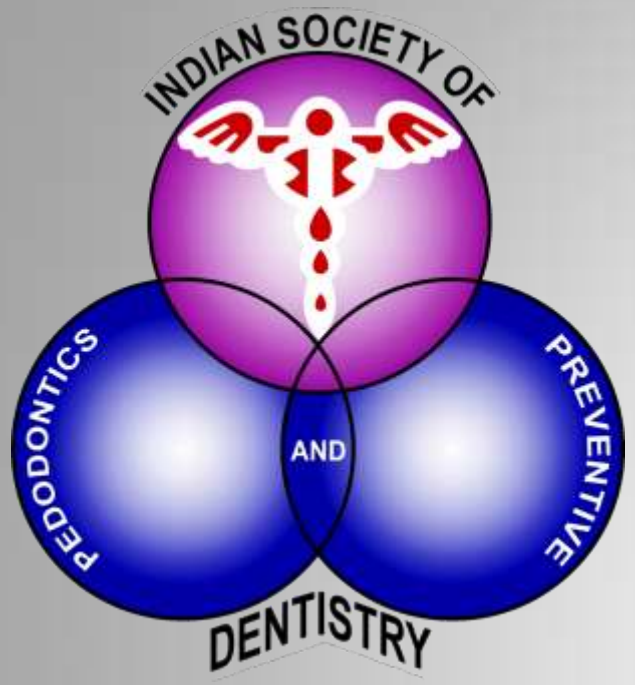


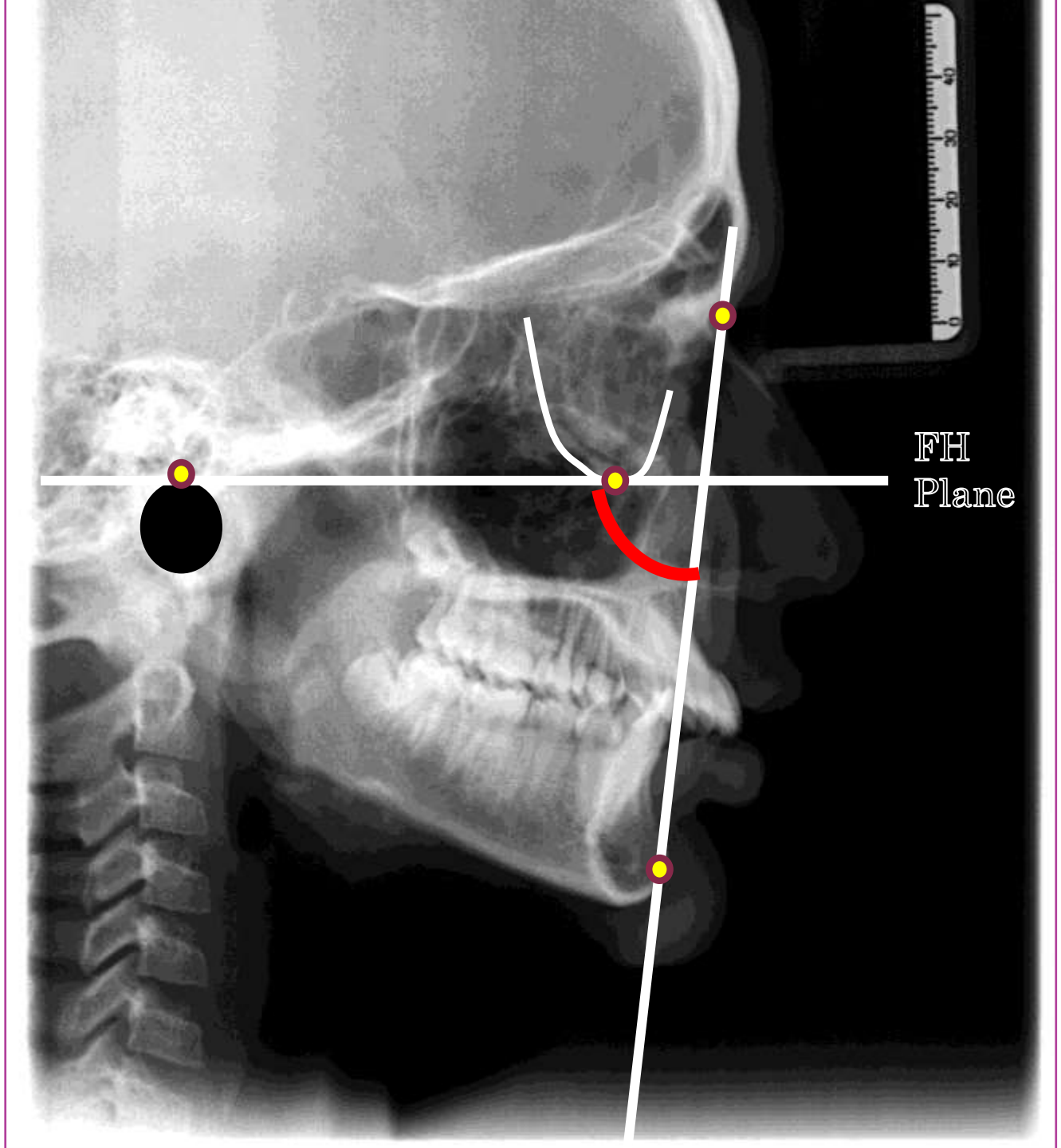
CEPHALOMETRICS

Dr Binu Abraham

SKELETAL AND DENTAL DIFFERENTIATION

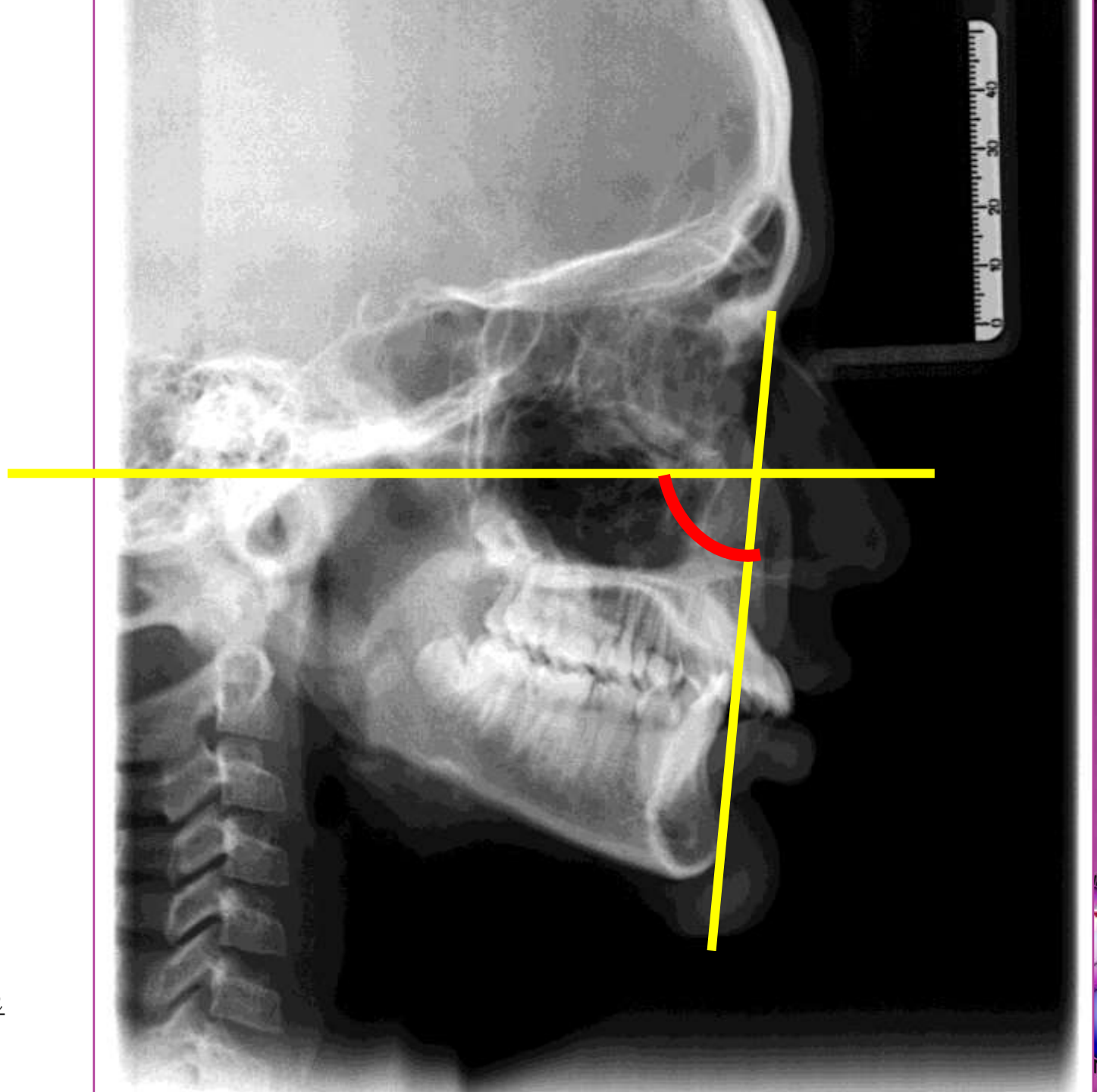
FACIAL ANGLE

Normal
87.5

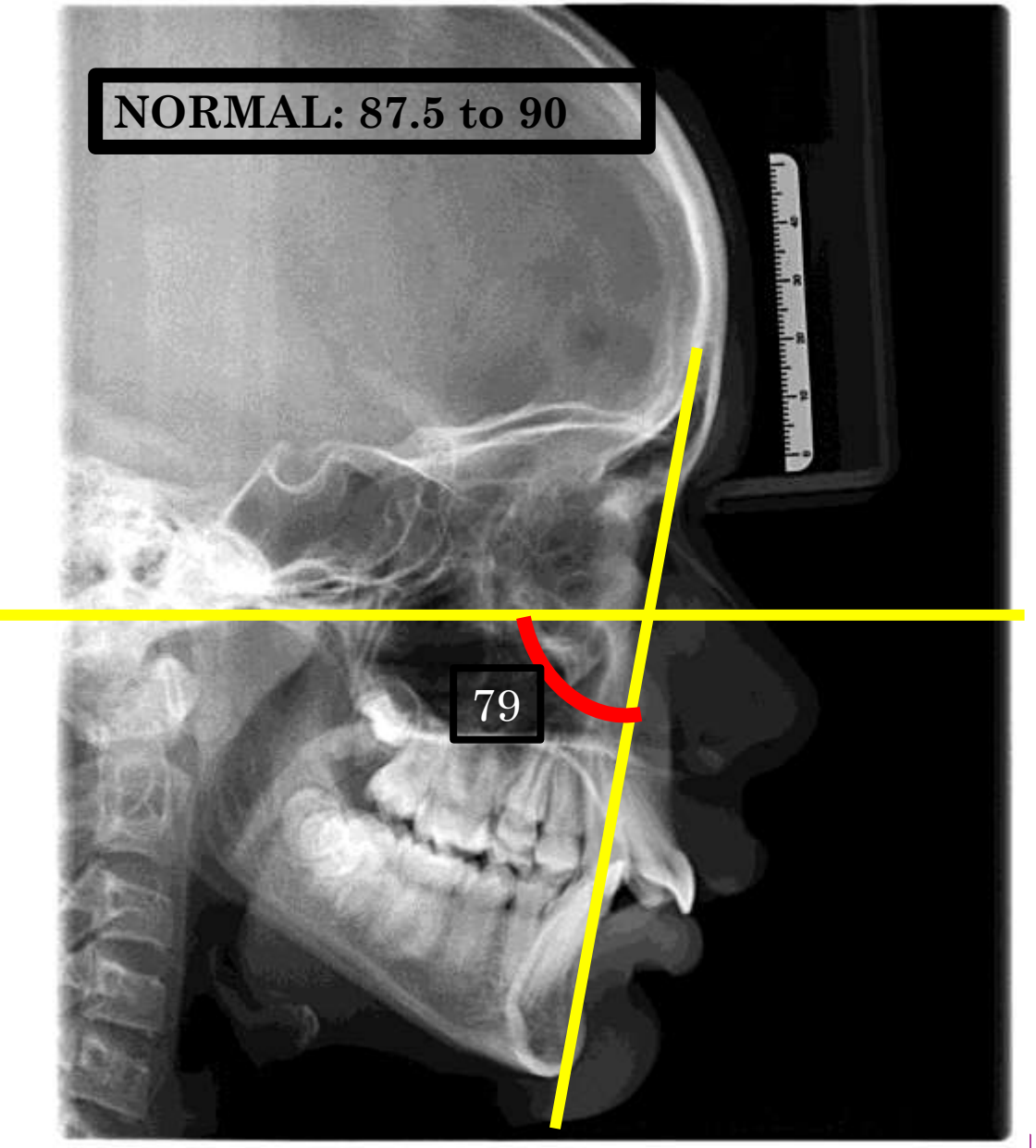


FACIAL ANGLE

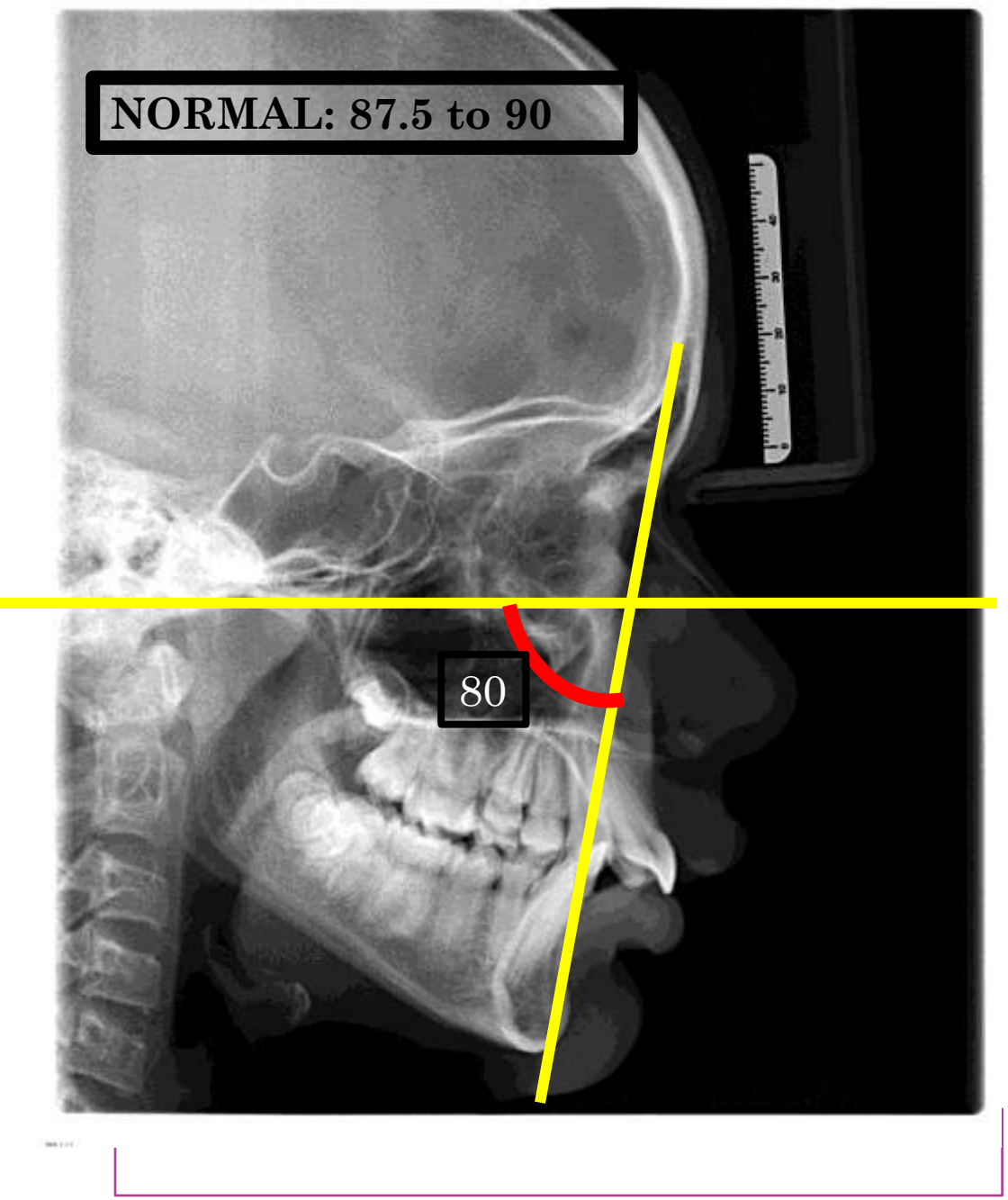
NORMAL: 87.5 to 90

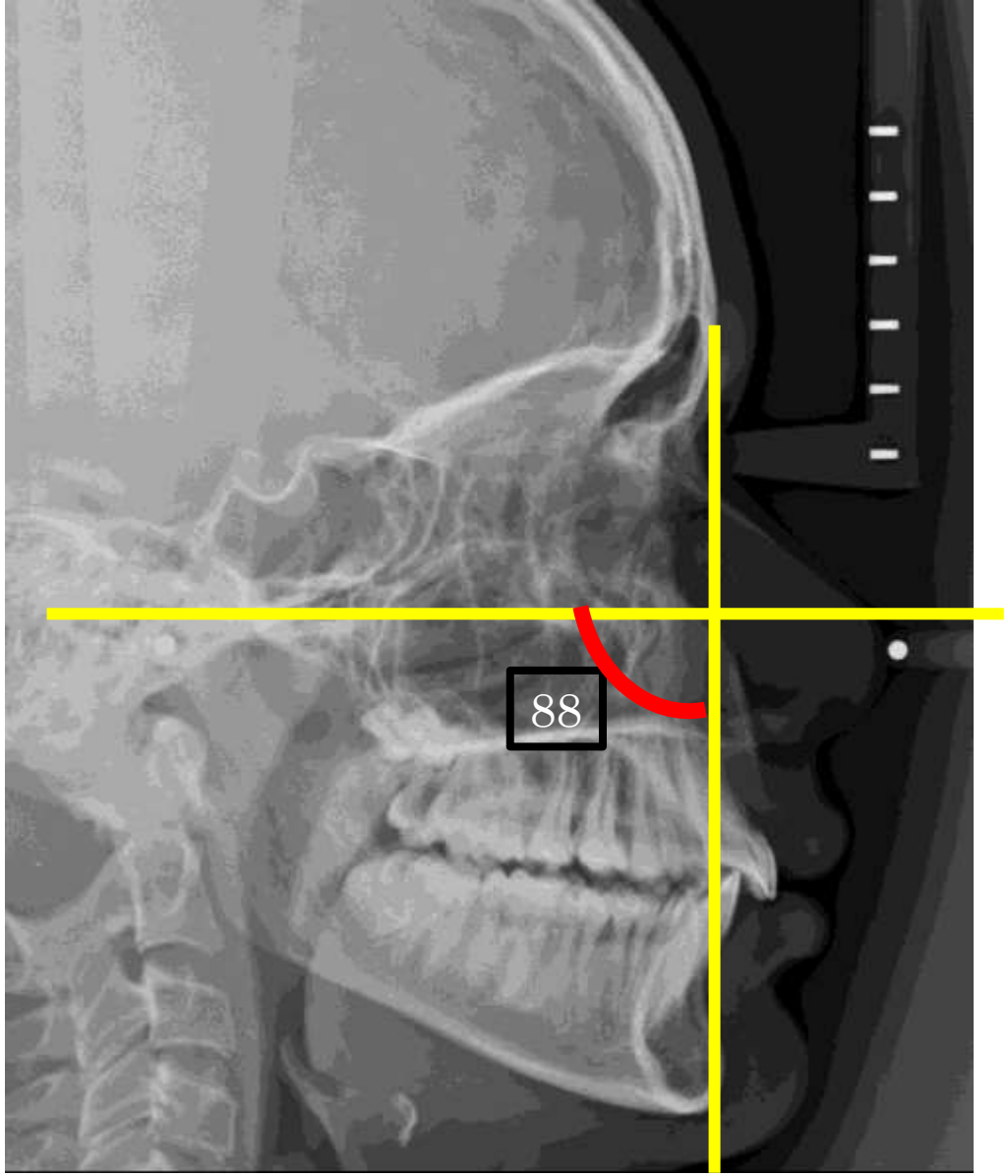


- Downs Analysis: **William Downs** **(1948)** *Variations in facial relationships: their significance in treatment and prognosis. Am J Orthod. 1948;34(10):812-40.*



Twin Block


NORMAL: 87.5 to 90
80

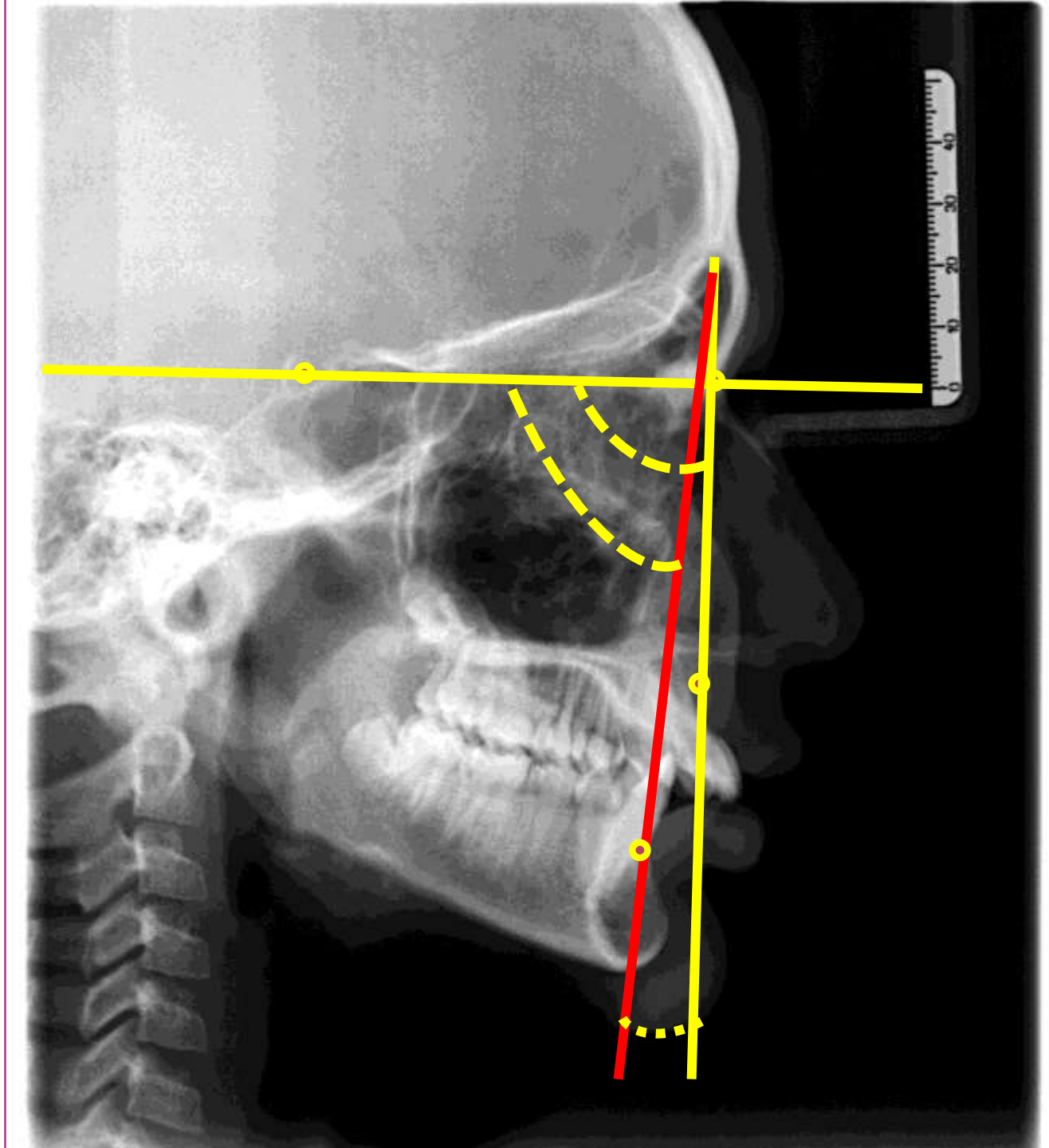

88

LIMITATION OF FACIAL ANGLE

- Only mandible is considered
- Reliability of FH plane

STEINER ANALYSIS

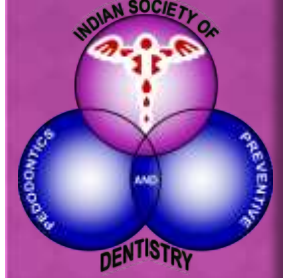
Steiner (1953) *Cephalometrics clinical practice. Angle Orthod. 1959;29(1):8-29.*

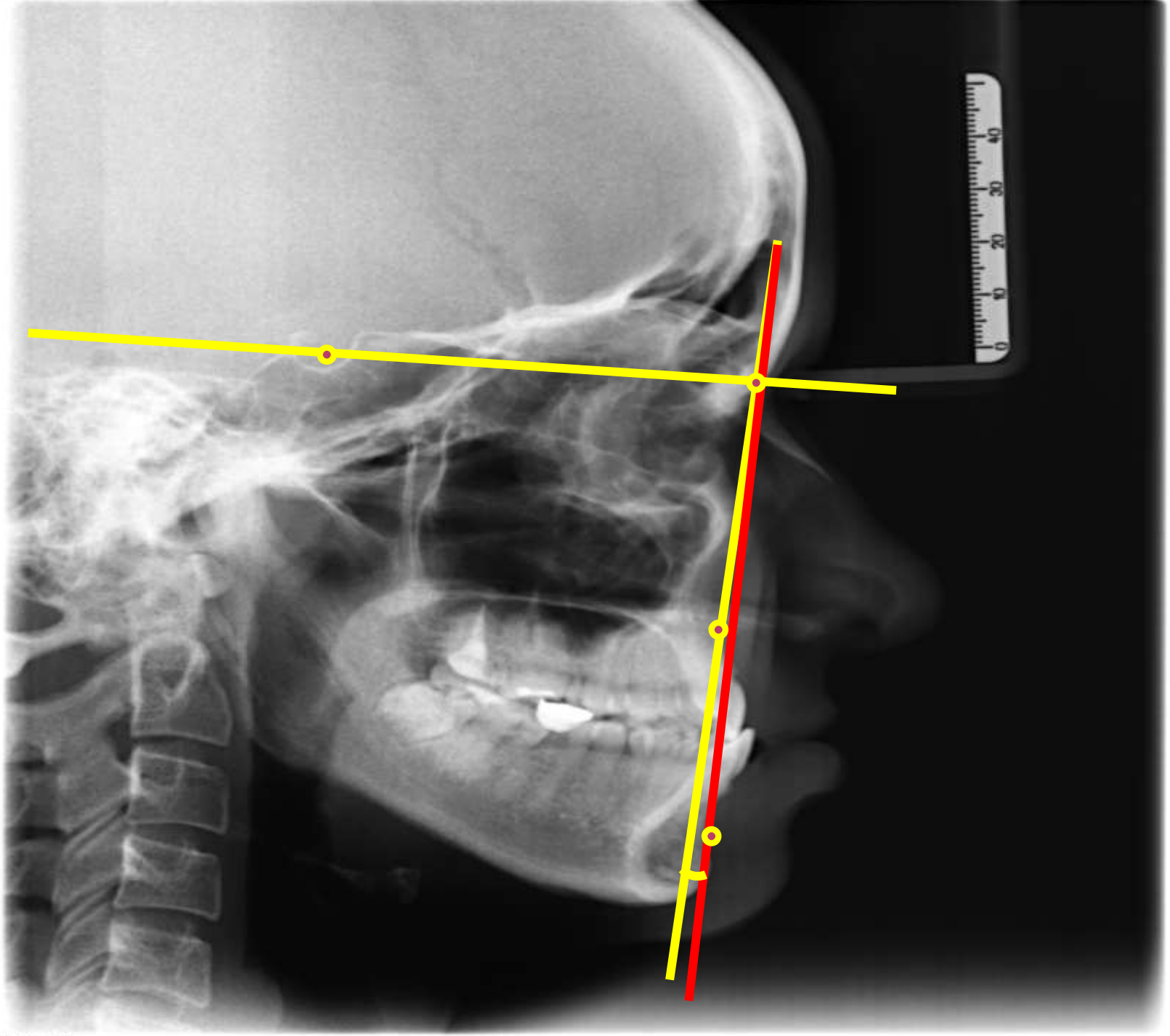


	NORMAL
SNA : 86	**SNA : 82**
SNB: 76	**SNB: 80**
ANB: 10	**ANB: 2**

TWB with HG

CLASS 3

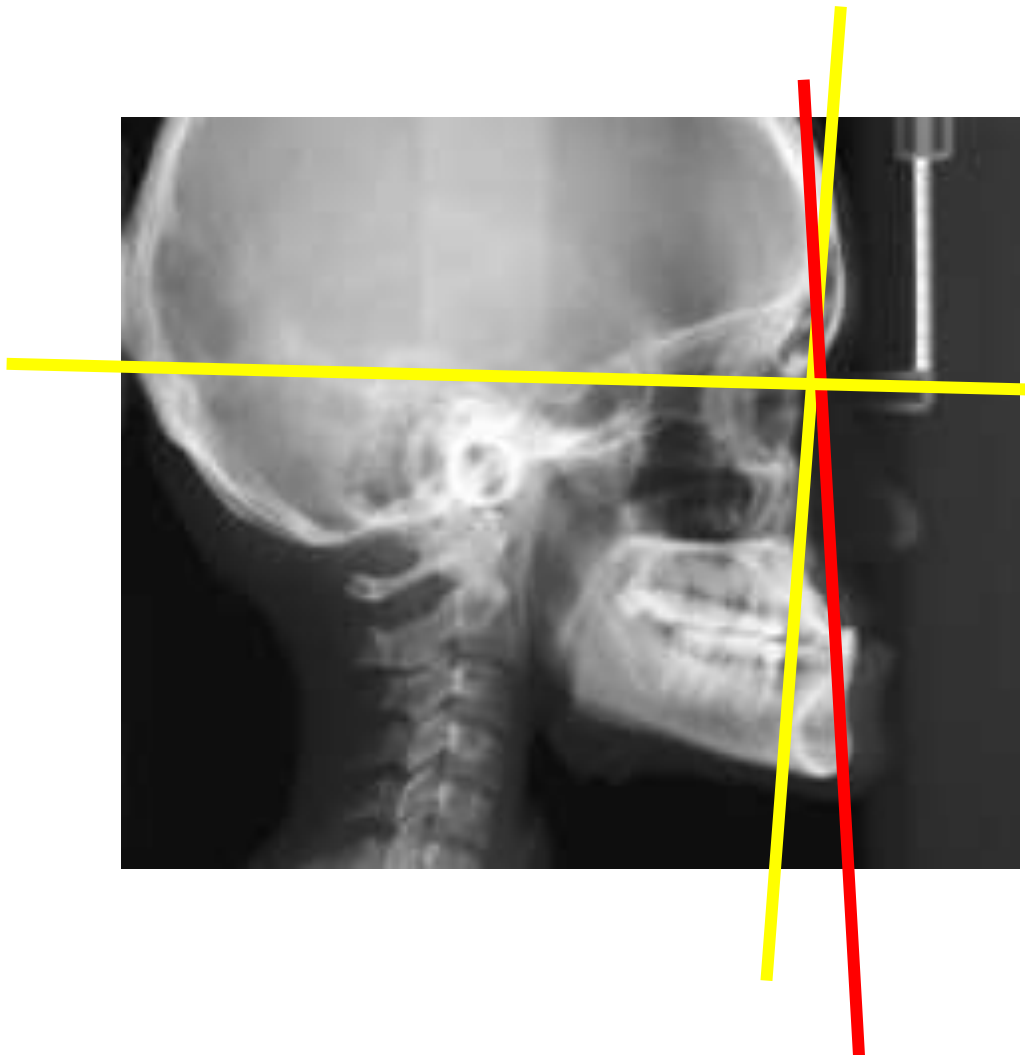




ANB: -3

NORMAL

ANB: 2



SNA : 73

SNB: 80

ANB: -7

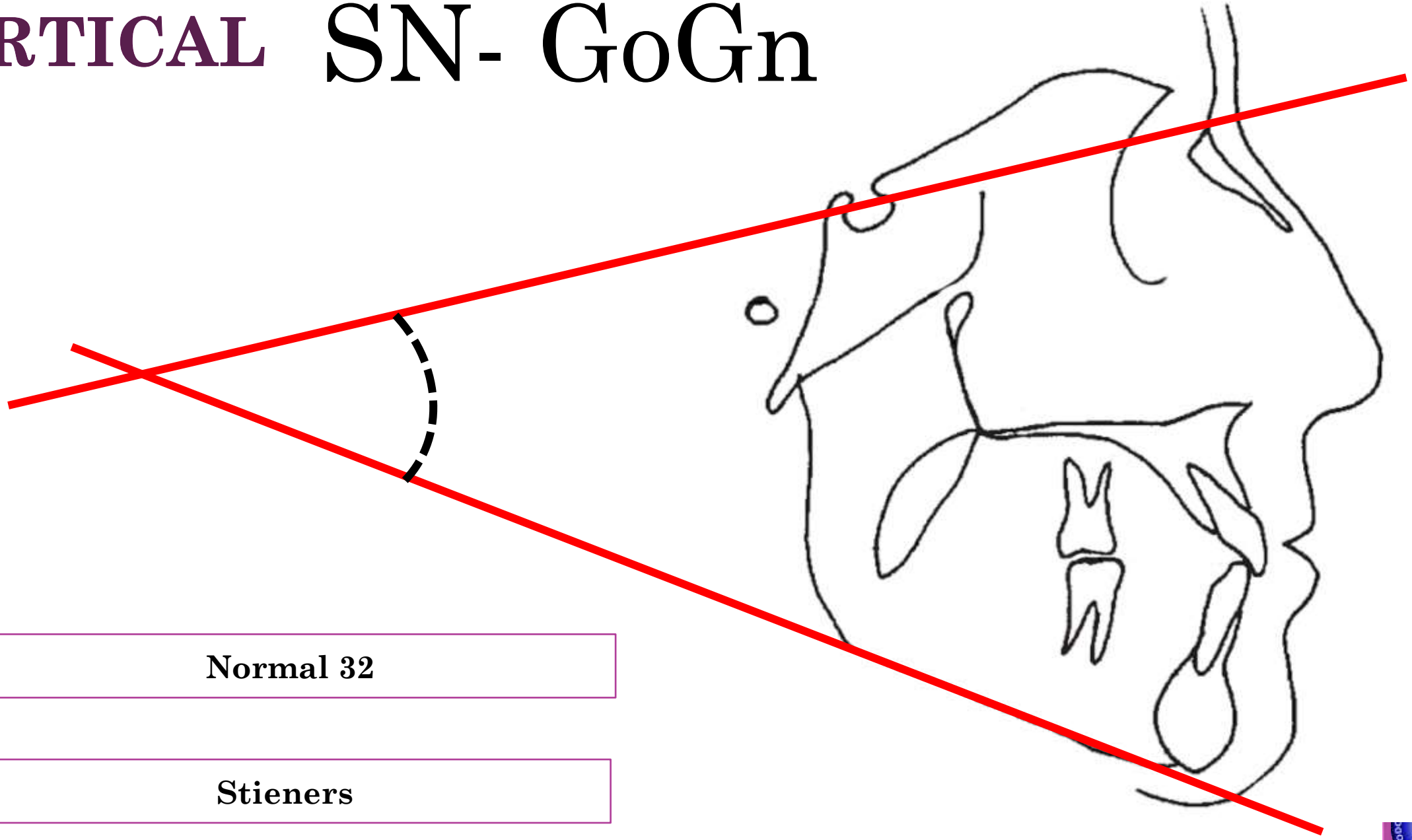
NORMAL

SNA : 82

SNB: 80

ANB: 2

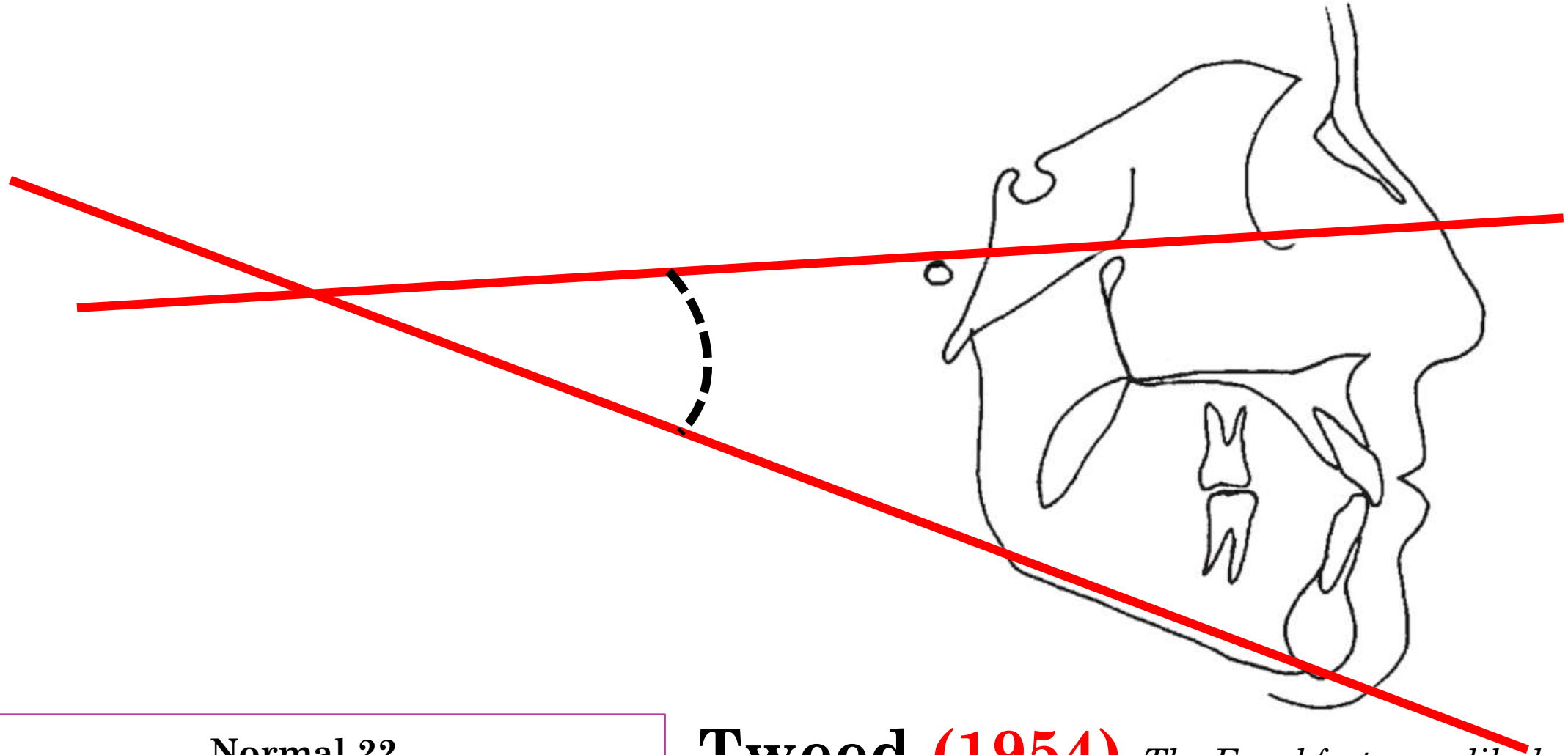
VERTICAL SN- GoGn



Normal 32

Stieners

VERTICAL FMA

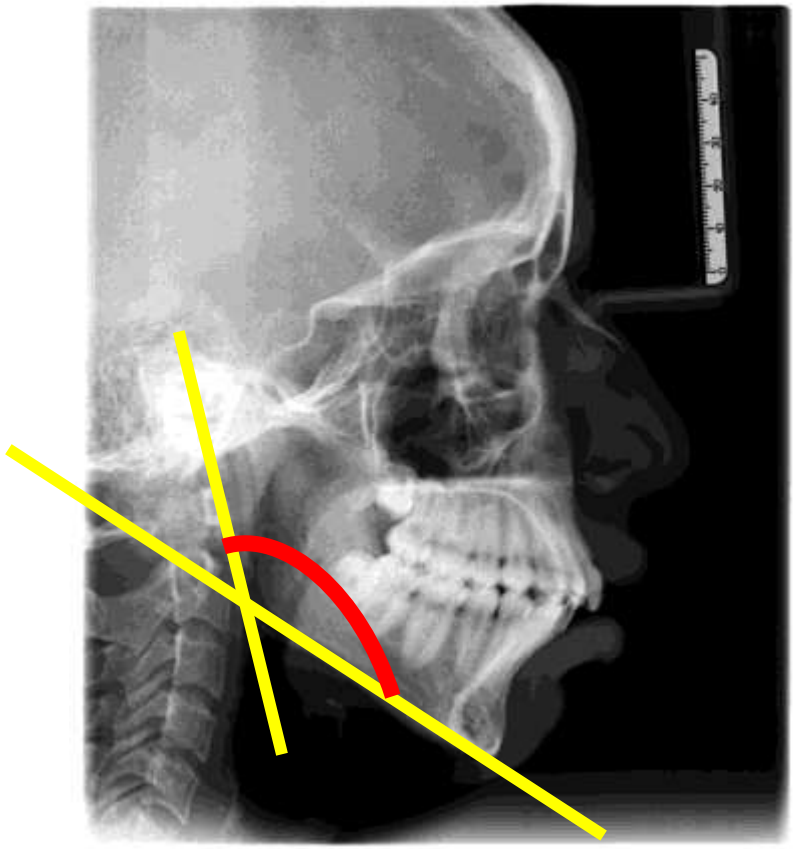


Normal 22
Downs Analysis

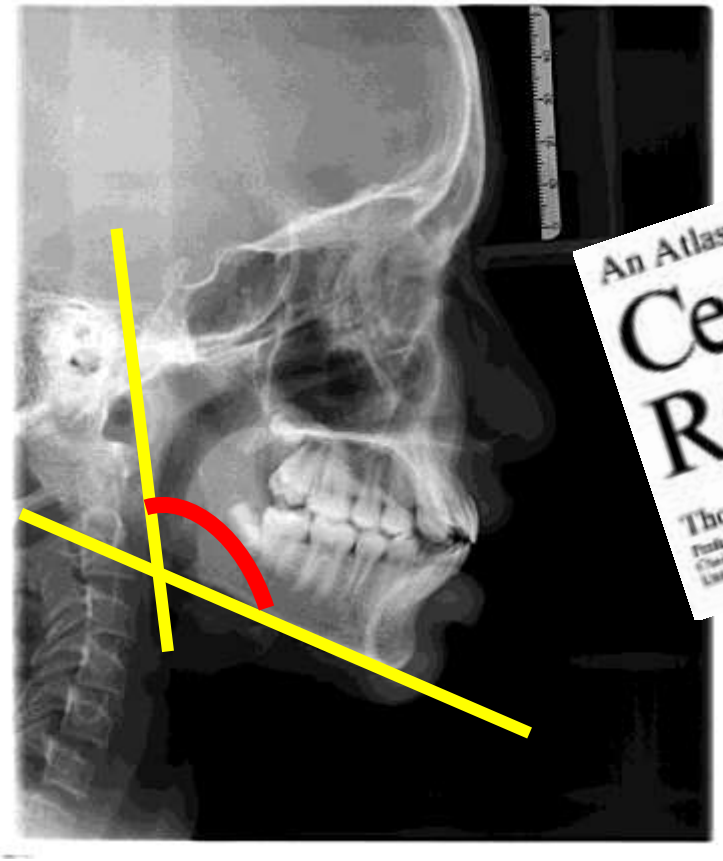
Tweed (1954) *The Frankfort-mandibular plane angle in orthodontic diagnosis, classification, treatment planning, and prognosis. Am J Orthod Oral Surg. 1946;**32**:175-230*

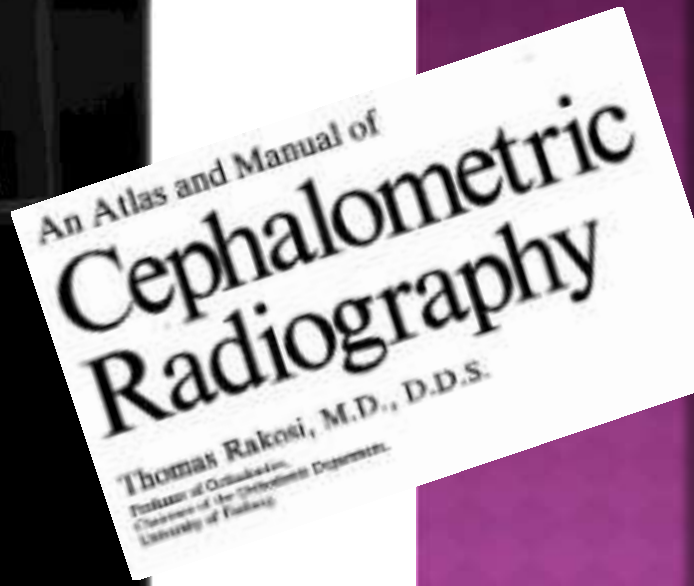
GONIAL ANGLE

NORMAL 128.5



137

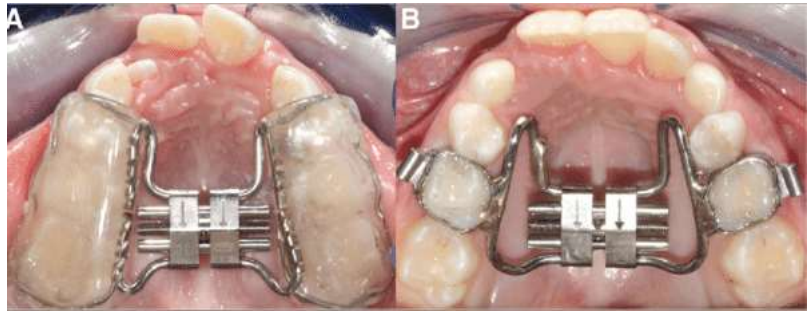


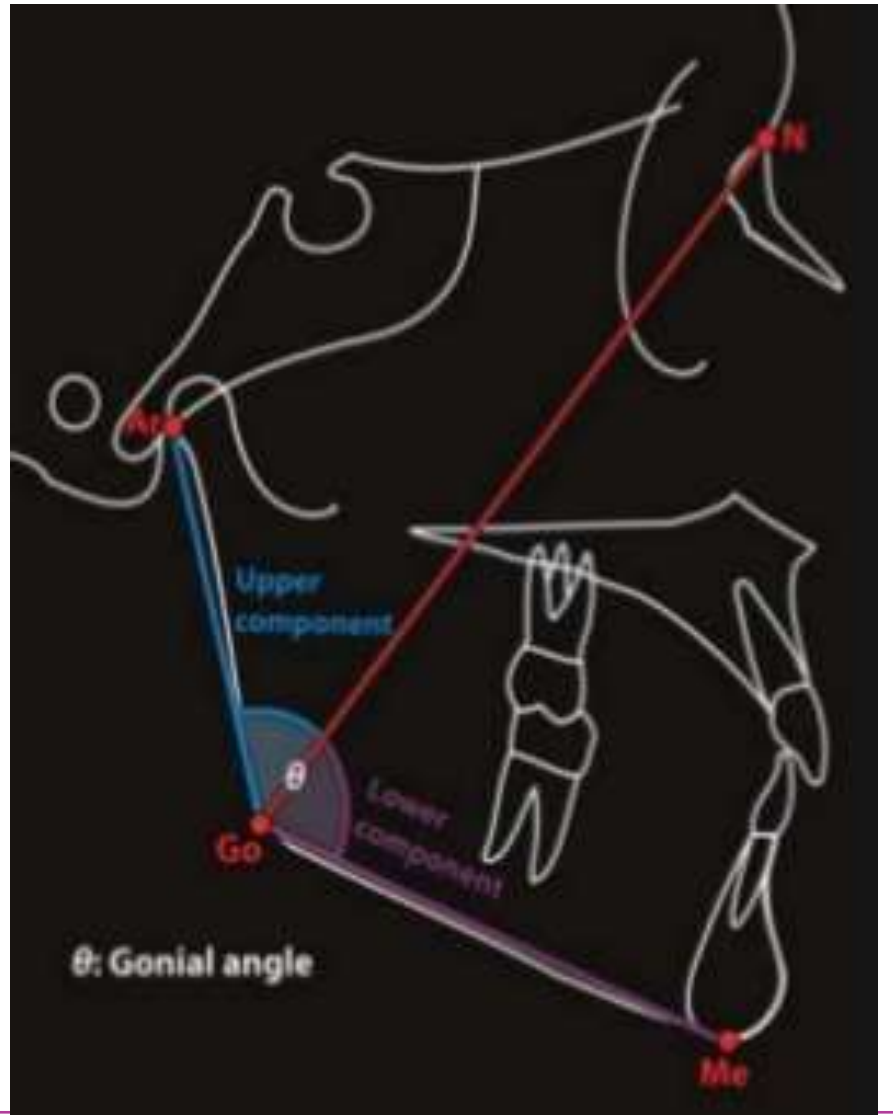


129

Rakosi Analysis

GONIAL ANGLE



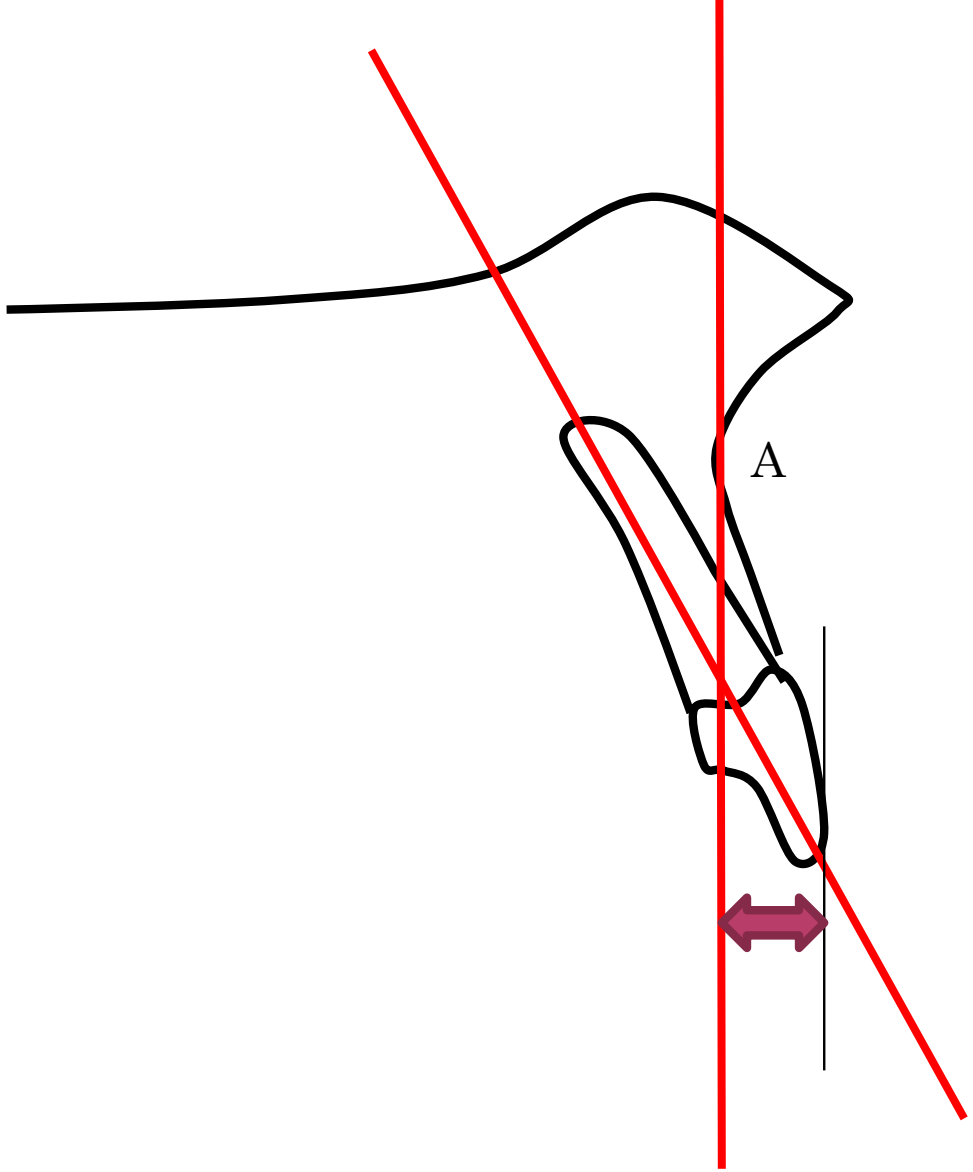


Jarabak

Upper/Lower Gonial Angle

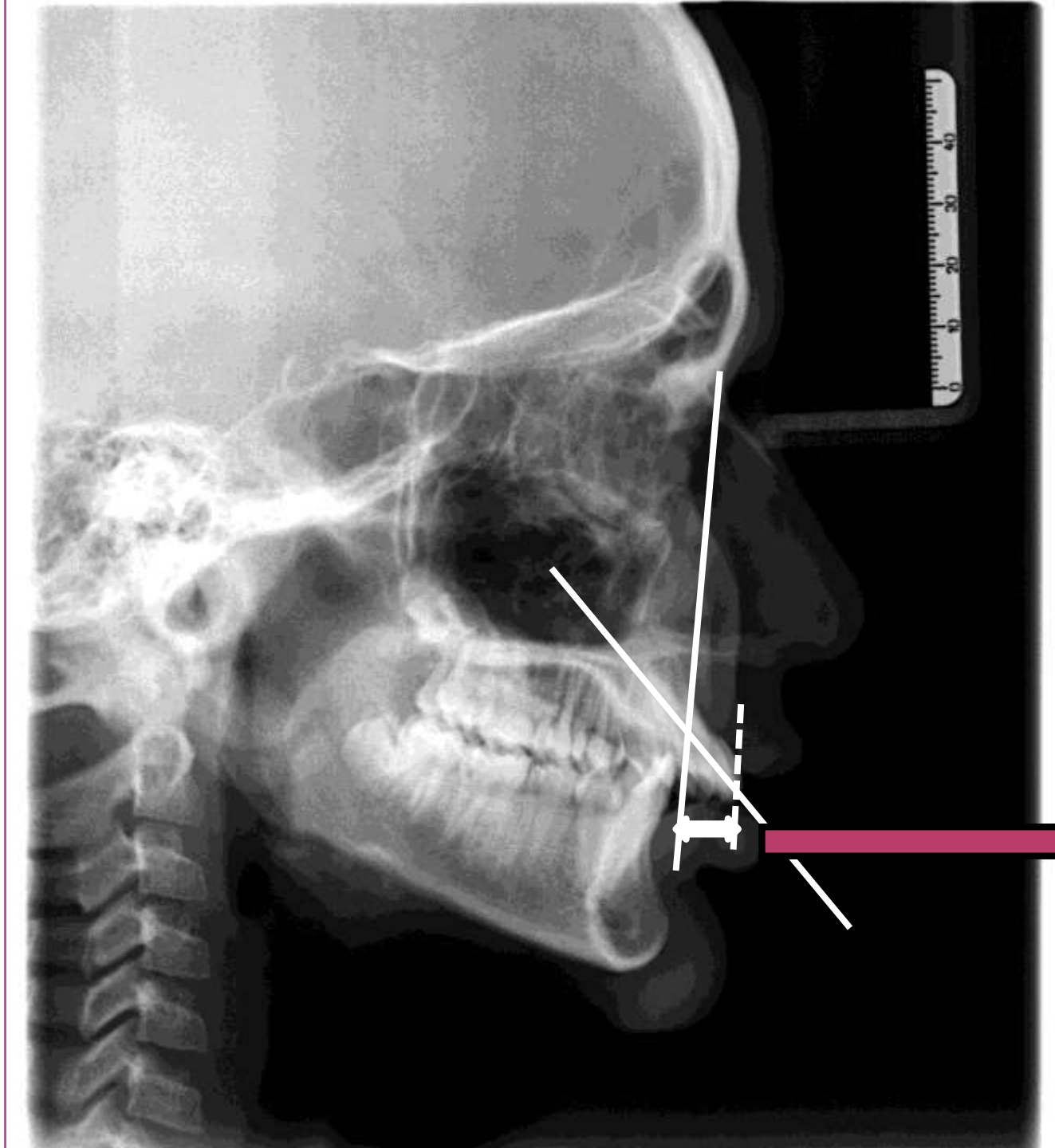
Jarabak JR, Fizzel JA. Technique and treatment with lightwire appliances. 2a ed. St Louis: CV Mosby; 1972.

DENTAL PARAMETERS



Stieners Analysis

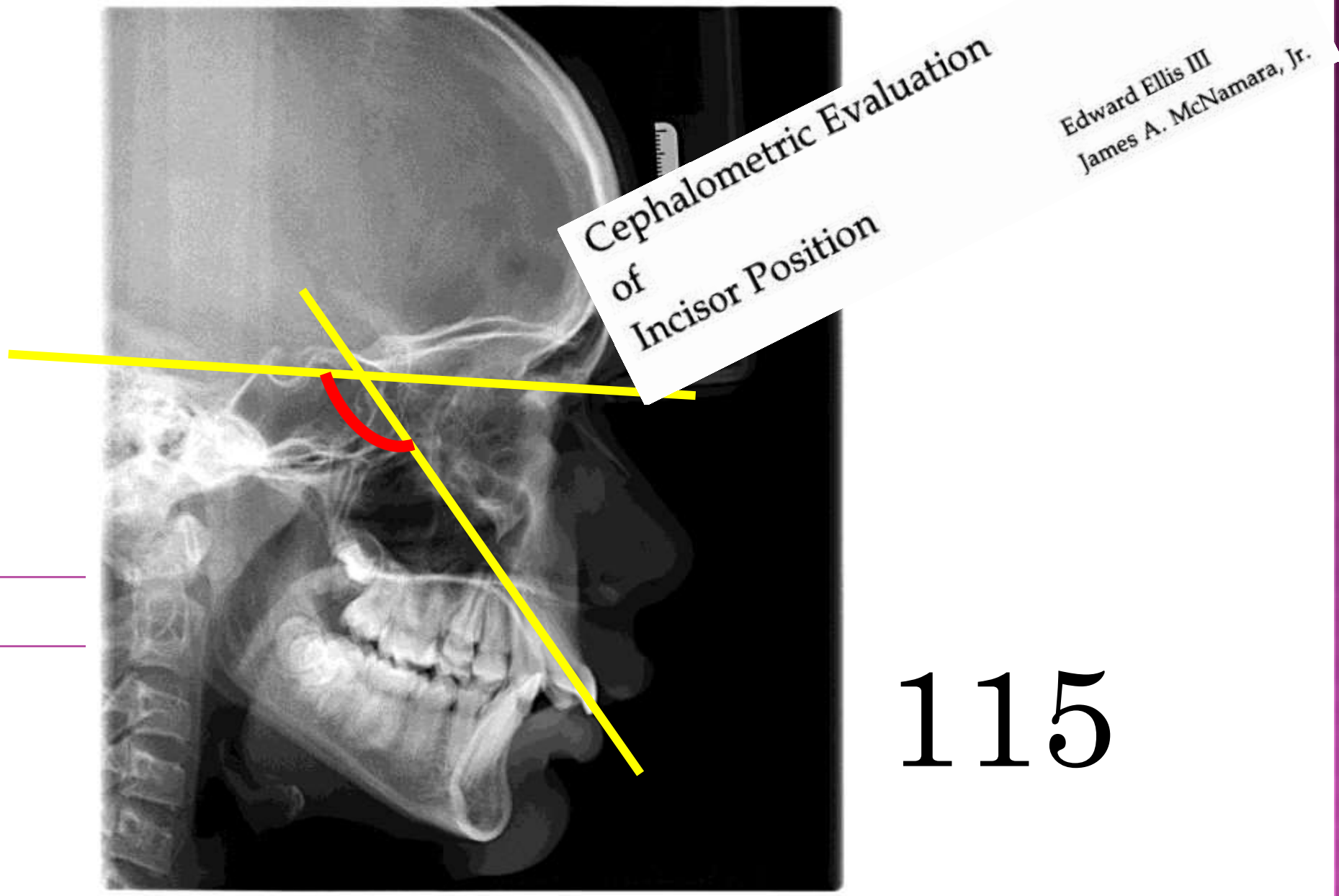
4mm



NORMAL 4mm

8mm

U1 TO SN

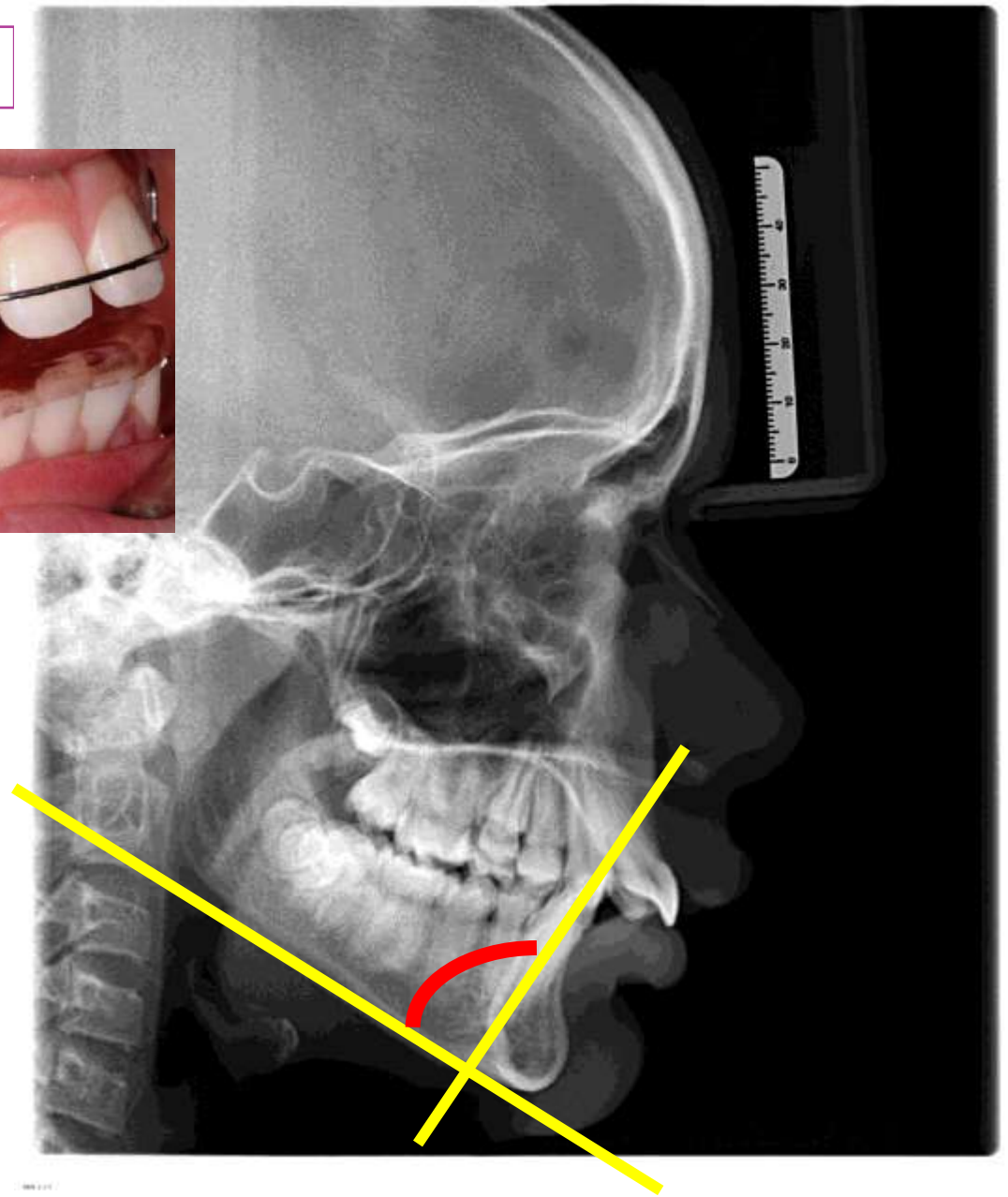


NORMAL: 102

115

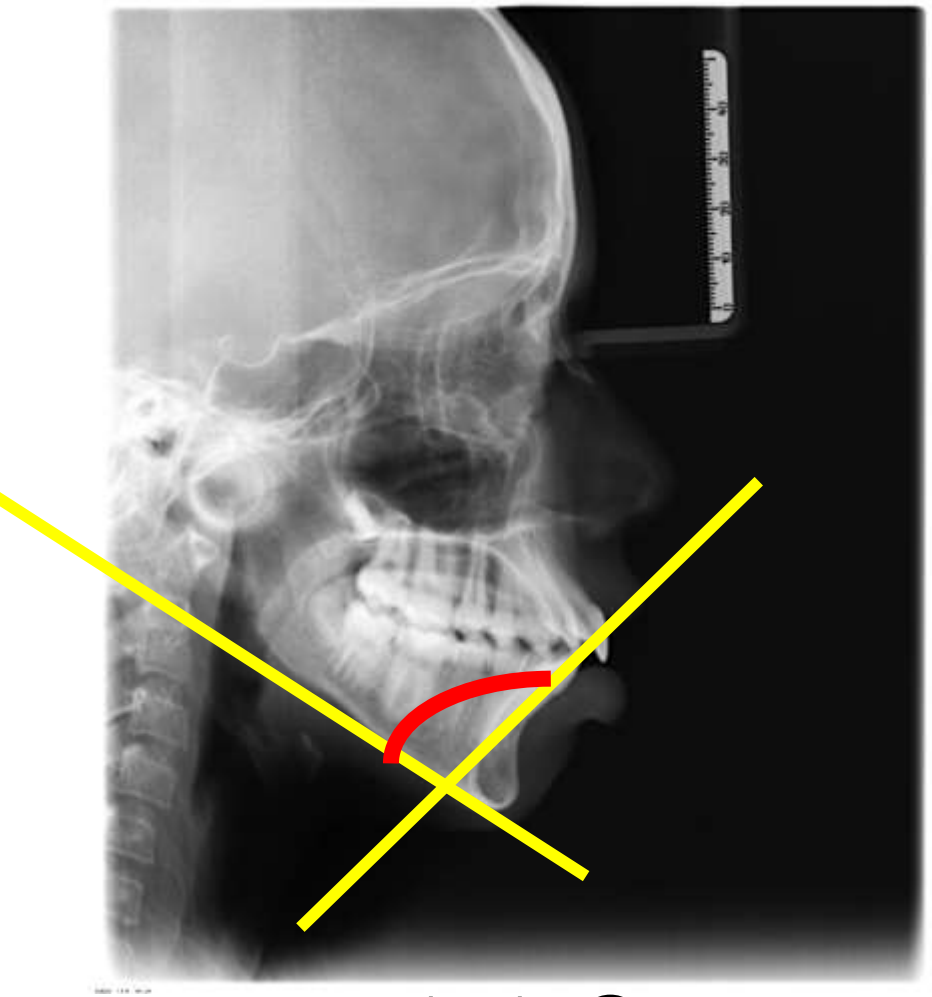
LOWER INCISOR POSITION

NORMAL: 90

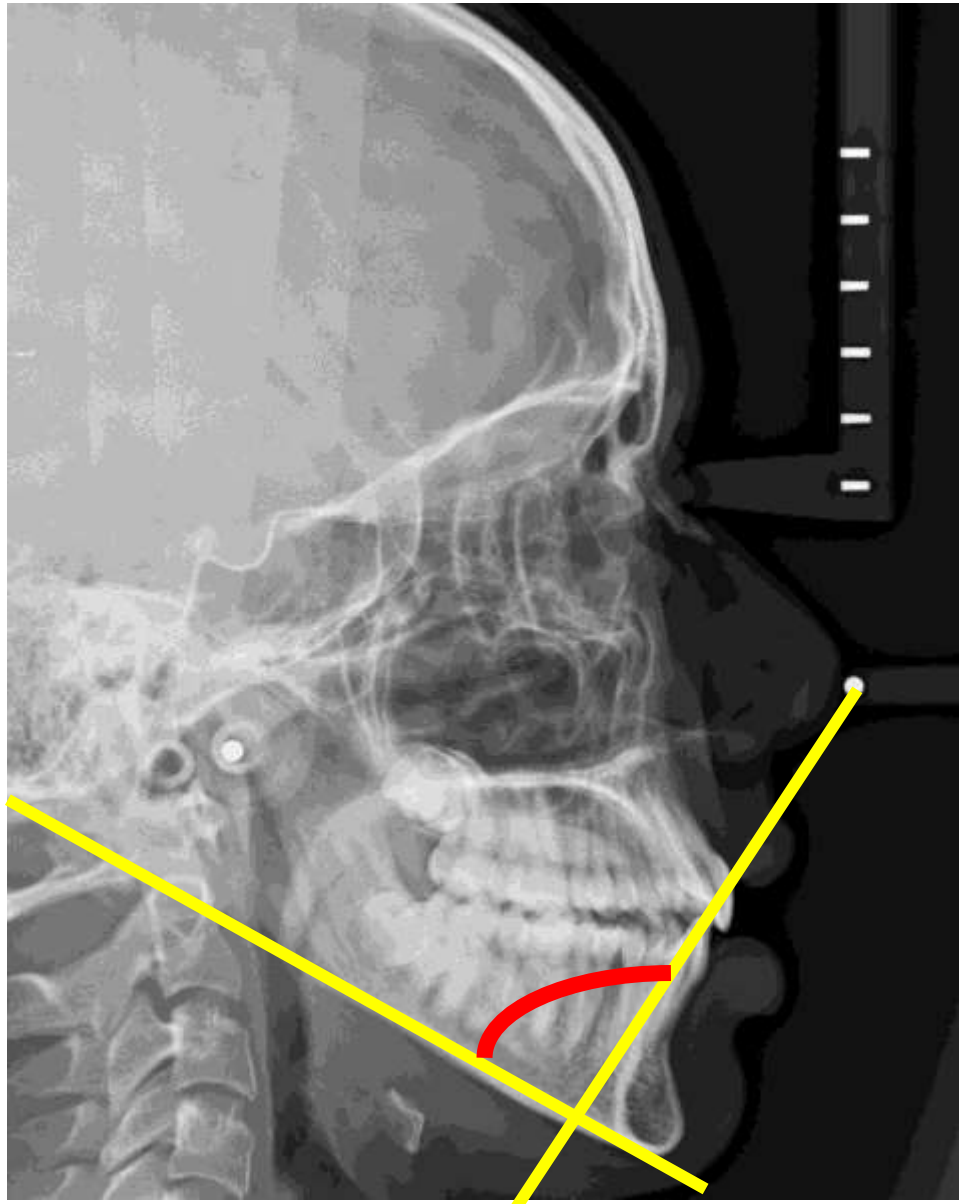


Tweed Charles H.
Clinical orthodontics. vol. 1. The C. V. Mosby Company; St. Louis1966: 33

NORMAL: 90

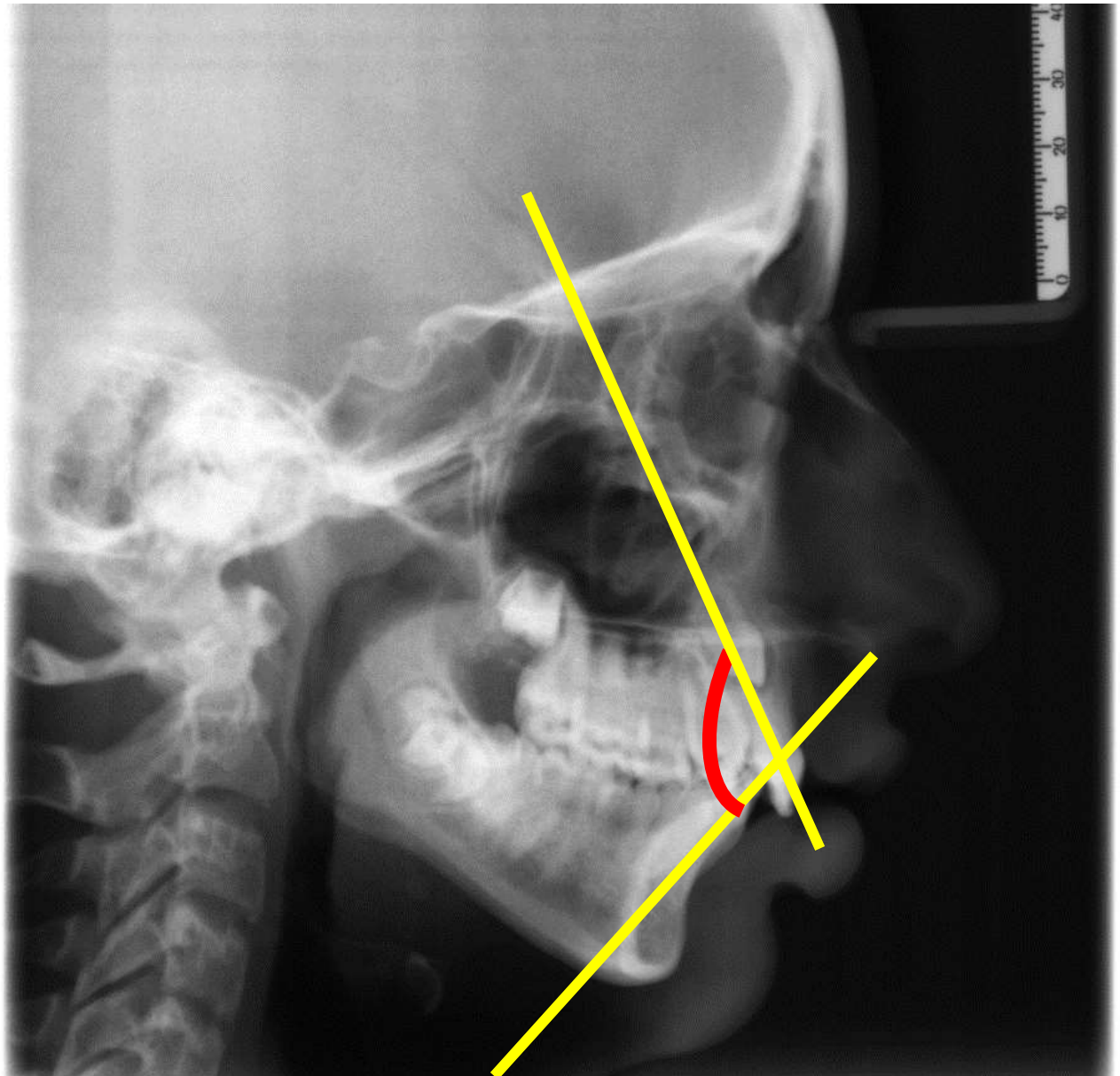


116



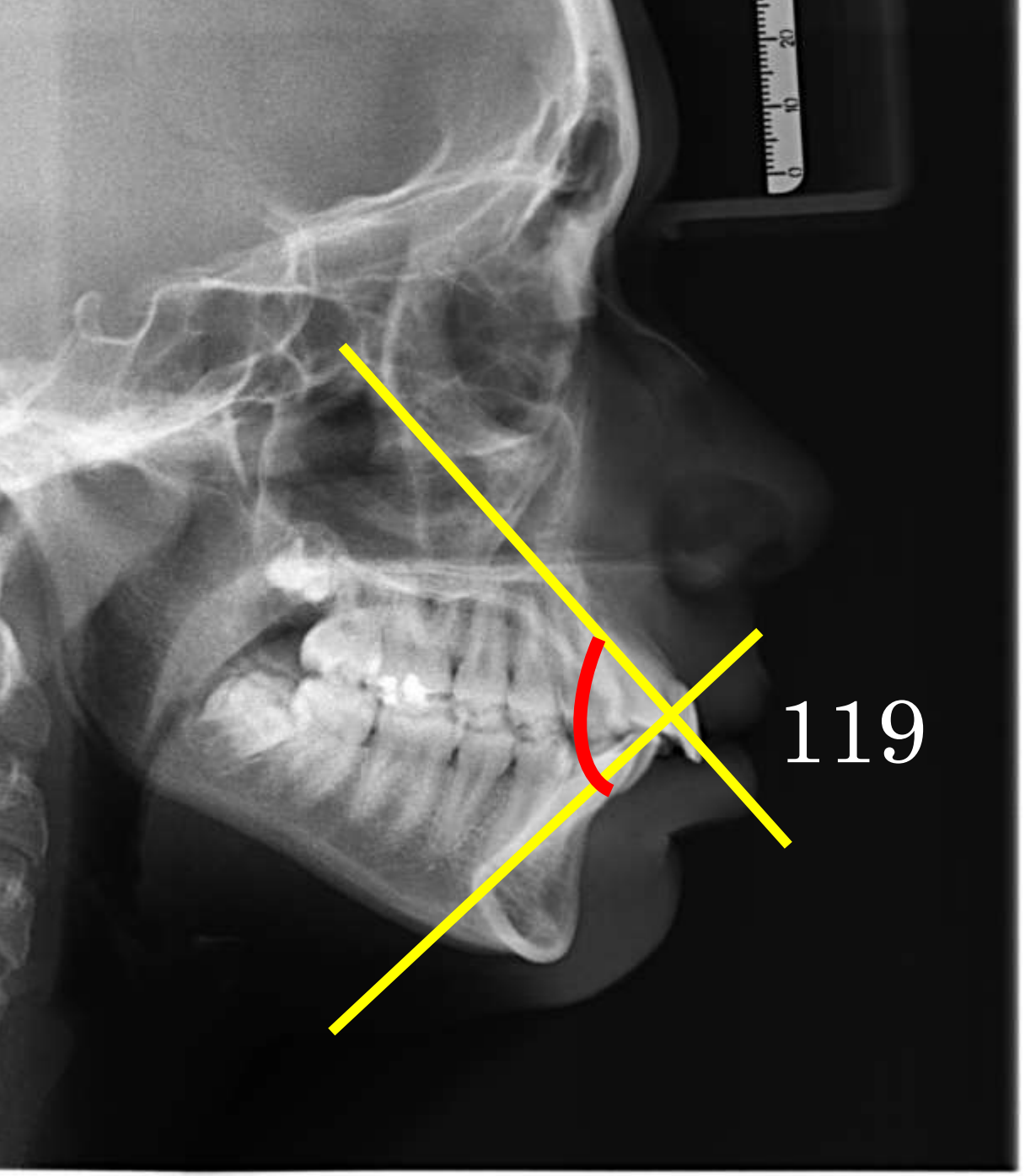
94

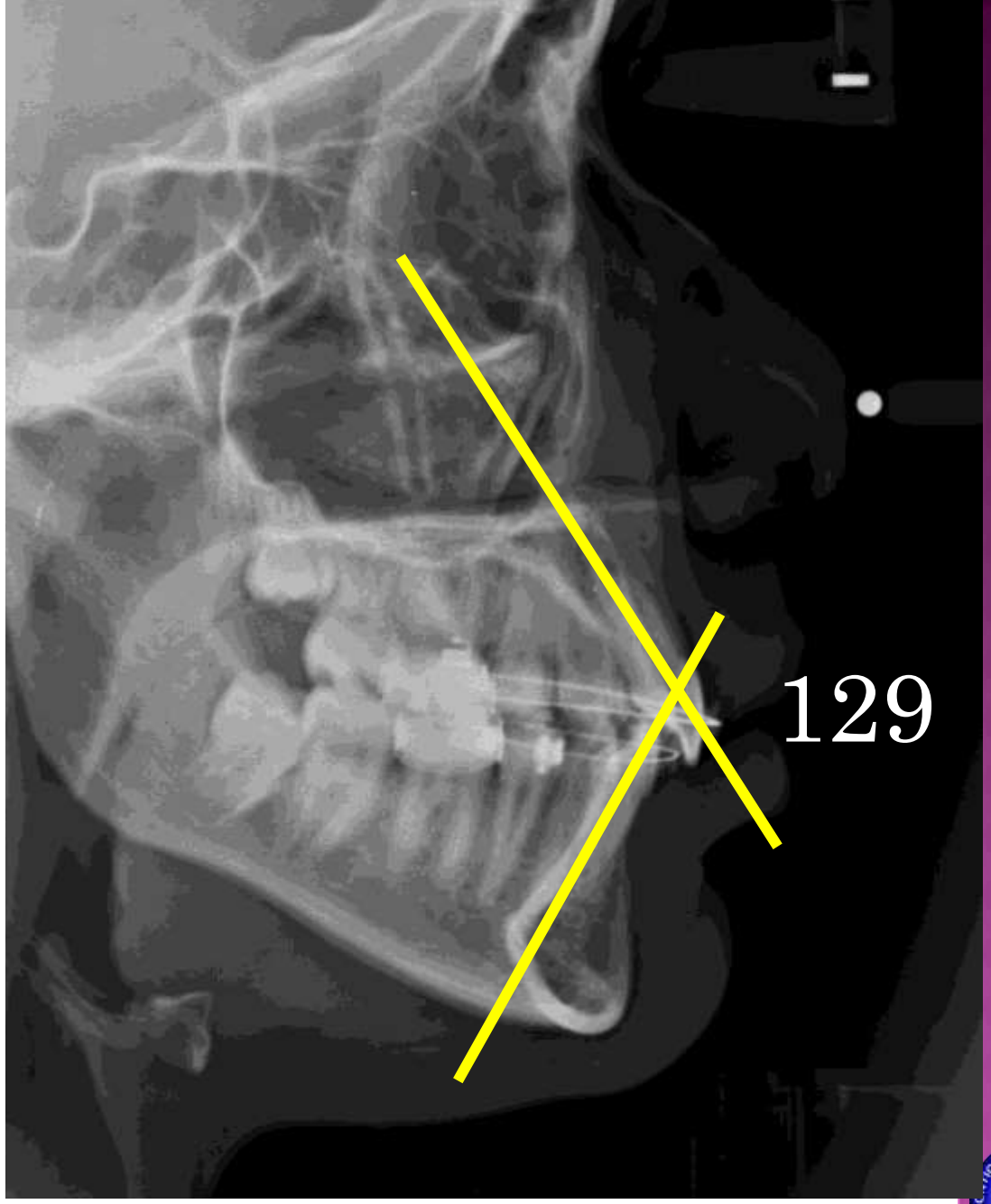
INTERINCISAL ANGLE



- Normal : 130

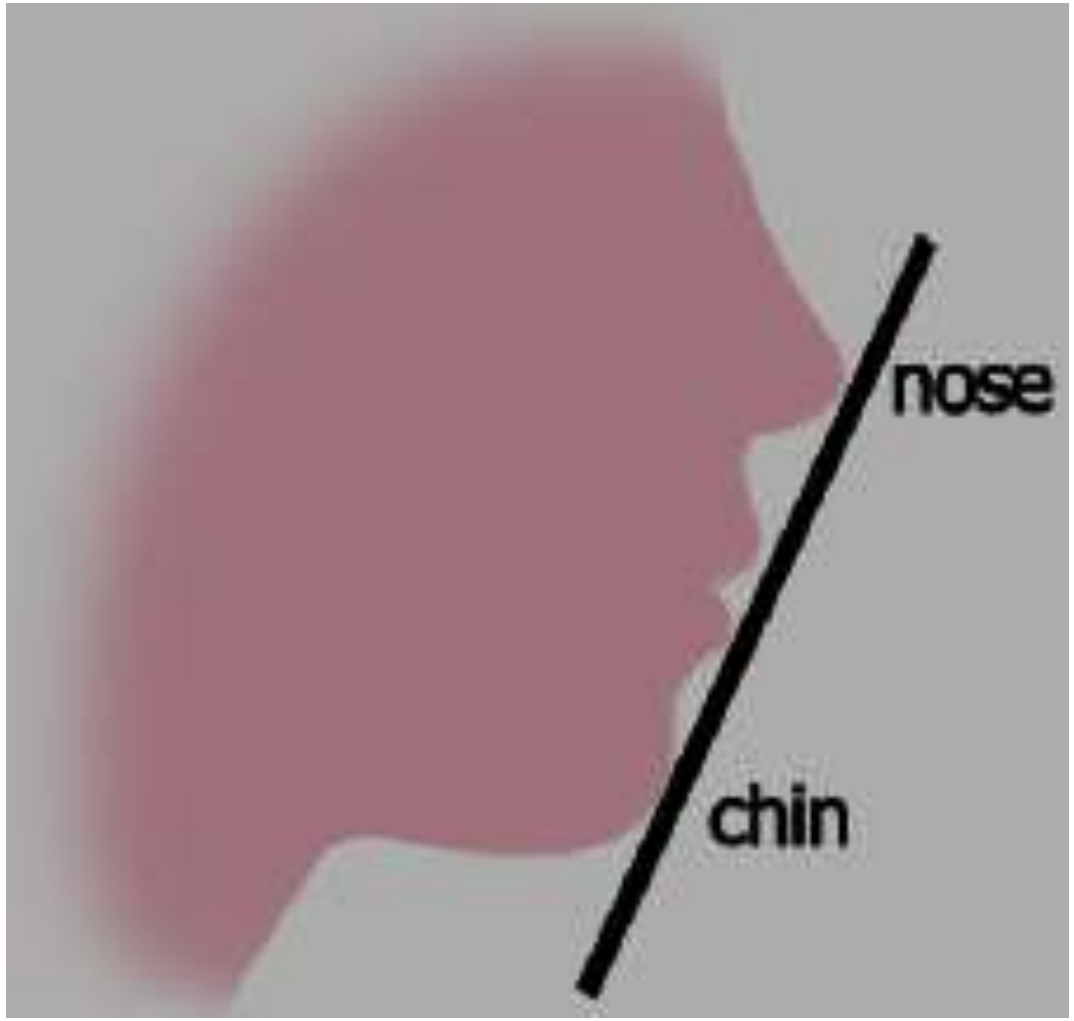
- Downs
- Stieners


119

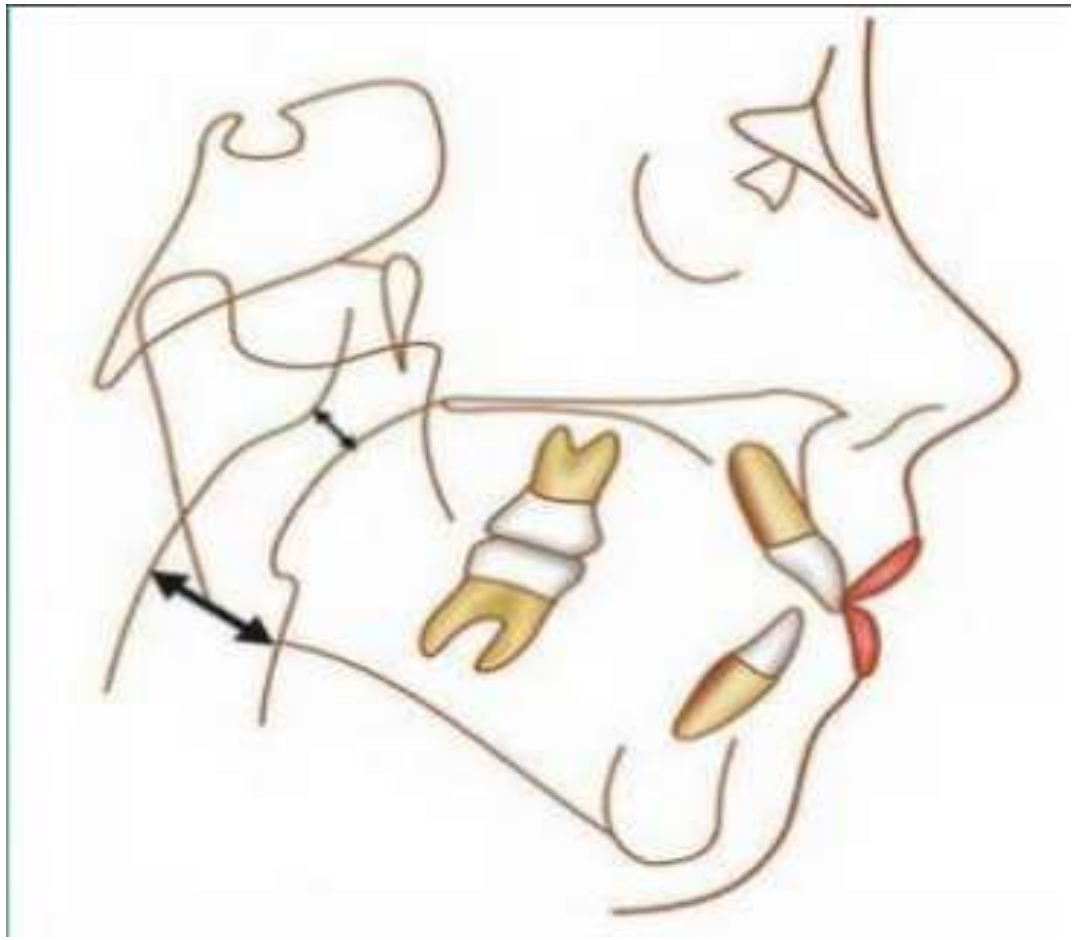

129

Rickets E line

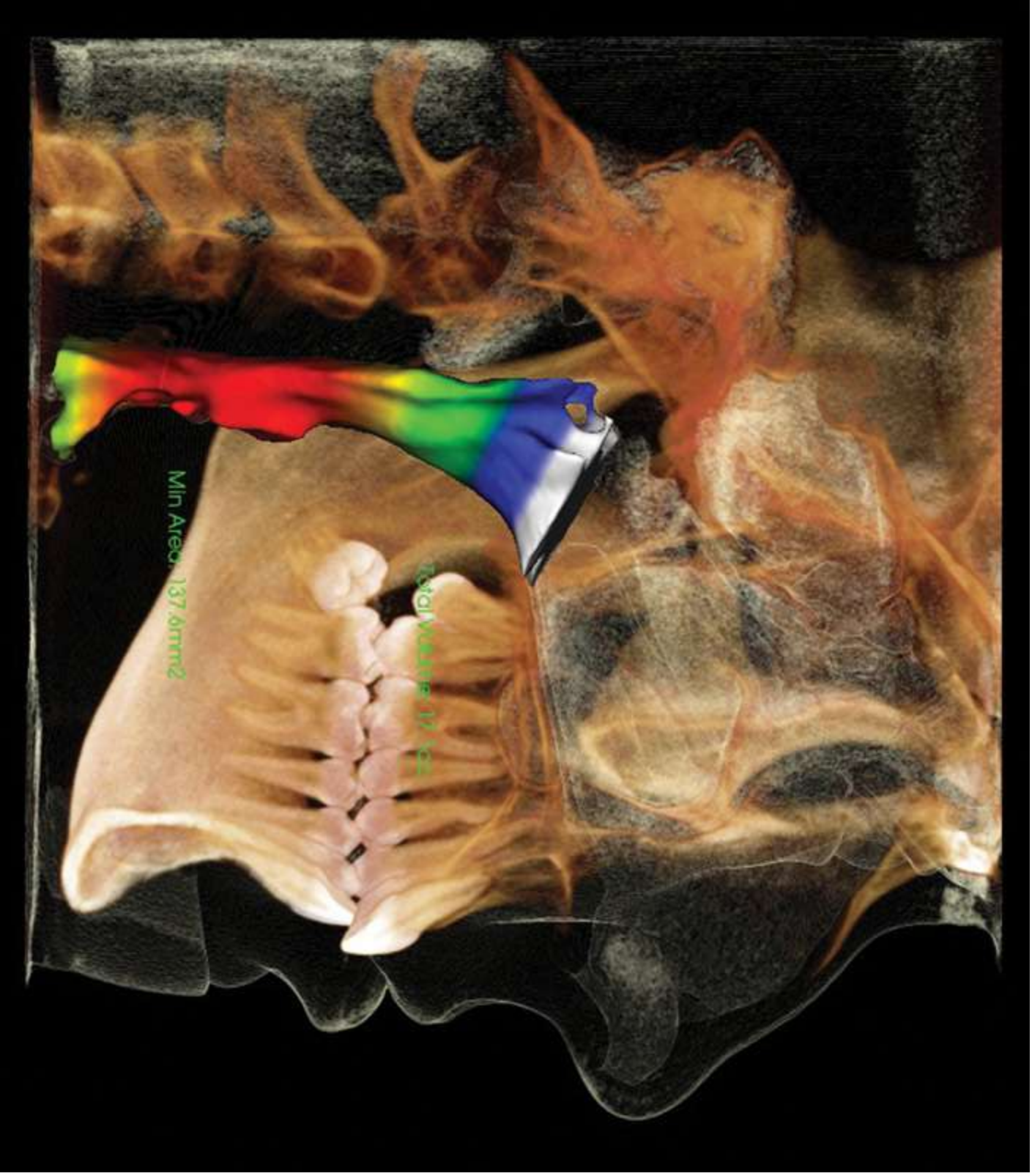
SOFT TISSUE



AIRWAY



McNamara, J. A.: A method of cephalometric evaluation. Am J Orthod. 1984; 86 (6): 449–469.



Eur J Orthod. 2019 Jan 23;41(1):101-108. doi: 10.1093/ejo/cjy058.

Reliability of Upper Airway Assessment Using CBCT

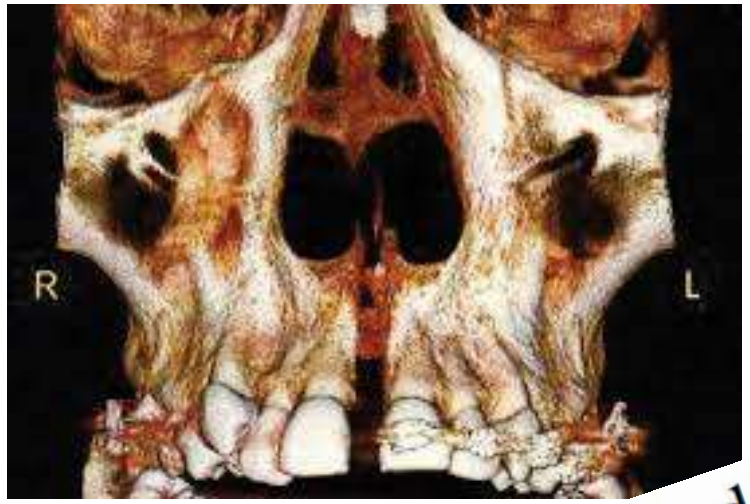
Jason N Zimmerman [1], Siddharth R Vora [1], Benjamin T Pliska [1]

CEPHALOGRAM

LATERAL CEPHALOGRAM

FRONTAL CEPHALOGRAM

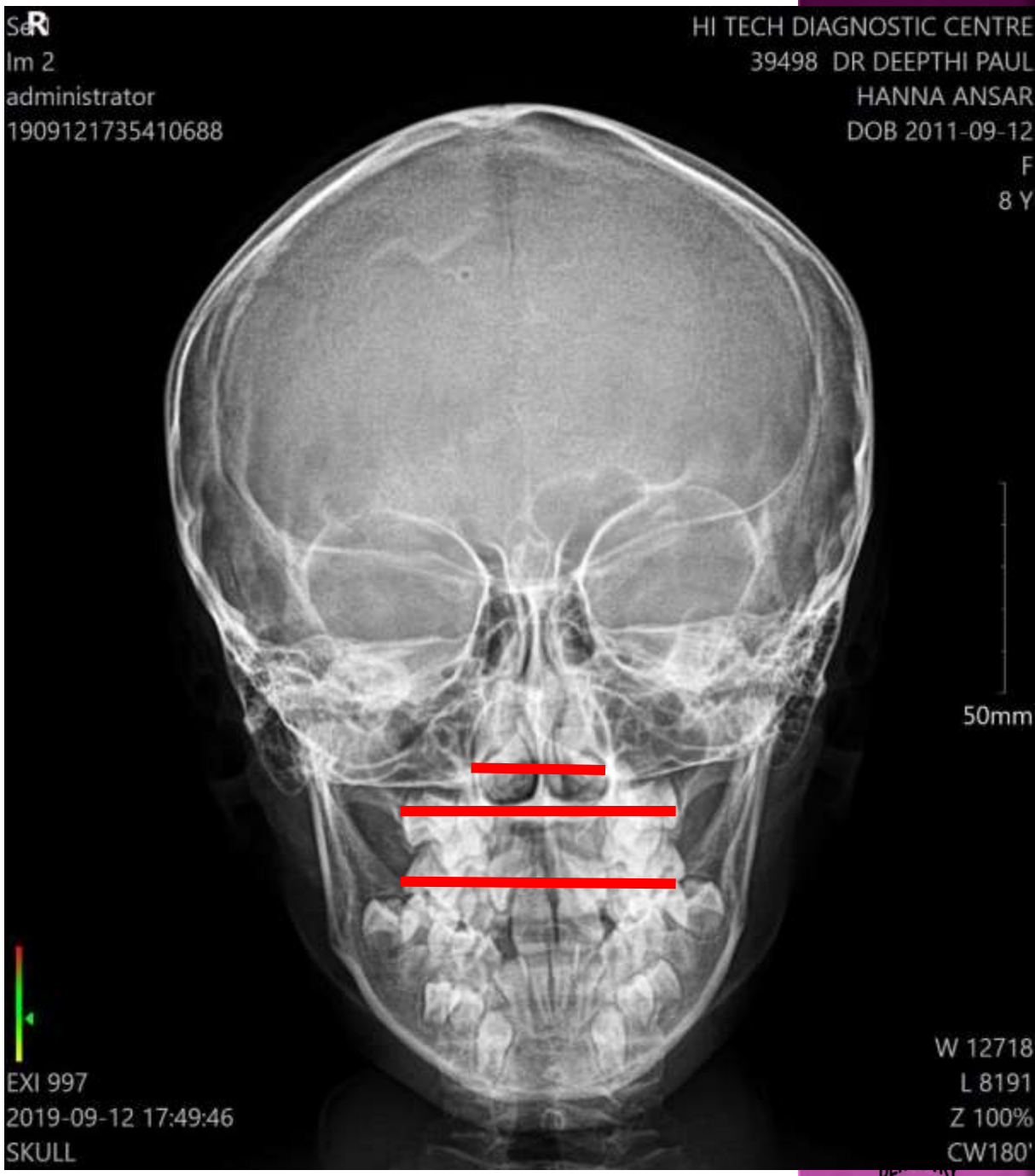
PA VIEW



Cone-beam computerized tomography evaluation of the maxillary dentoskeletal complex after rapid palatal expansion

Armine Kartalian,[a] Elizabeth Gohl,[a] Melina Adamian,[b] and Reyes Enciso[c]

Los Angeles, Calif



SUMMARY

- Skeletal Parameters
- Dental Parameters
- Soft Tissue Parameters
- Airway
- Frontal Ceph

AIM OF EARLY INTERVENTION (AAPD)

- Health of teeth and oral stuctures
- Occlusal Harmony and function
- Dentofacial esthetics (Facial and Jaw Proportions)

AAPD Guideline 2016

NAMES YOU CAN NOT FORGET

- **Roentgen 1895** *("On a New Kind of Rays" Science 14 Feb 1896: Vol. 3, Issue 59, pp. 227-231 DOI: 10.1126/science.3.59.227)*
- **A J Pacini and Carrera 1922** *: First Xray Picture of Skull (Roentgen Ray Anthropometry of the Skull. J. Radiol. 1922; 3: 230-238)*
- **Broadbent 1931** *(A new Xray Tech and its application to orthodontia. Angle Orthod 1:45-60)*
- **Hofrath 1931** *(Fortschritte Der Orthodontie in German)*

ANALYSIS

- **William Downs (1948)** *Variations in facial relationships: their significance in treatment and prognosis. Am J Orthod. 1948;34(10):812-40.*

- **Steiner (1953)** *Cephalometrics clinical practice. Angle Orthod. 1959;29(1):8-29.*

- **Tweed (1954)** *The Frankfort-mandibular plane angle in orthodontic diagnosis, classification, treatment planning, and prognosis. Am J Orthod Oral Surg. 1946;32:175-230*

- **Sassouni (1955)** A roentgenographic cephalometric analysis of cephalo-facio-dental relationships Viken Sassouni. DOI: **http: org/10.1016/0002-9416(55) 90171-8**

GOALS OF CEPHALOMETRICS

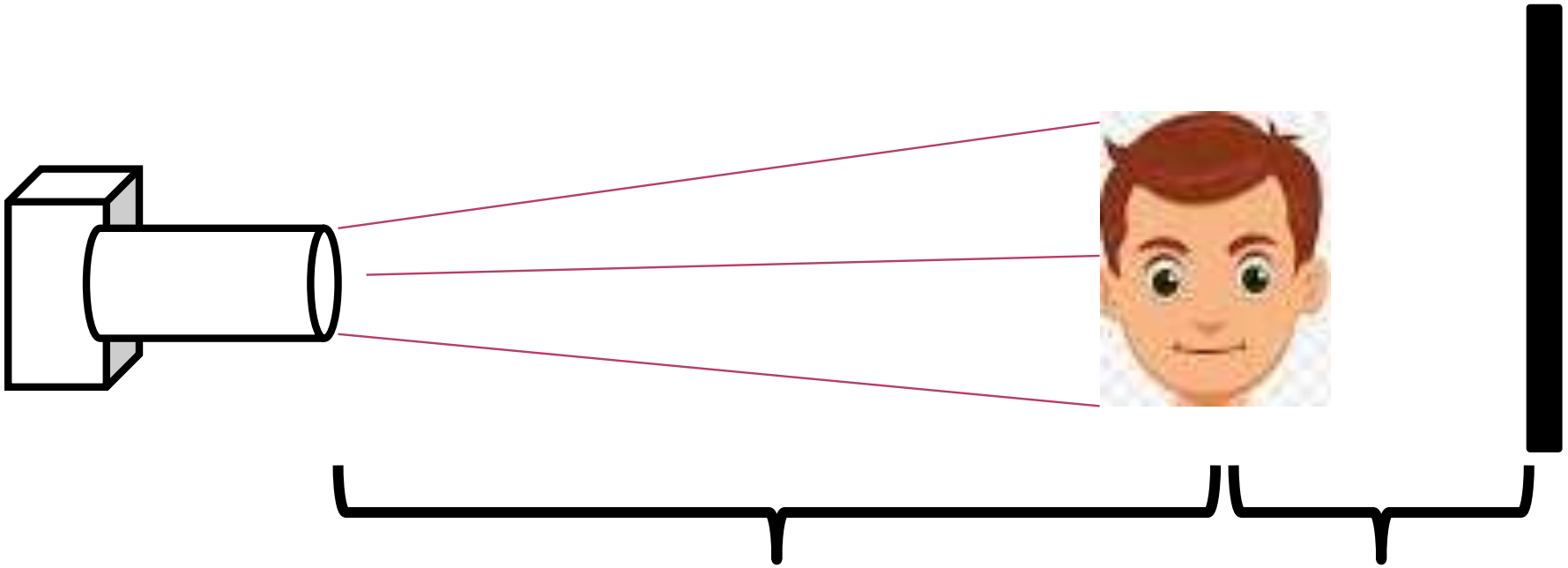
- To evaluate the transverse/saggital relationships between

Maxilla /Mandible
Maxilla and Maxillary teeth
Mandible and mandibular teeeth
Cranial base to Maxilla and Mandible

PROFFIT TEXTBOOK OF ORTHODONTICS 5th Edition

IMAGING SYSTEM

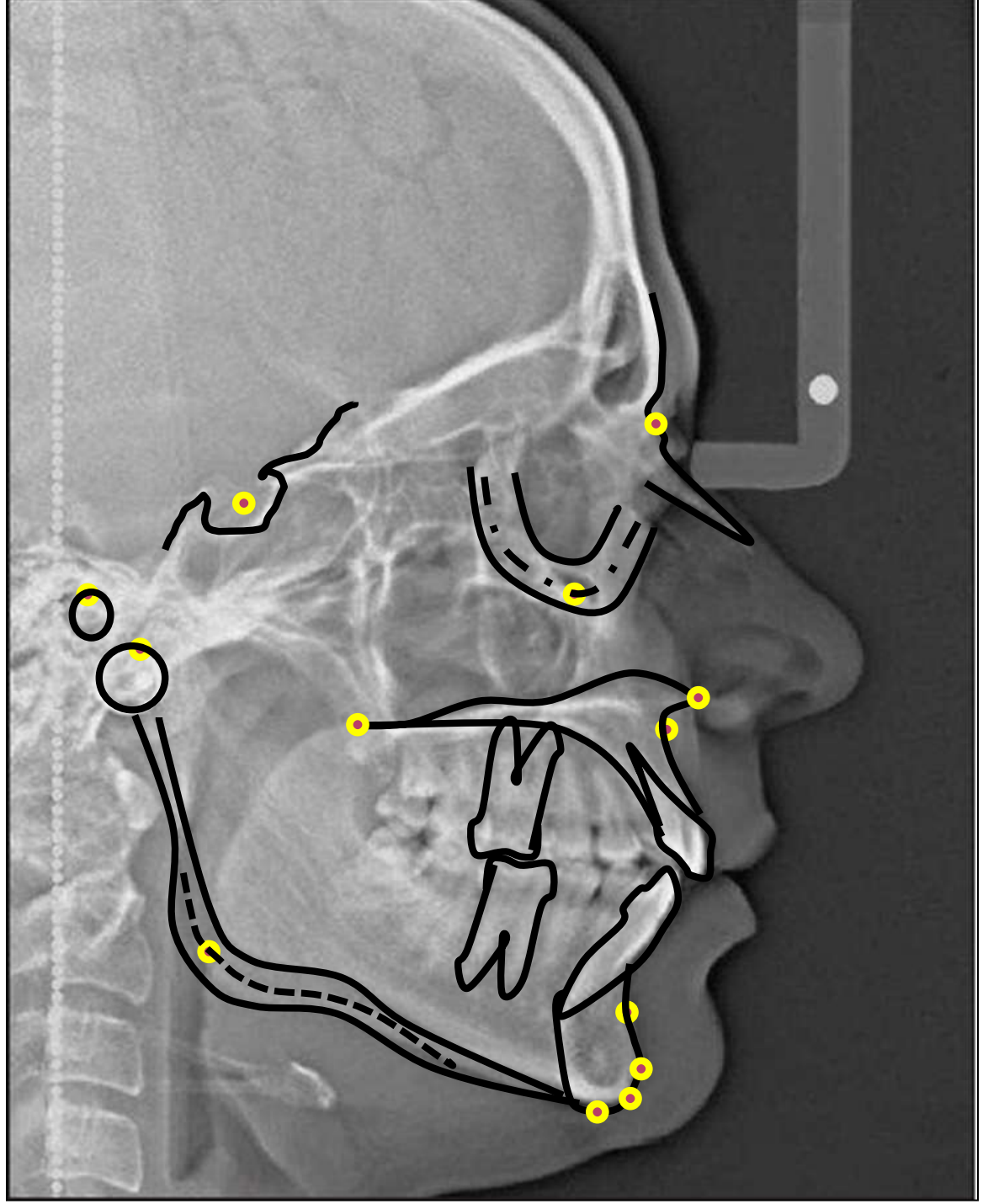
Taking



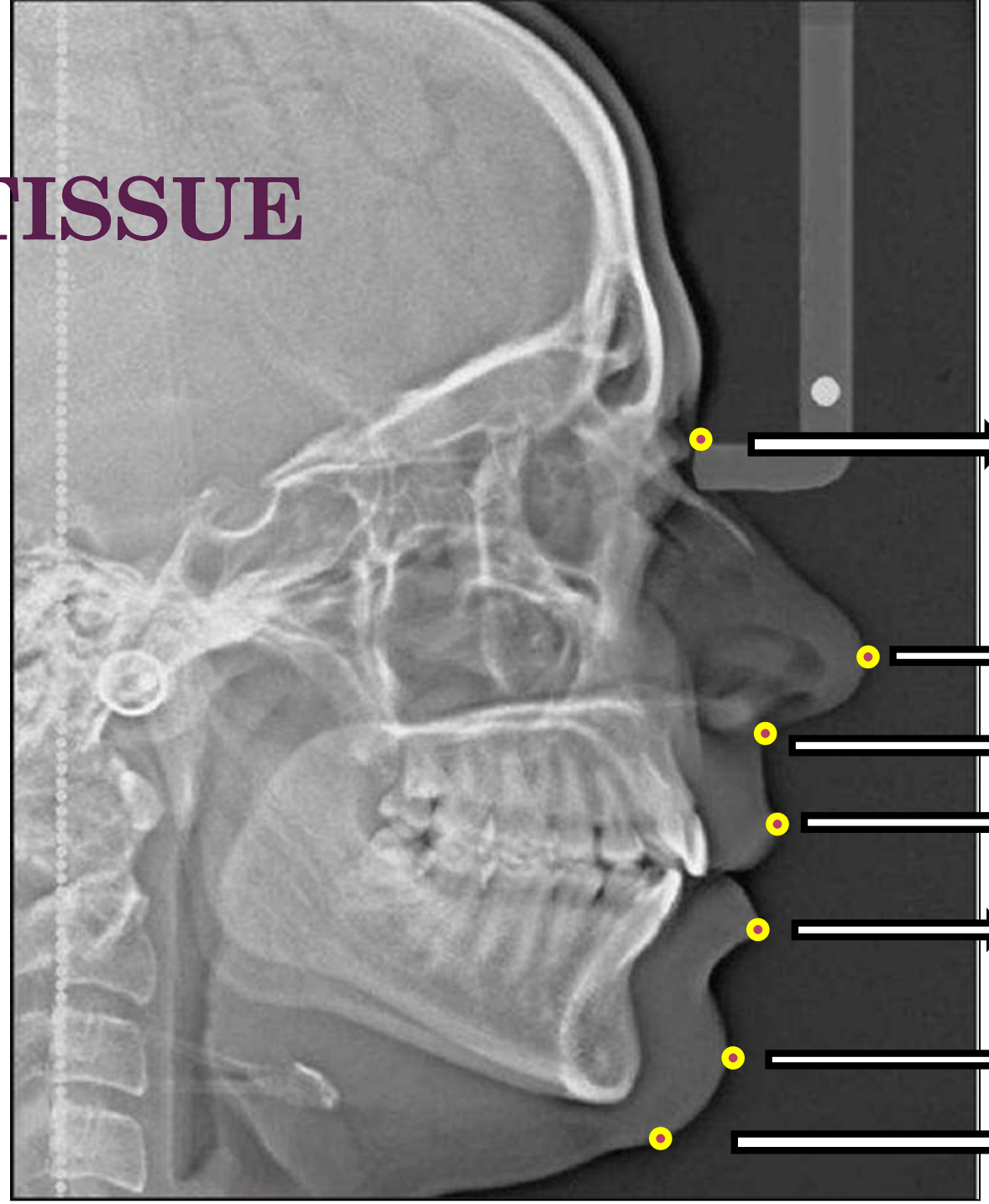
5 Ft

1 Ft

LANDMARKS



SOFT TISSUE


Nasion
Pronasale
Subnasale
Labial Superious
Labial Inferios
Pogonion
Menton

binuortho@ gmail.com

9847032032

Kerala Dental Clinic- Go Green

Latest in dentistry

binu6177

THANK YOU

Dr Binu T Abraham