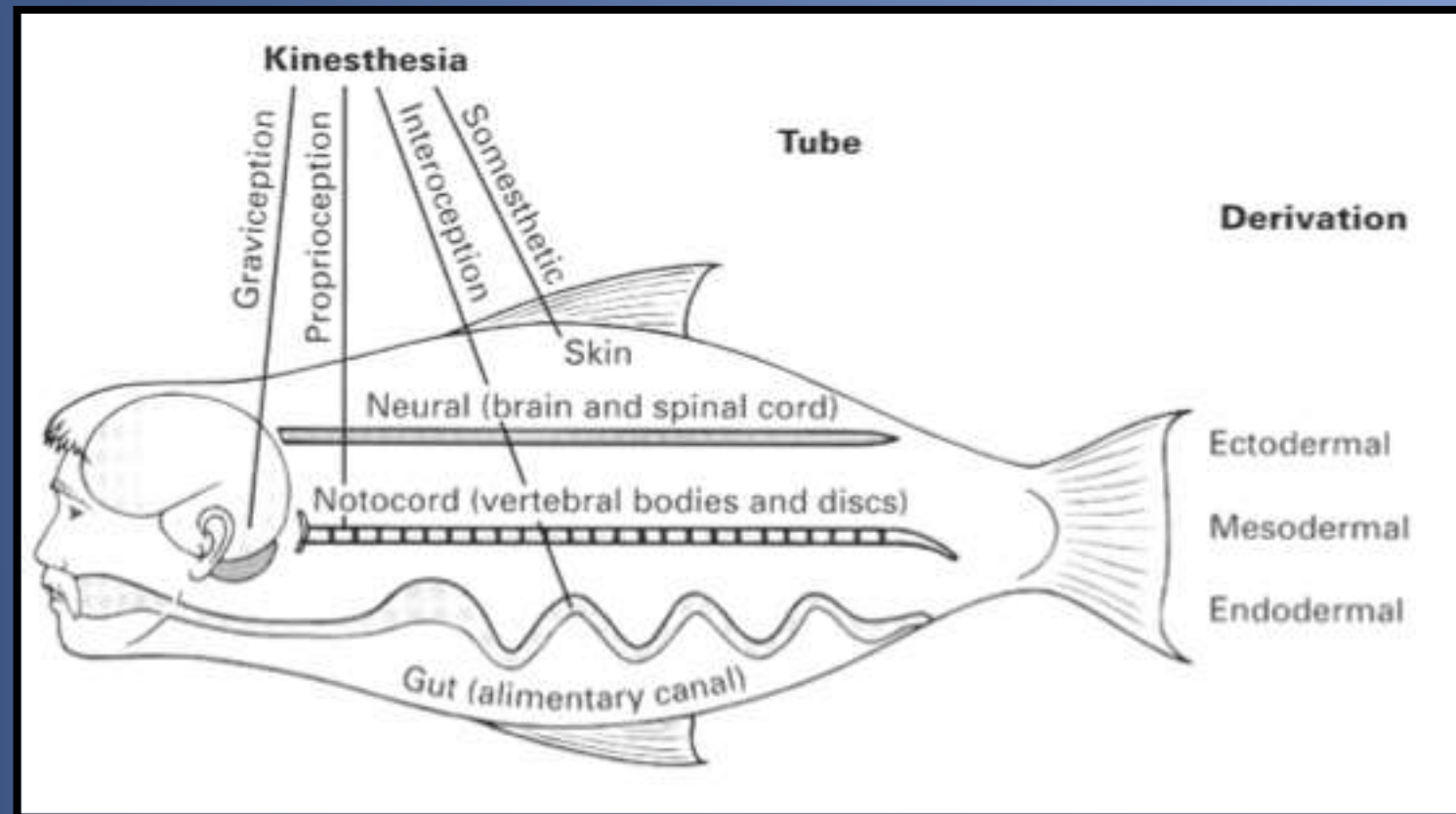
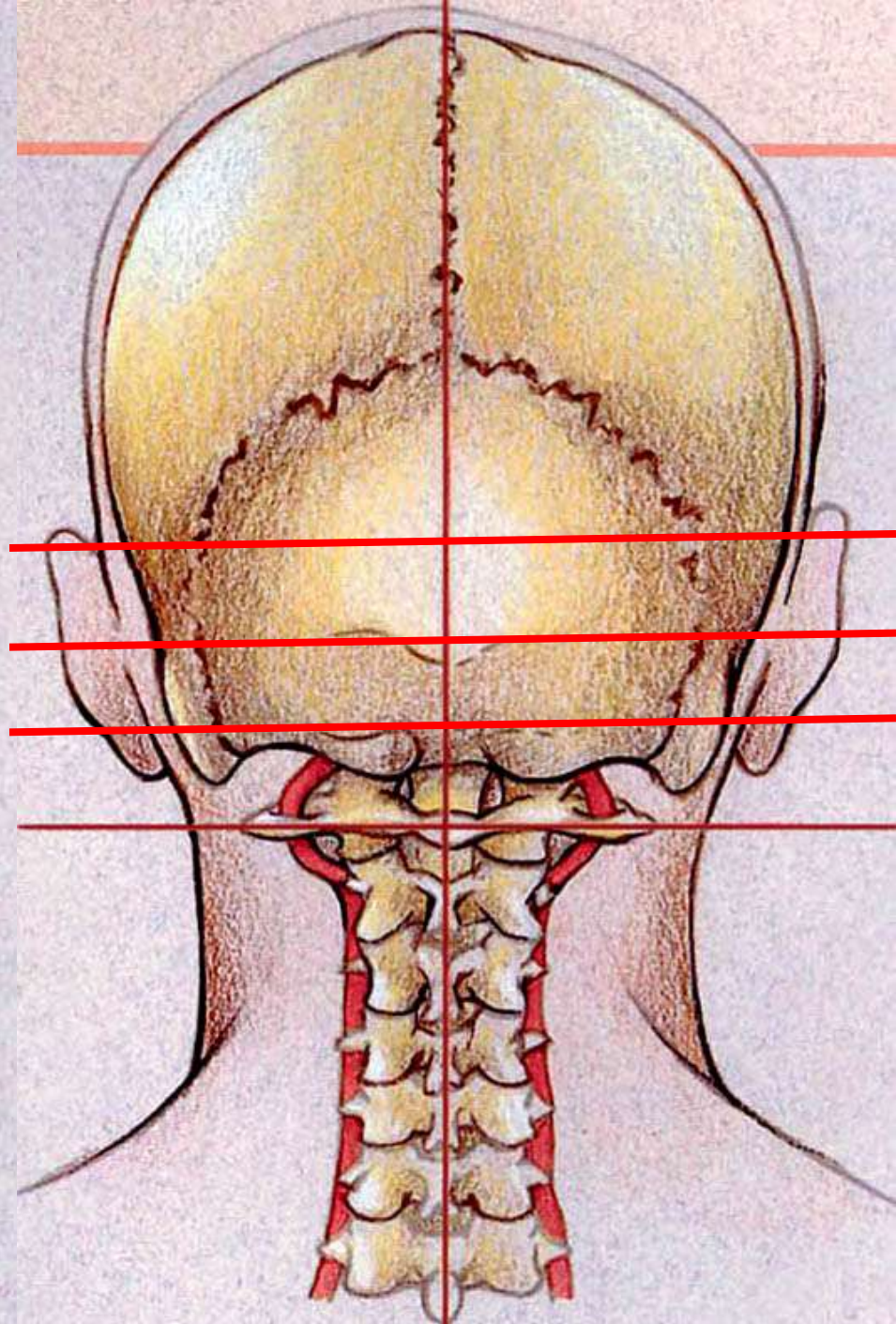
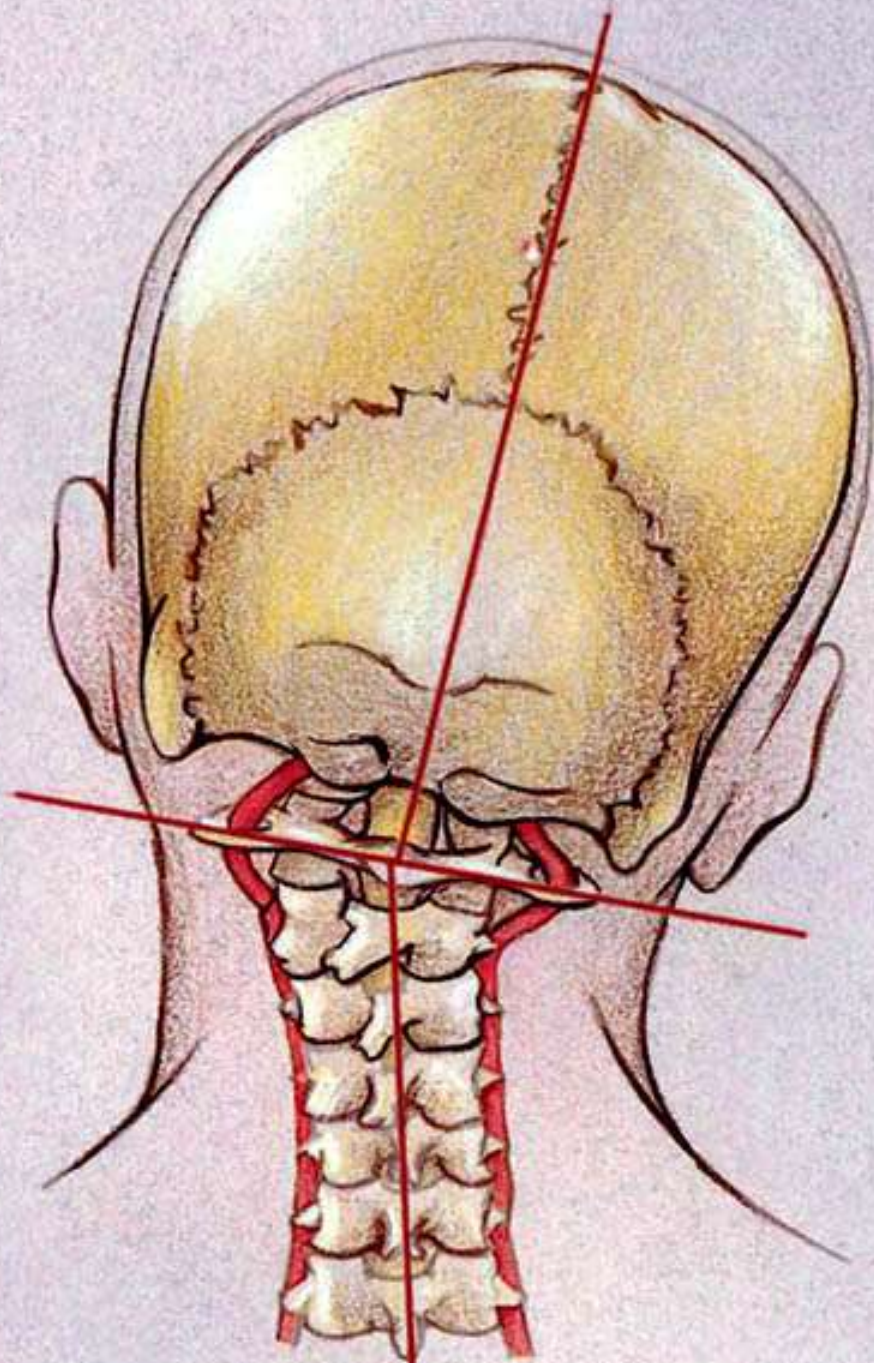


Trigeminal nerve

- “...the trigeminal nerve accounts for 80% of all afferent drive to the brain...”





TMJ in Context

Totem Pole of Health (Chek 2001)

■ Hierarchy of Developmental Reflexes

- Breathing
- Eating
- Seeing
- Hearing / Balance
- Upper complex
- Viscera
- SIJ's
- "Slave" Joints

↑ importance

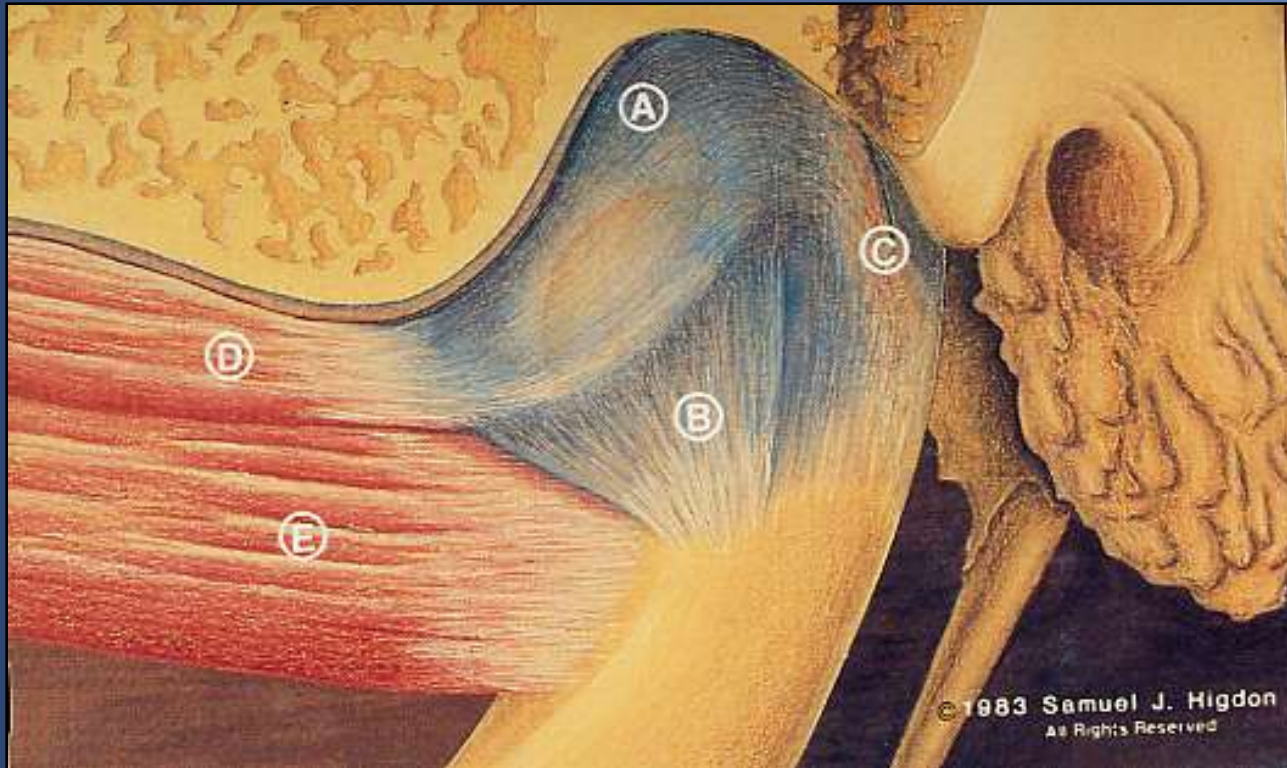
← Limbic emotional →

Planes

- Optic
- Otic
- Occlusal



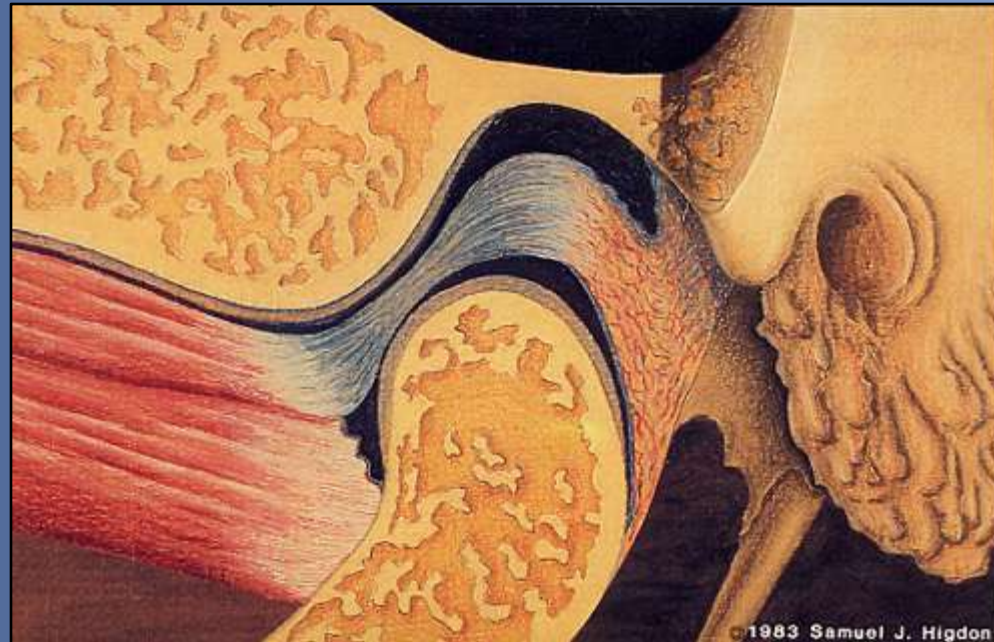
Local Biomechanics



- A = articular disc
- B = collateral ligament
- C = retrodiscal tissue
- D = Upper head LPt
- E = Lower head LPt.
- Semi-mobile disc allows for maximum surface contact in close-packed position
- Rotation / translation
- Pinto's ligament...

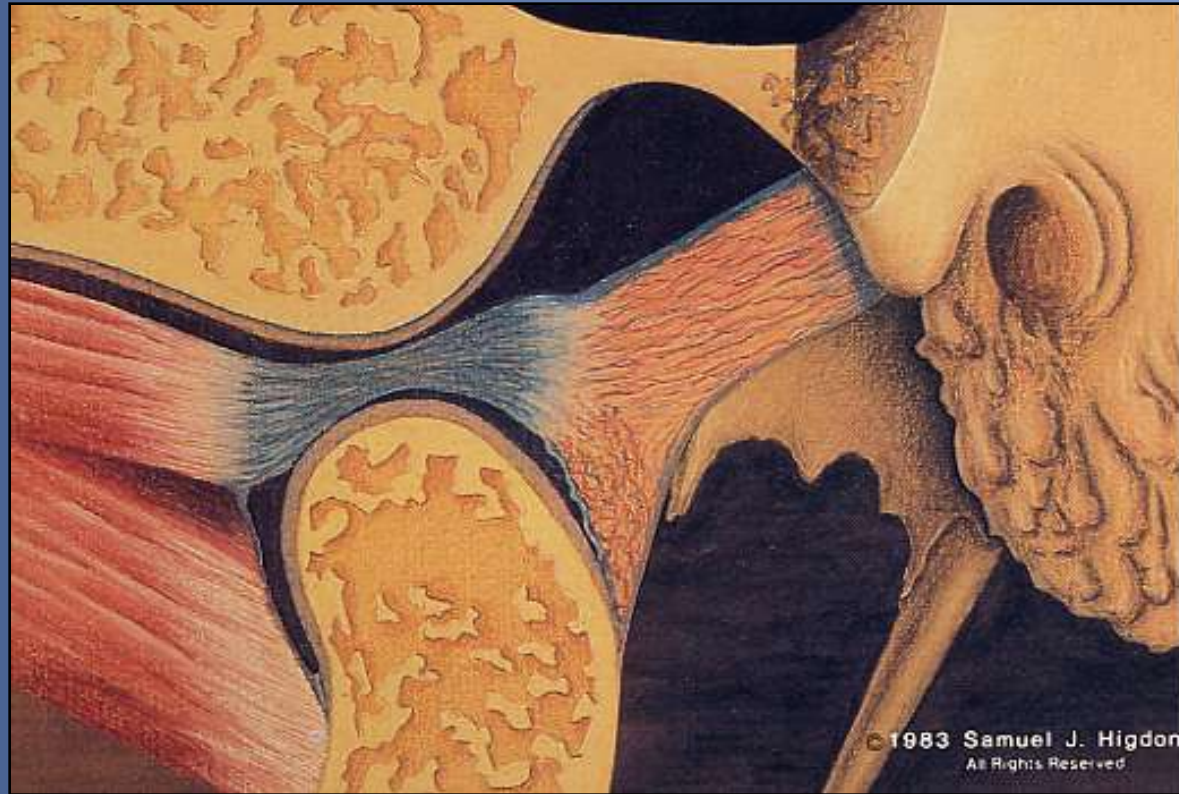
TMJ (initiation of opening)

- Lateral Pterygoid (upper head) contracts, pulling condyle/disc complex into anterior translation
- → loose packed position & ↓friction

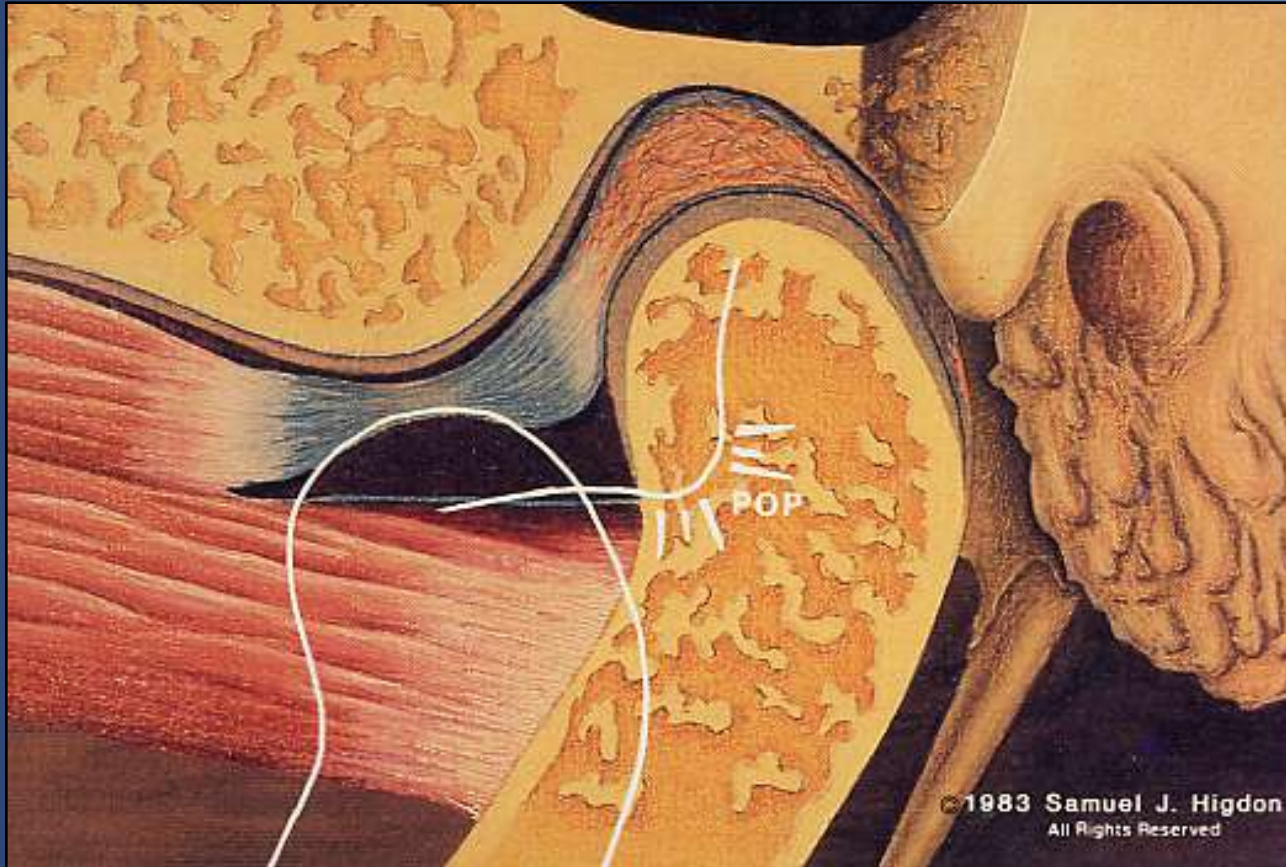


Opening

- Superior lamina of bilaminar zone (elastin) exerts posterior elastic pull.



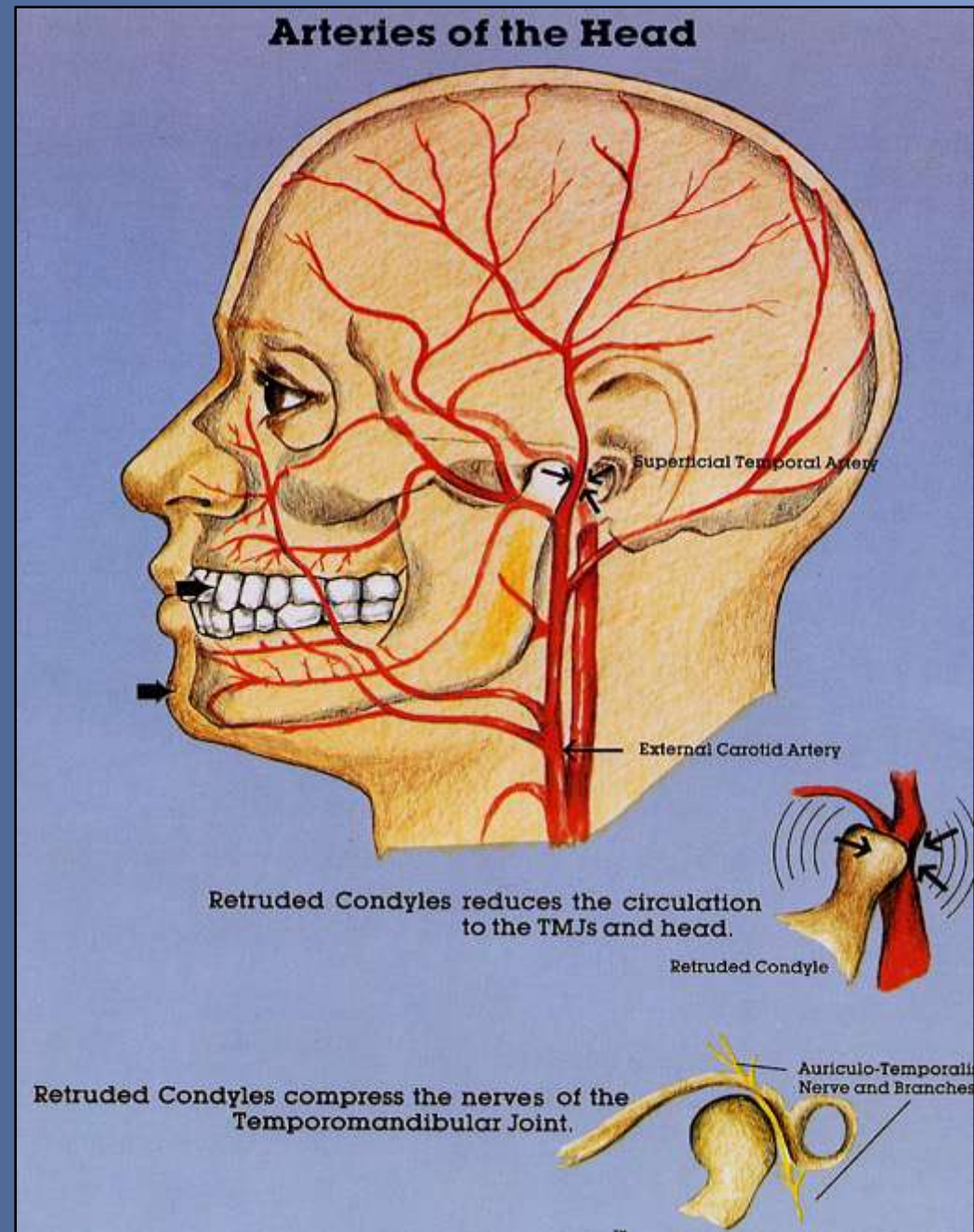
Reciprocal Click



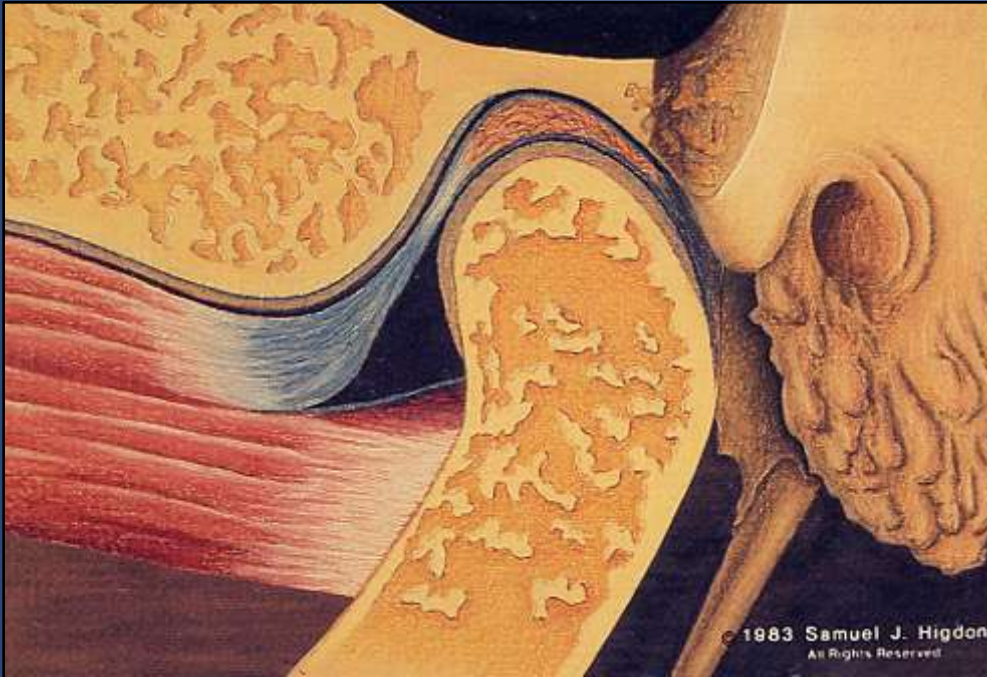
- Antr and medial displacement – most common.
- Secondary to trauma to collateral ligament
- Condyle now → pressure on sensitive retrodiscal tissue
- Thick postr capsule → reciprocal click

Retrodiscal tissue

- Impingement
 - Ischaemia
 - Pain
 - Nerve impingement



TMD mid-late phase i)

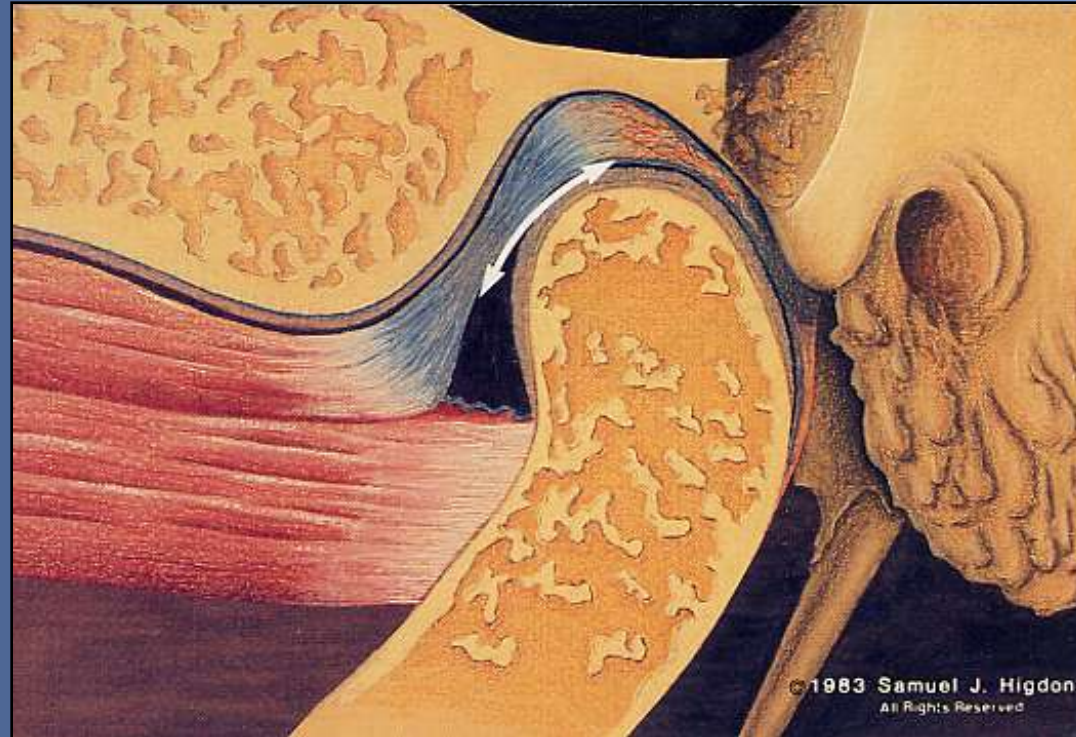


- Posterior disc becomes thin over time
- Anterior disc can become thickened
- Disc can become wedge shaped (previously biconcave)
- Wet water-melon seed!

Conservative management very difficult

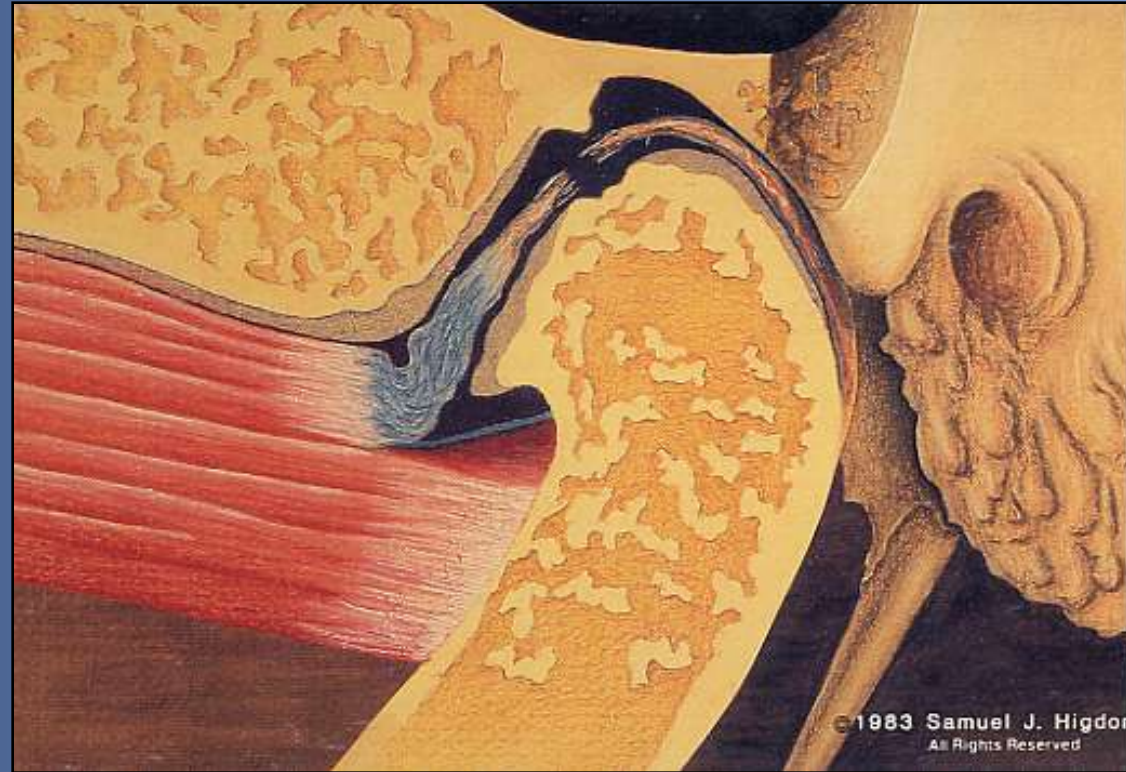
Mid-Late Phase ii)

- Magnitude of click may decrease with time
- An “ironing out” of the disc may occur
- Can also get folding of posterior disc → intermittent click



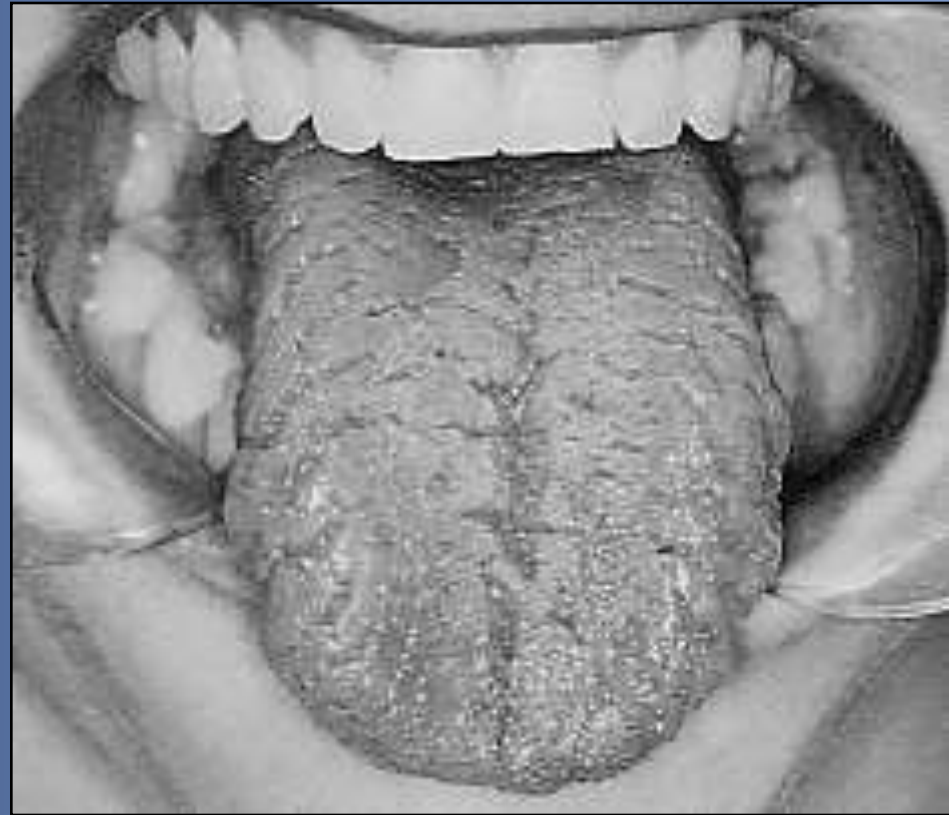
Late Phase TMD

- In late phases, the disc will wear through resulting in bony contact.
- Osteophyte formation
- OA
- Only treatment option is surgery



Signs of TMD

- Scalloping of the tongue or cheek
- Worn teeth
- Cracked fillings
 - Heavy restoration
 - Usu gold



Signs of TMD

- Hypertrophy of masseter
- Masseter & Medial pterygoid prime movers of grinding / clenching



Signs of TMD

- Hypertrophy of temporalis and masseter
- Thickened, painful medial pterygoid / SPC

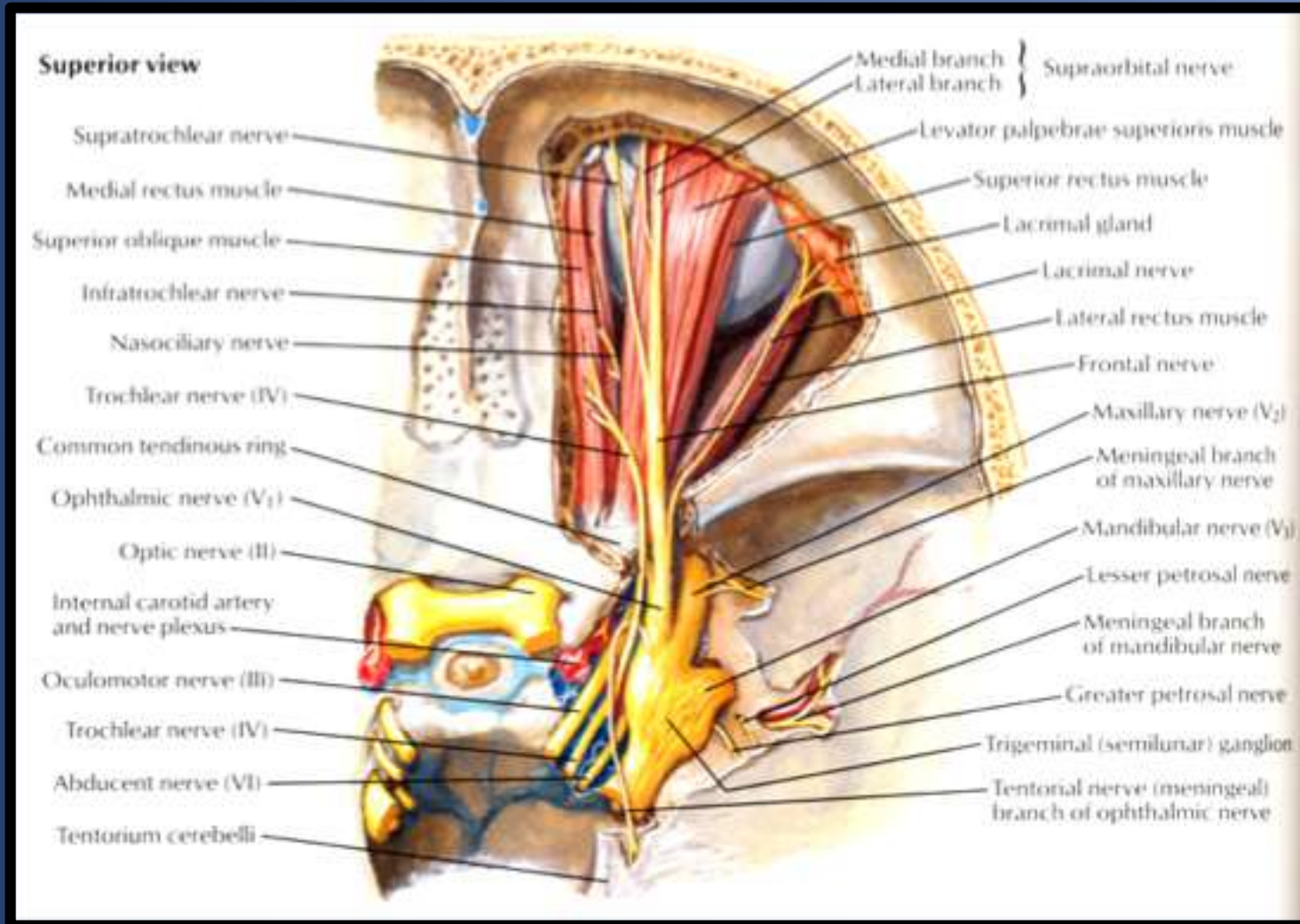


Signs of TMD

- Baggy eyes
 - Food intolerance
 - Parasites / dysbiosis



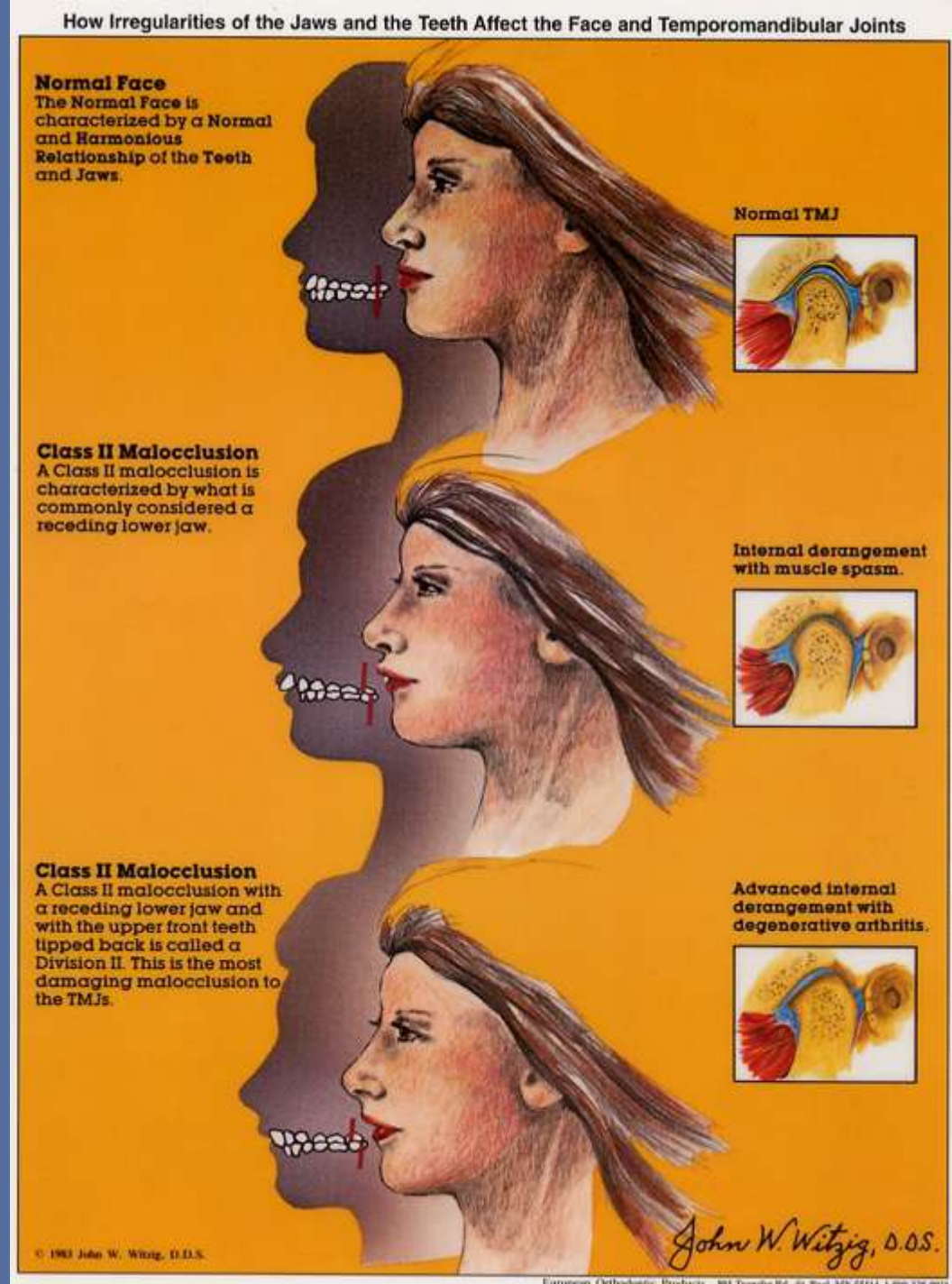
Signs of TMD



- “Ticks”
- Eye angulation

Causes of TMD

- Malocclusion
 - Dental work
 - Nutrition
- FHP (U-X-S)
 - SCM
 - TrPts



Class II/III

Class II =

“Goofy”

Class III

= *“Desperate Dan”*

HOW IRREGULARITIES OF THE TEETH AND JAWS AFFECT THE FACE

NORMAL FACE

The NORMAL FACE is characterized by a NORMAL and HARMONIOUS RELATIONSHIP of the TEETH and JAWS.



CLASS II MALOCCLUSION

A Class II malocclusion is characterized by what is commonly considered a receding lower jaw, with protruding upper front teeth.

A Class II malocclusion with a receding lower jaw and with the upper front teeth tipped back is called a Division II.

66% of all malocclusions are Class II malocclusions.



CLASS III MALOCCLUSION

A Class III malocclusion is characterized by the under development of the upper jaw and a protruding lower jaw.

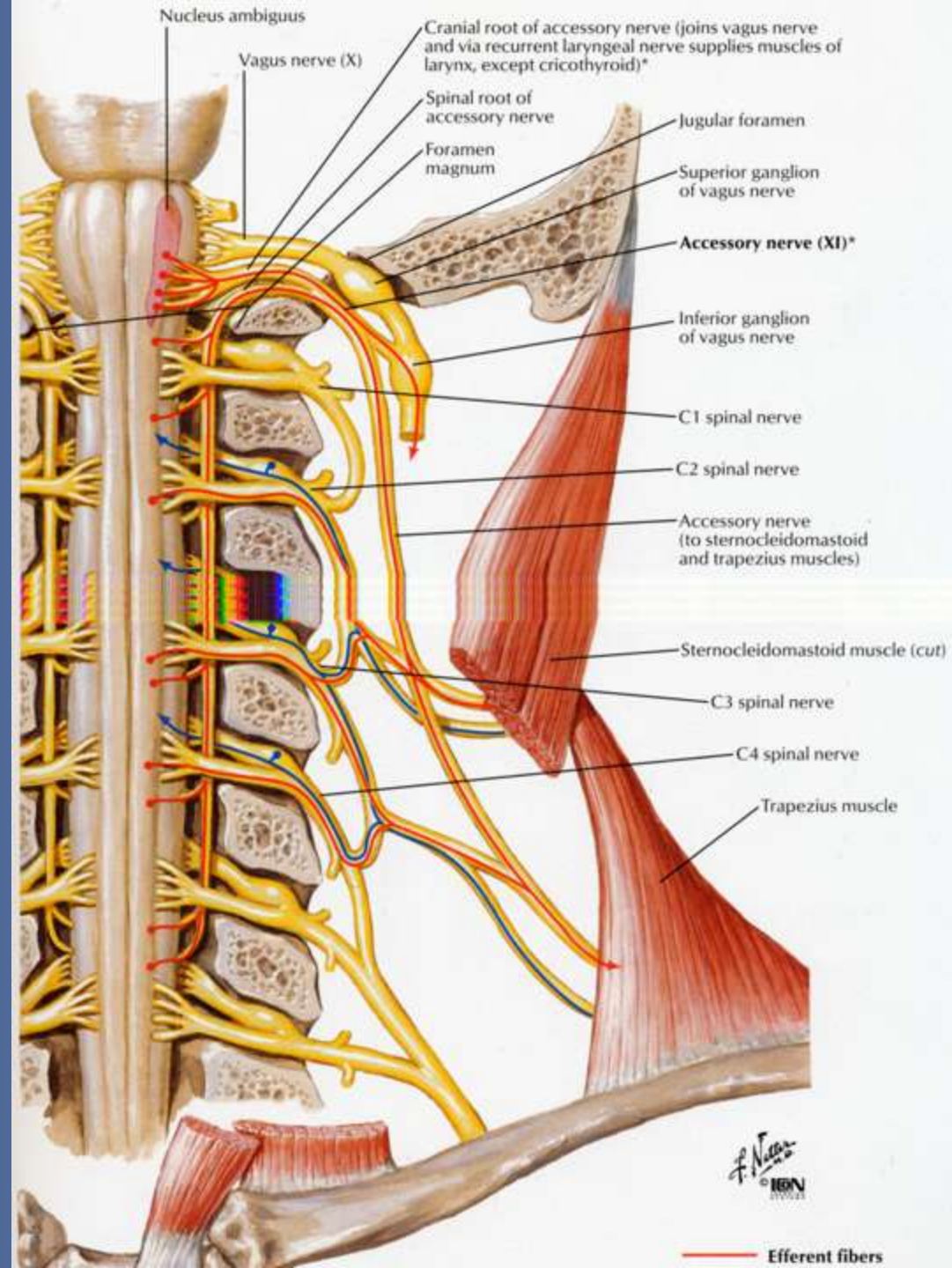


RECOMMENDATION:

Disfiguring facial conditions can be corrected by proper treatment.

Trigeminal anastomosis

- Accessory nerve
- Trigemino-cervical reflex
- Bruxing
- Tetanus



Holistic Biomechanics

LITERATURE REVIEW

SPINAL CURVES AND HEALTH: A SYSTEMATIC CRITICAL REVIEW OF THE EPIDEMIOLOGICAL LITERATURE DEALING WITH ASSOCIATIONS BETWEEN SAGITTAL SPINAL CURVES AND HEALTH

Samir Tulgiptani, DPhil, PhD, DSc, and Jon Hildebrand, DSc, PhD

Abstract

Objective: The purpose of this study was to systematically review epidemiological research on the association between sagittal spinal curves and health. The study was conducted in accordance with the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines.

Methods: A systematic critical review of the literature was conducted. The search was performed using a combination of manual and electronic searches. The search was limited to the English language and to the period 1980-2010. The search was limited to the English language and to the period 1980-2010. The search was limited to the English language and to the period 1980-2010.

Results: The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened. The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened.

Conclusions: The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened. The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened.

Some health care providers believe that sagittal spinal curves have an influence on health. For example, it is believed that poor posture may lead to neck pain, shoulder pain, and low back pain. However, the relationship between sagittal spinal curves and health is not fully understood. This systematic review was conducted to evaluate the evidence for the association between sagittal spinal curves and health. The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened. The search identified 10,000 records. After screening the titles and abstracts, 5,000 records were excluded. The full texts of the remaining 5,000 records were screened.

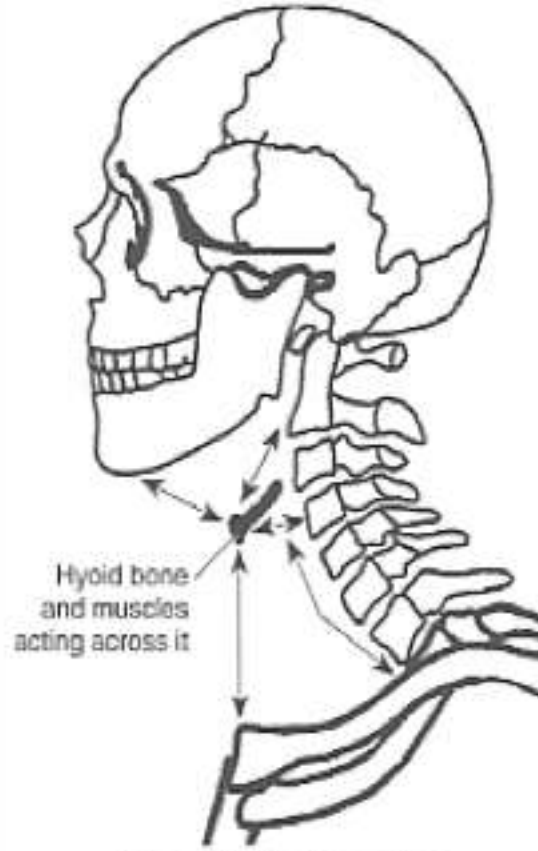


Figure 8.13. Swallowing bone.

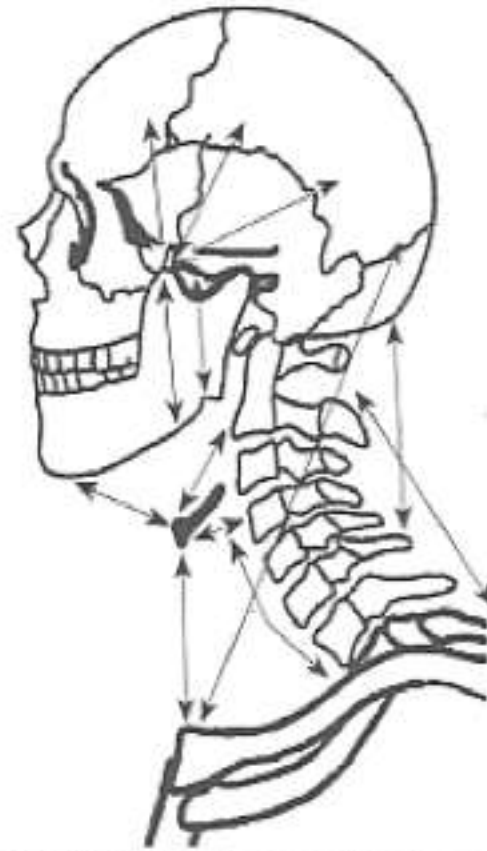


Figure 8.14. Interplay between muscles of jaw and neck.

FMS = Fibromyalgia Syndrome
 CFS = Chronic Fatigue Syndrome
 IBS = irritable bowel syndrome
 TT HA = Tension Type Headache
 TMD = temporo-mandibular disorder
 MPS = myofascial pain syndrome
 RLS = restless leg syndrome
 PLMS = periodic limb movements in sleep
 MCS = multiple chemical sensitivity
 PD = primary dysmenorrhea
 FUS = female urethral syndrome
 IC = interstitial cystitis
 PTSD = post-traumatic stress disorder

