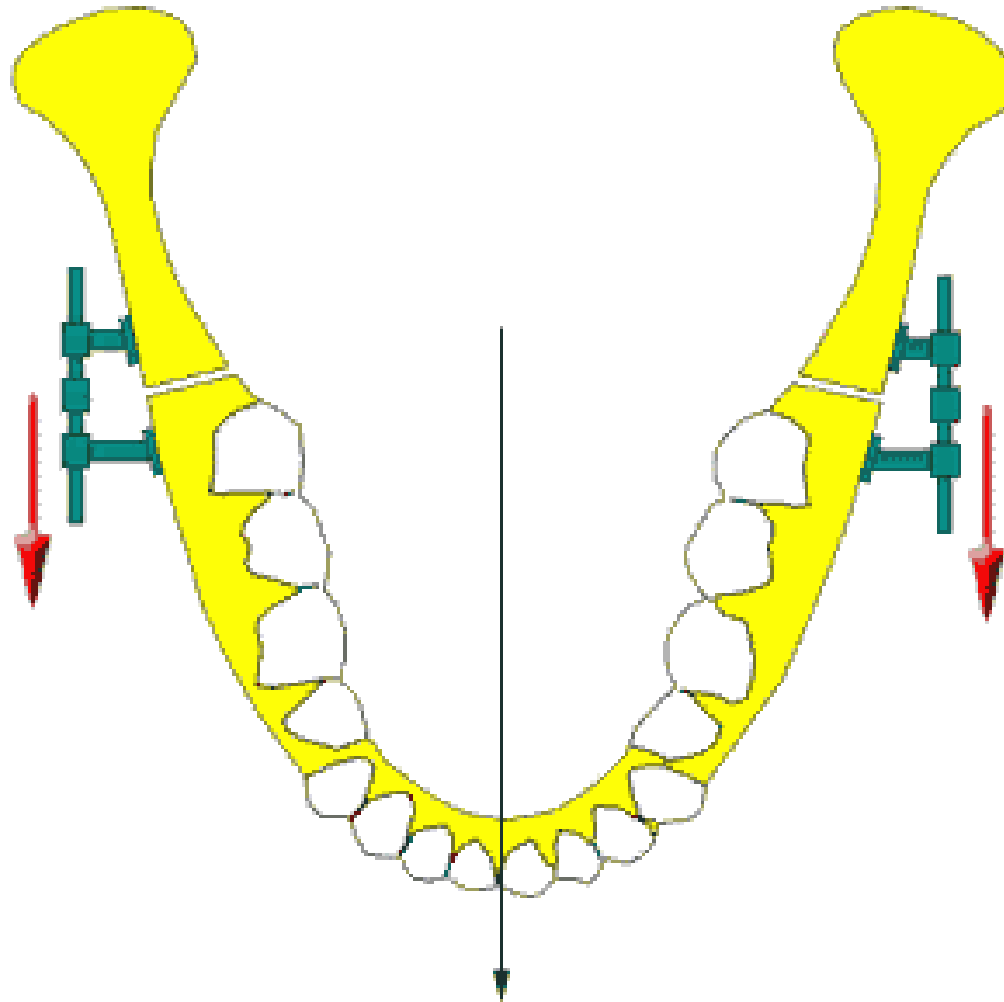
Intraoral

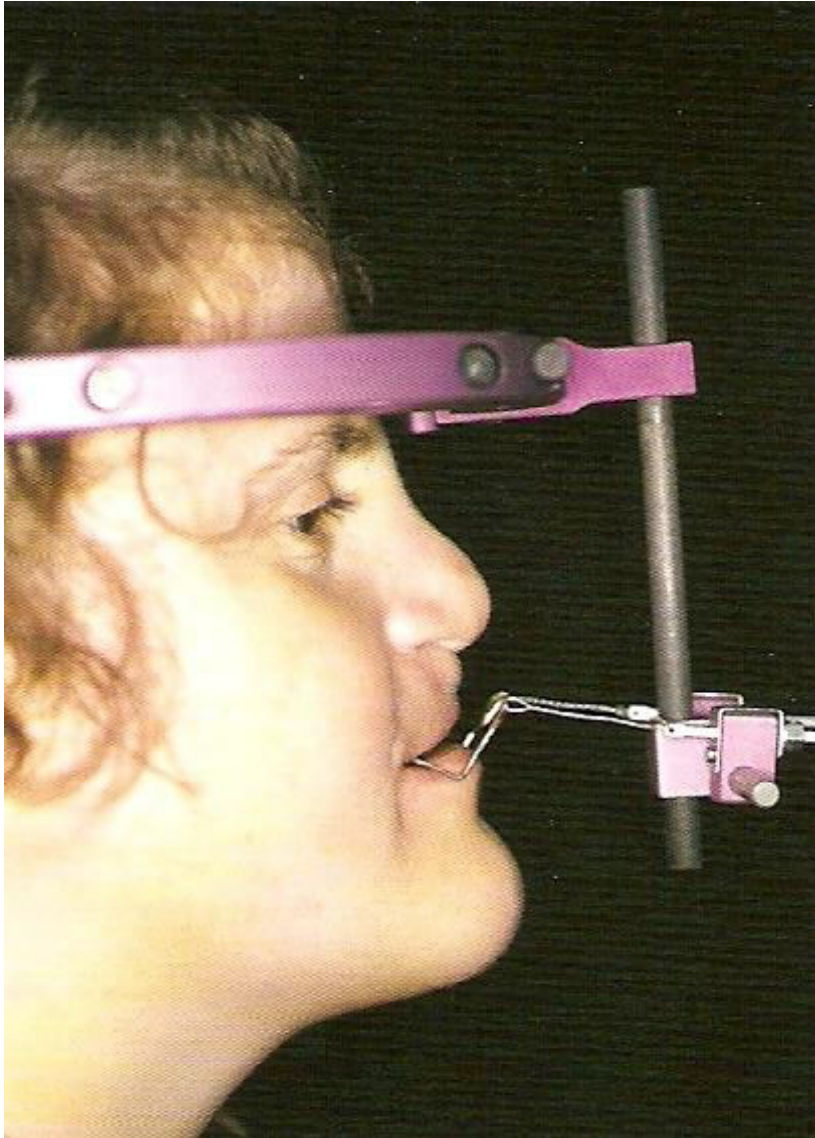
- Tooth-borne
- Bone-borne
- Hybrid

McCarthy, 1994



Unidirectional Distraction





EXTRAORAL DISTRACTION APPLIANCES

Maxillary Distraction
Osteogenesis

Guerrero, 1987

