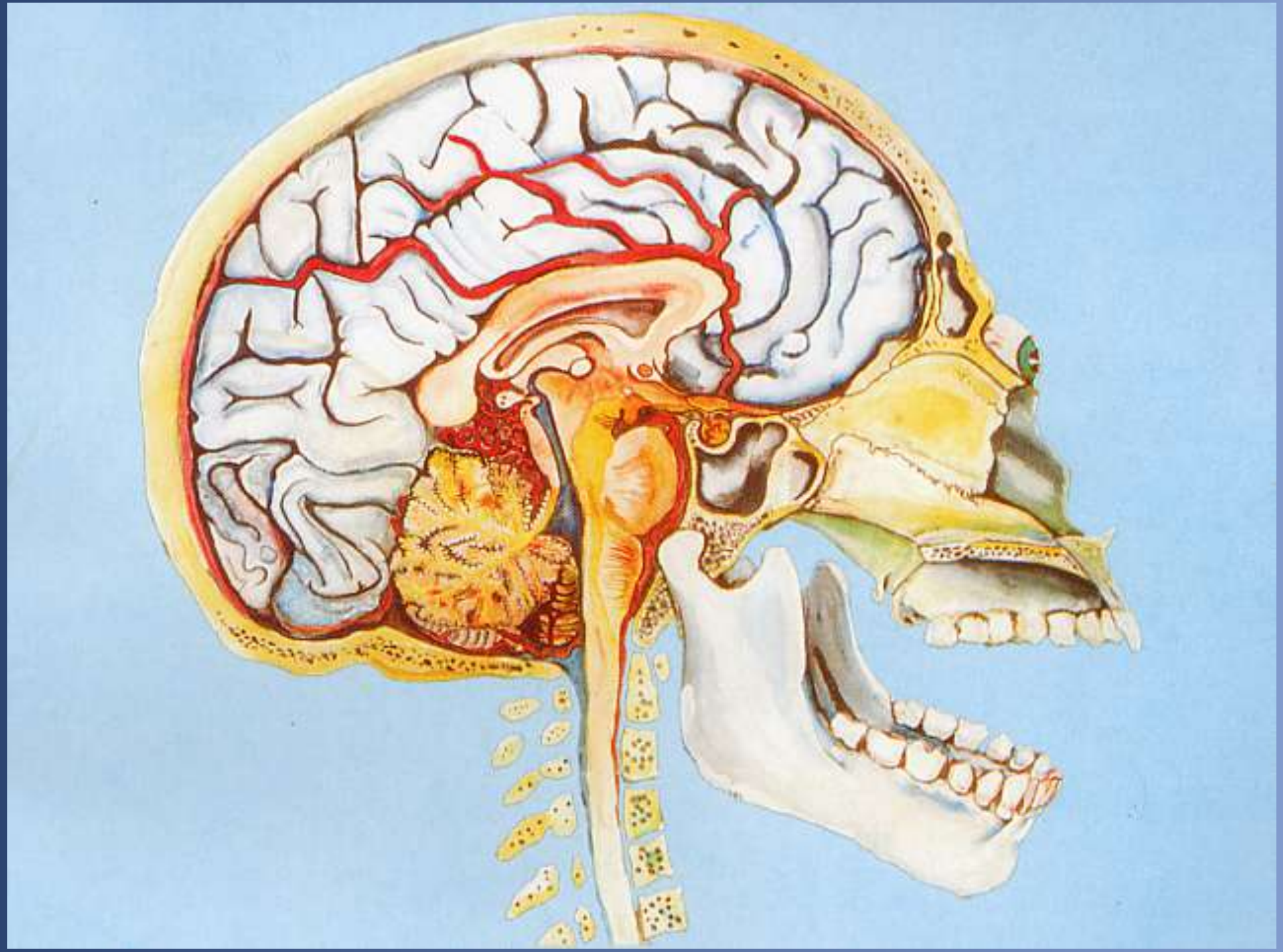
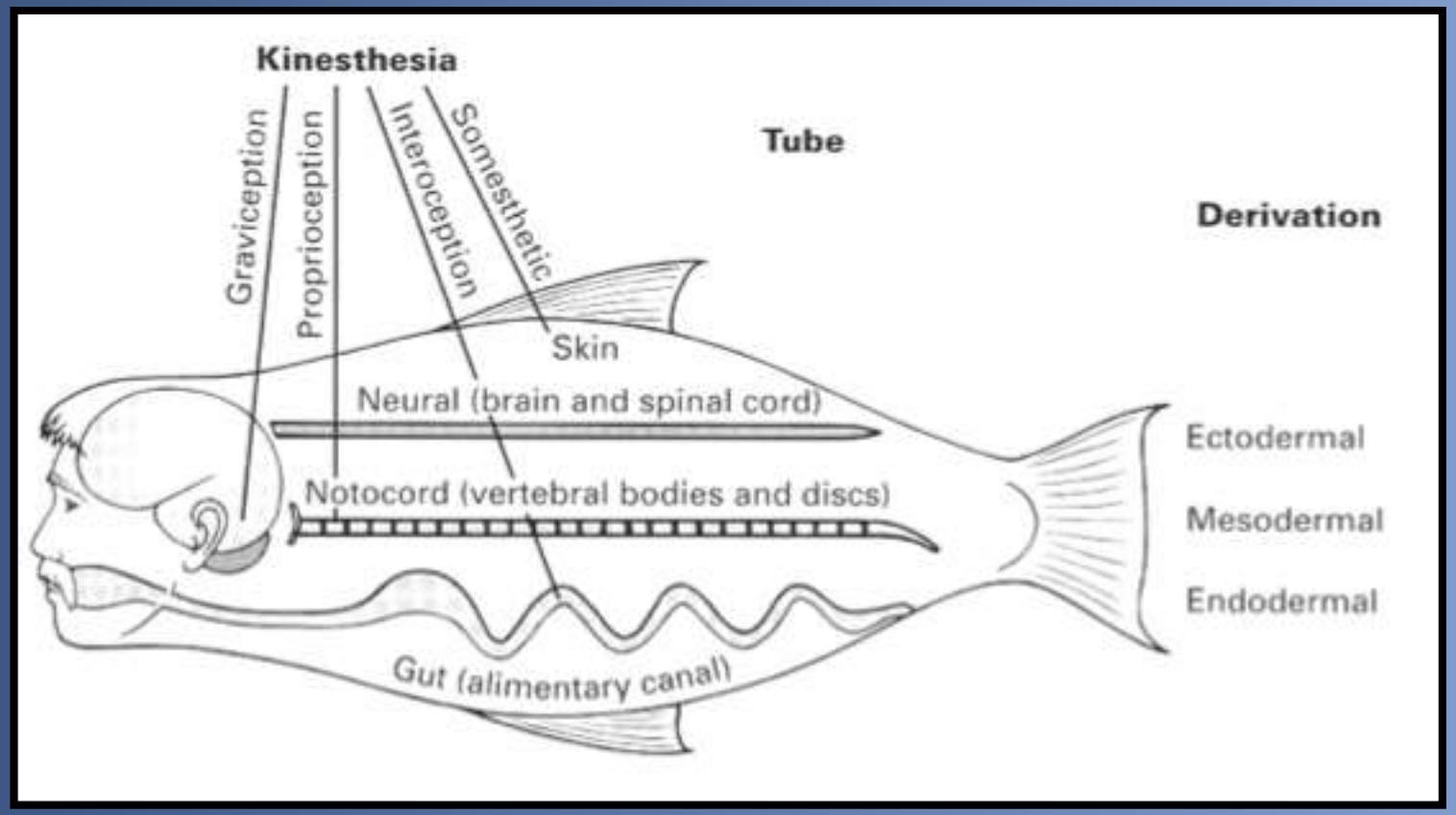
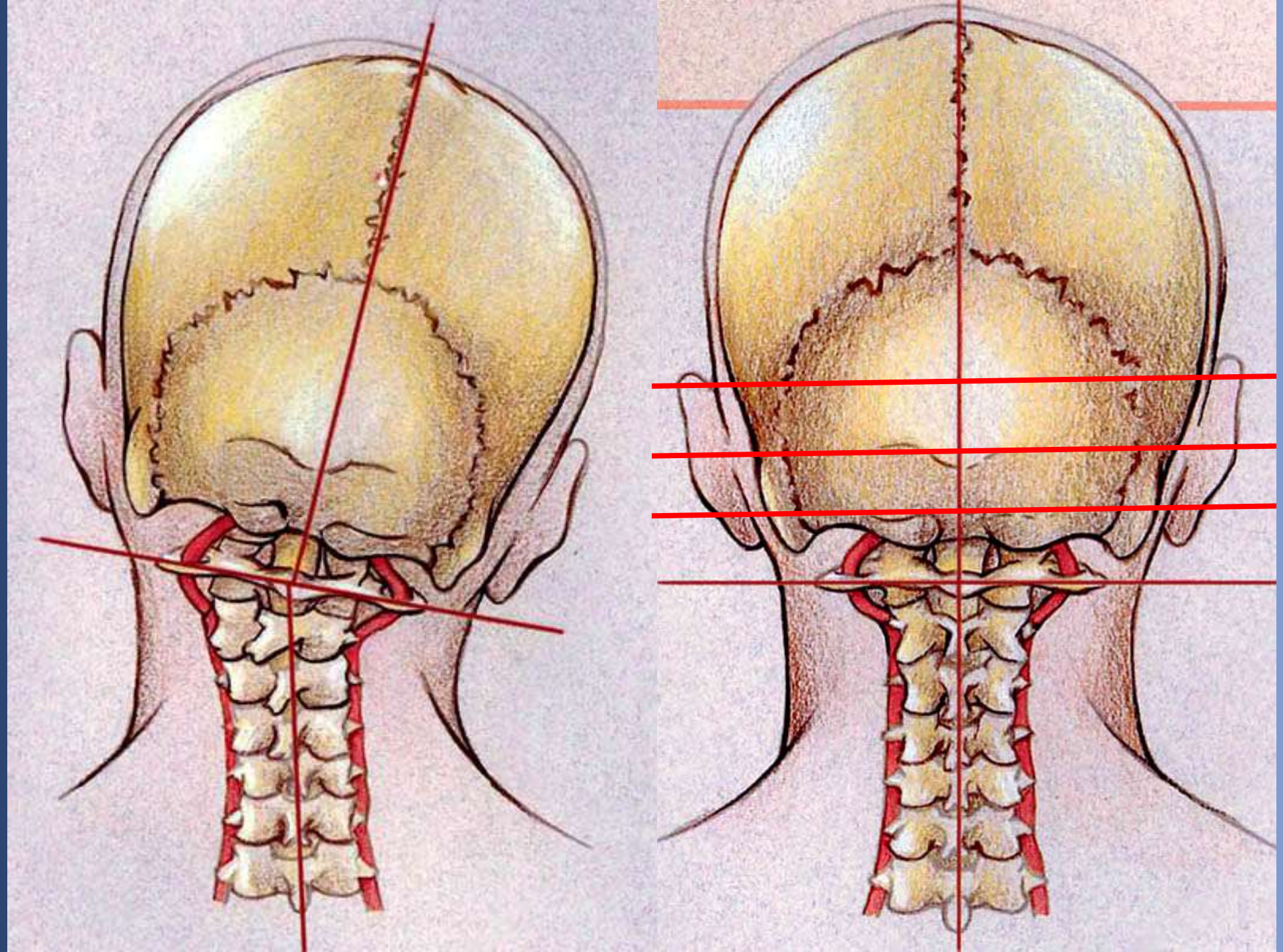


Trigeminal nerve

- "...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

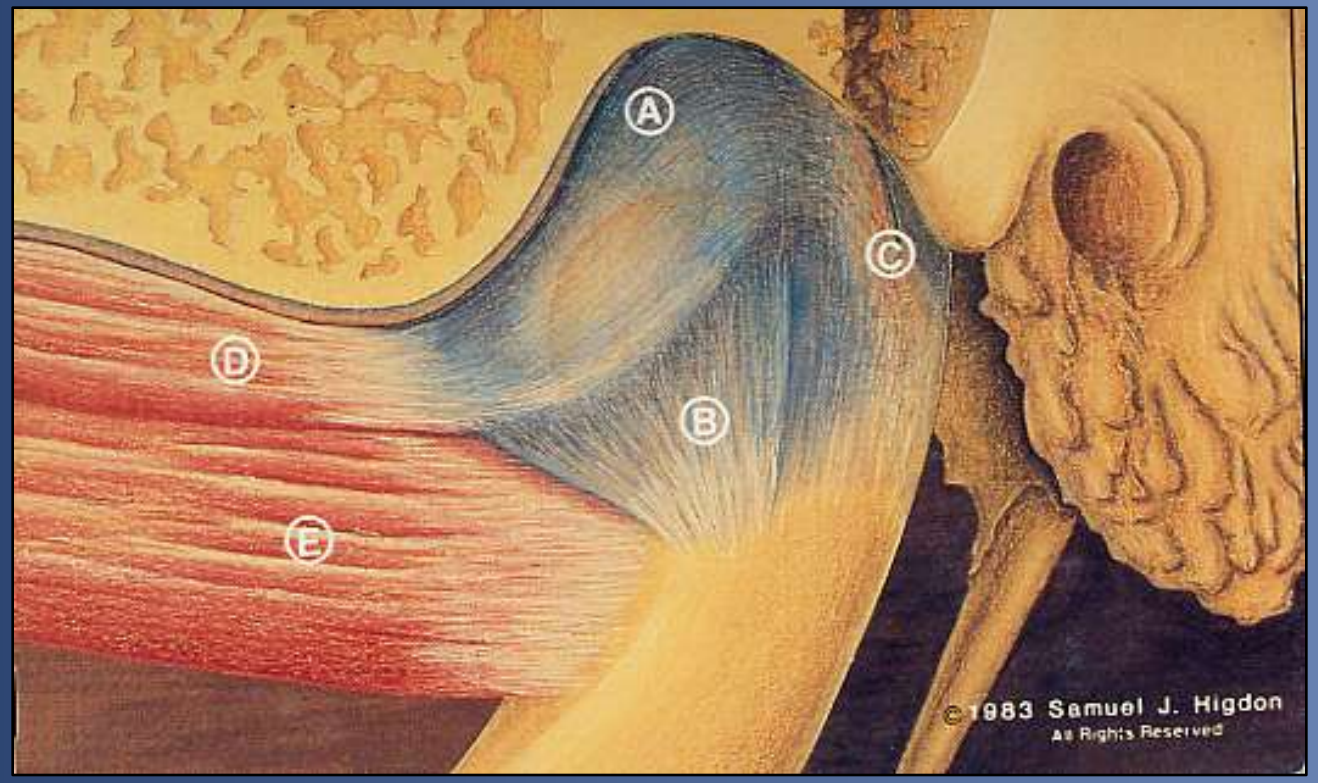
importance ↑

← Limbic emotional →

Planes

- Optic
- Otic
- Occlusal

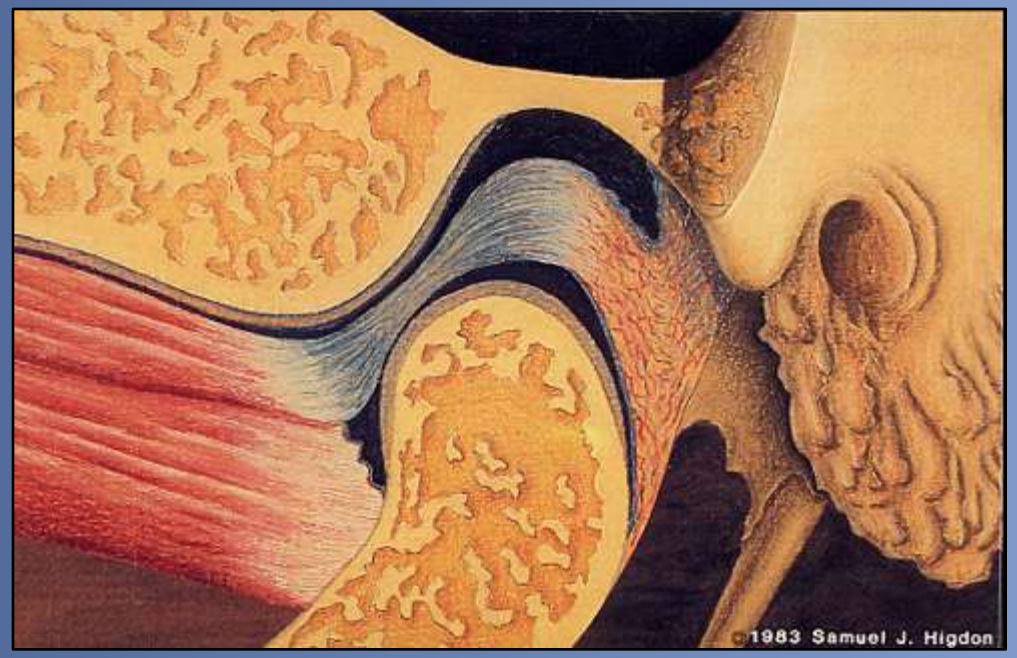
Local Biomechanics



- 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...

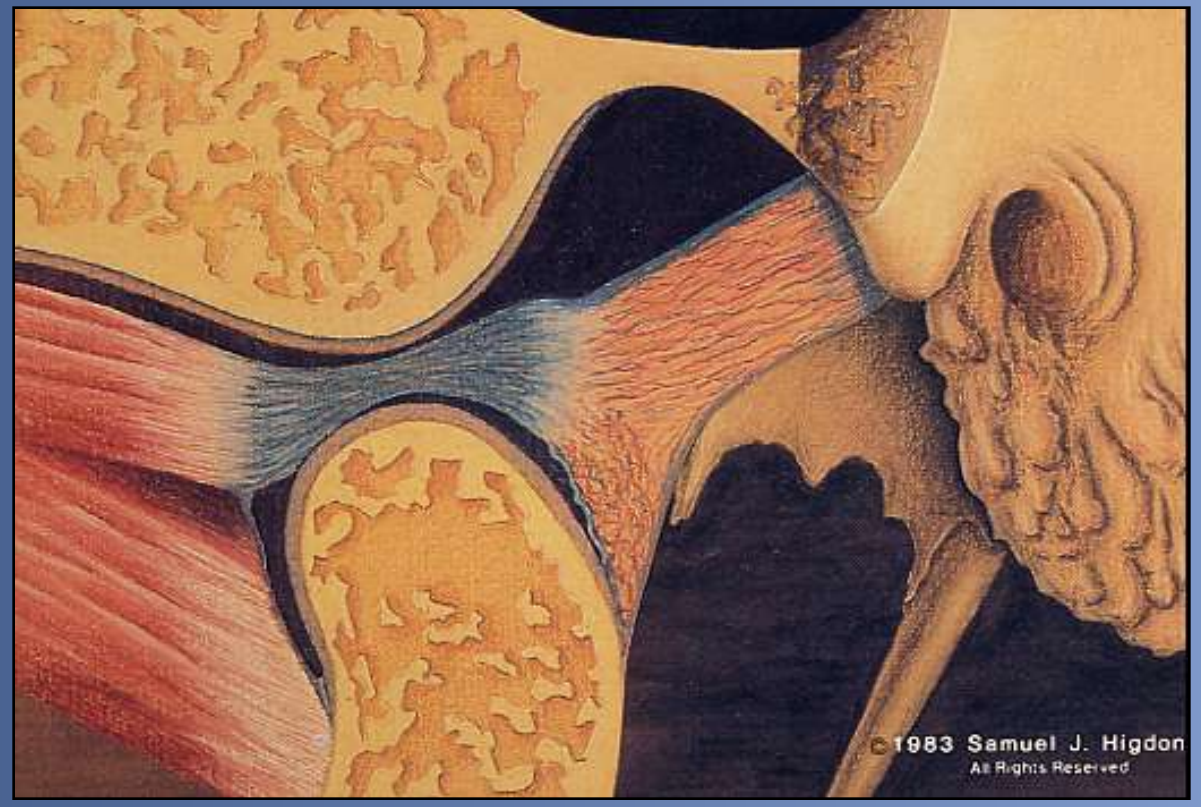
TMJ (initiation of opening)

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

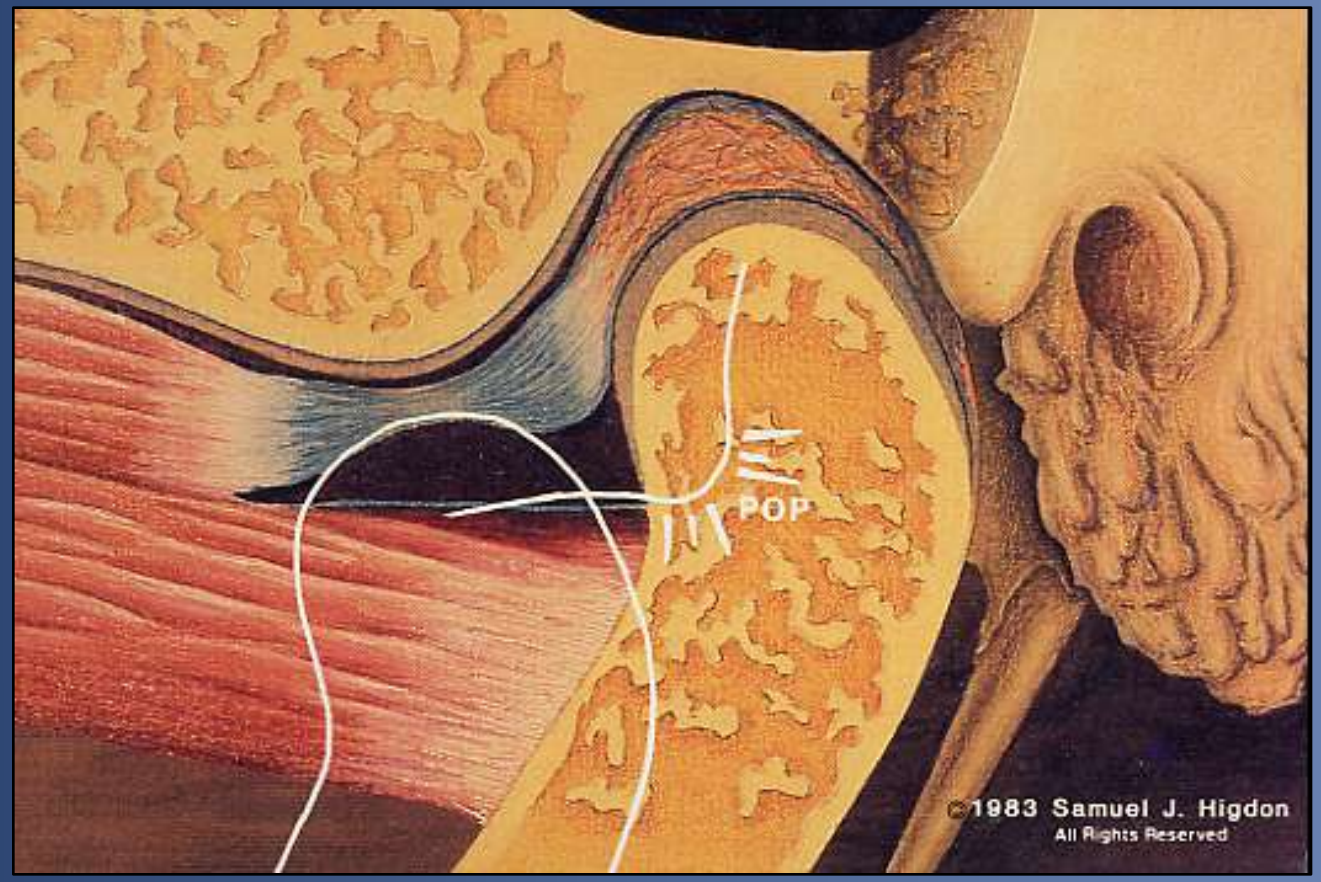


Opening

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



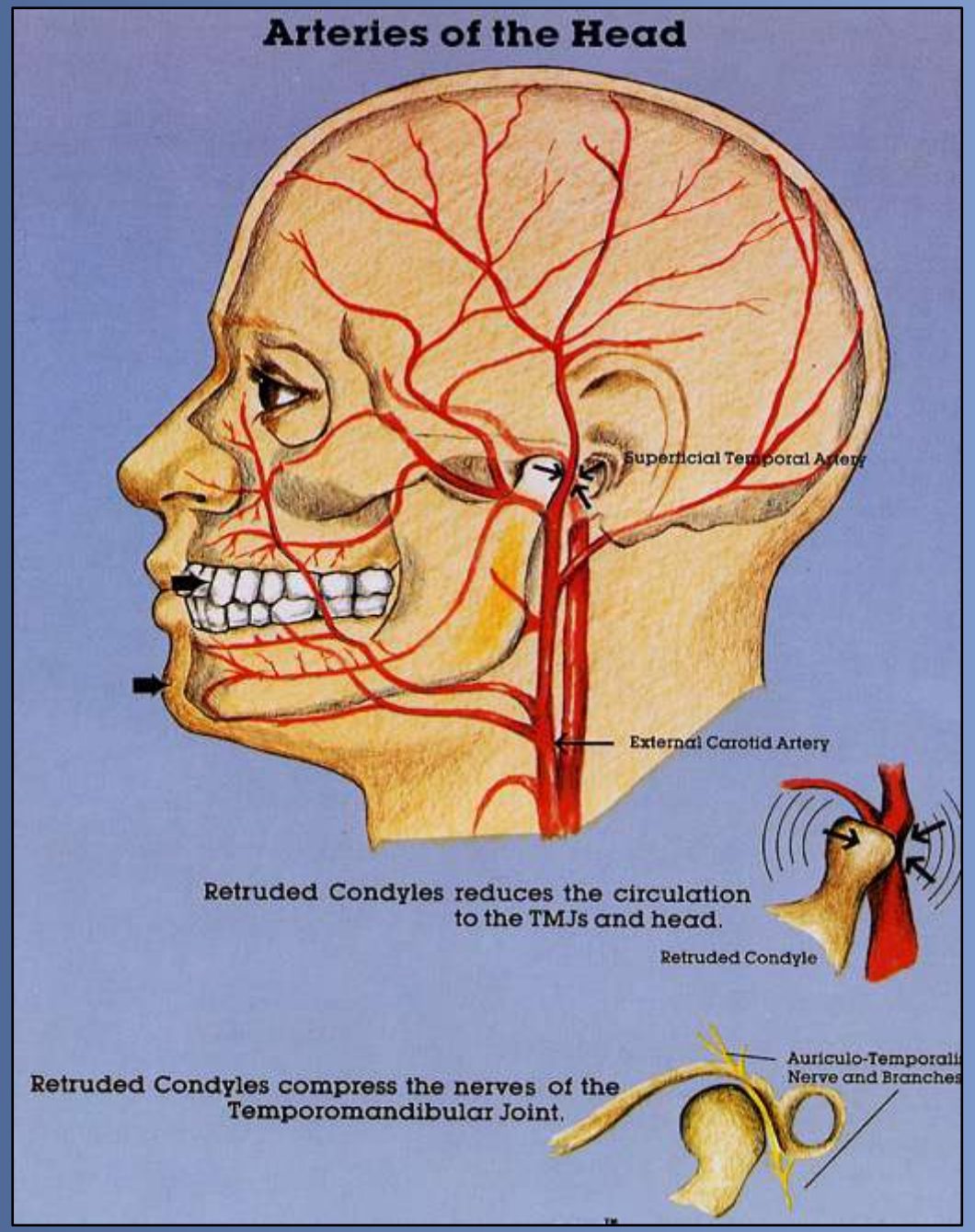
Reciprocal Click



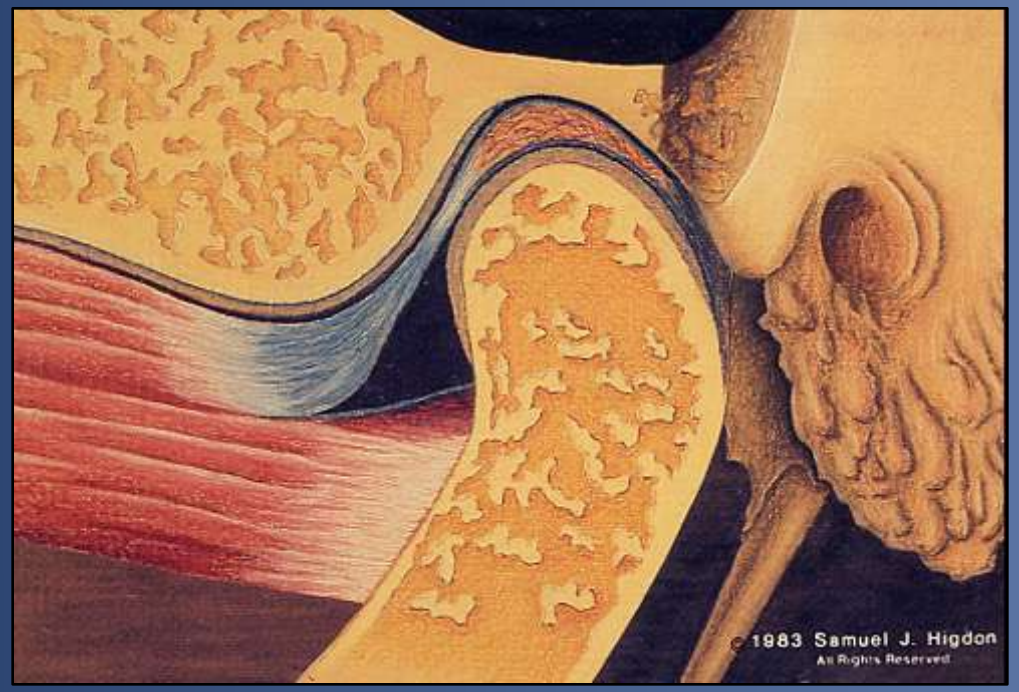
- Antr and medial displacement – most common.
- Secondary to trauma to collateral ligament
- Condyle now → pressure on sensitive retrodiscal tissue
- Thick postr capsule → reciprocal click

Retrodiscal tissue

- Impingement
  - Ischaemia
  - Pain
  - Nerve impingement



TMD mid-late phase i)

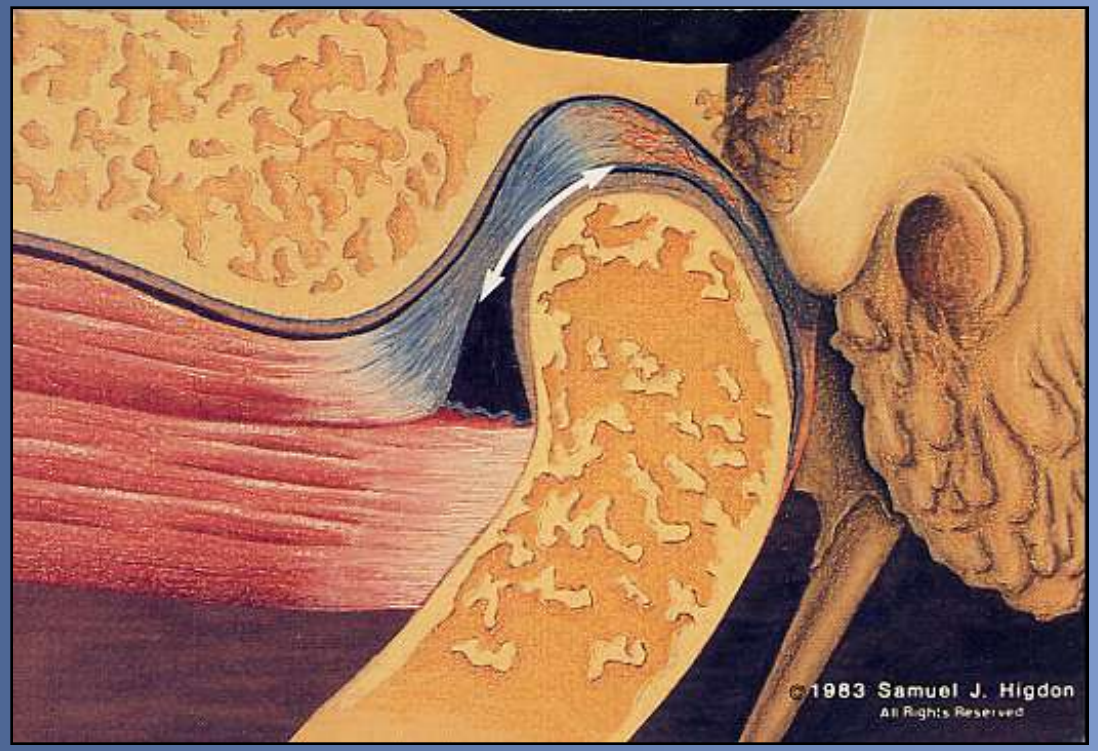


- Posterior disc becomes thin over time
- Anterior disc can become thickened
- Disc can become wedge shaped (previously biconcave)
- Wet water-melon seed!

Conservative management very difficult

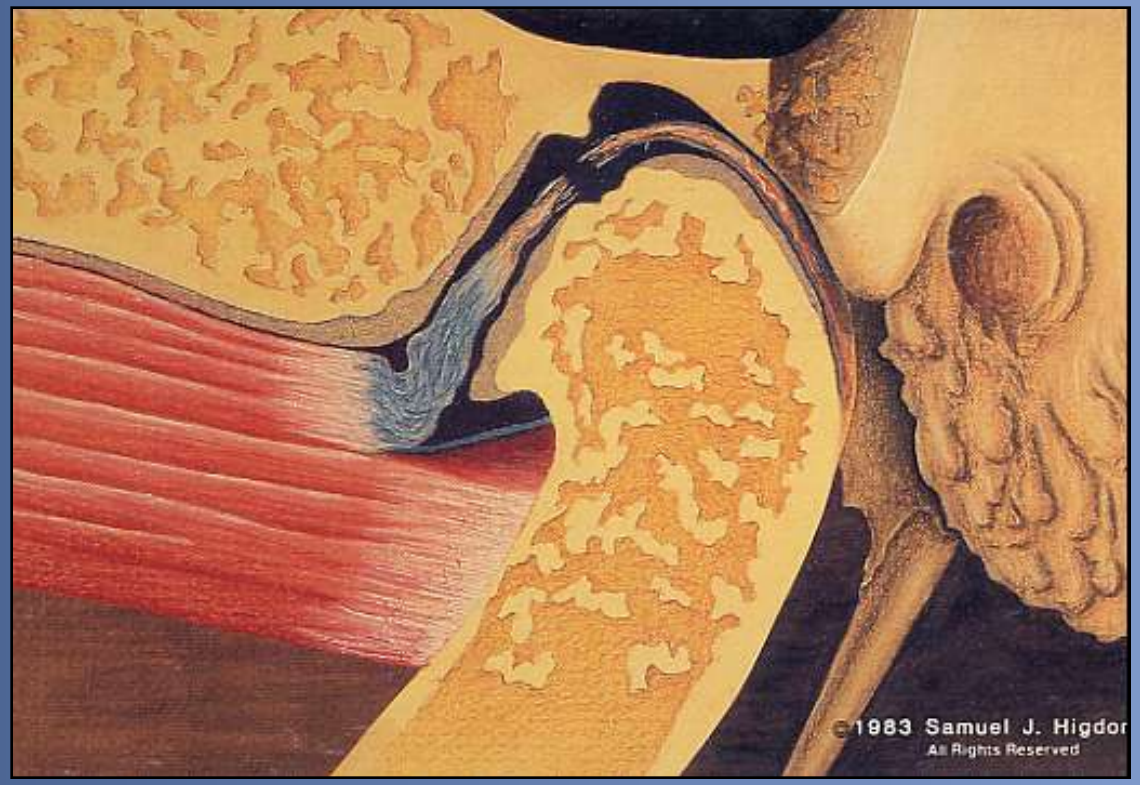
Mid-Late Phase ii)

- 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

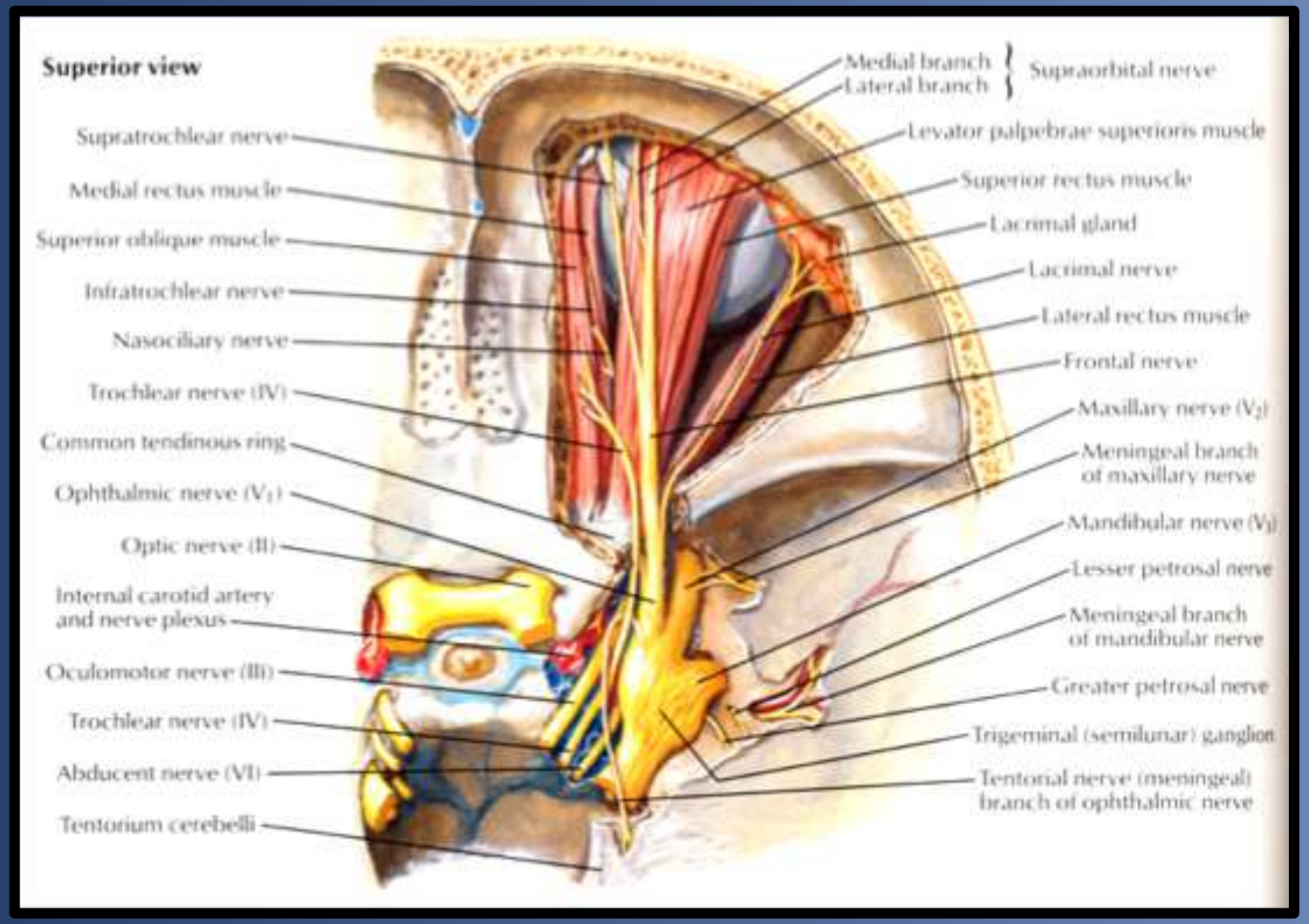
Signs of TMD

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

Signs of TMD

- Baggy eyes
  - Food intolerance
  - Parasites / dysbiosis

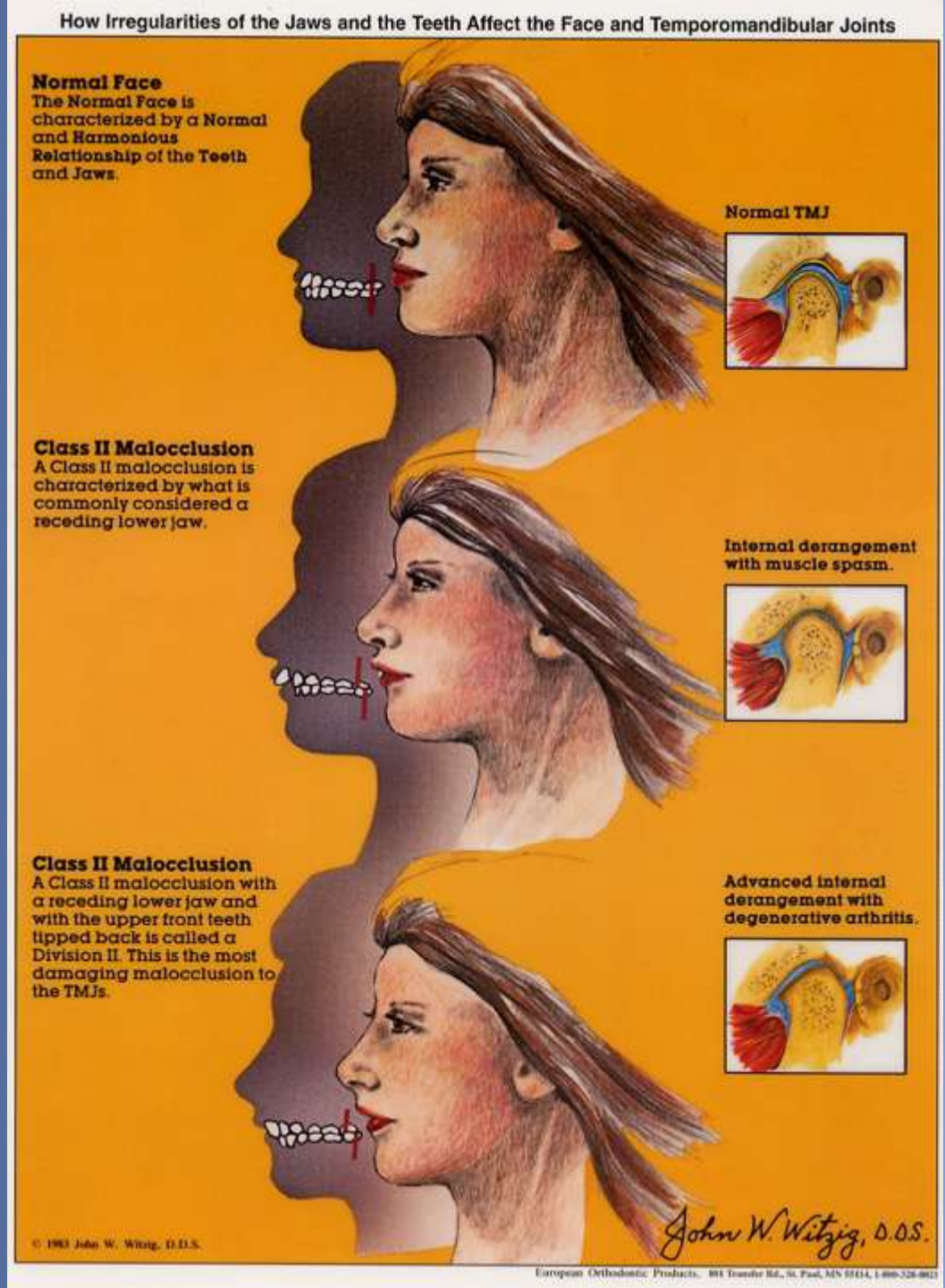
Signs of TMD



- “Ticks”
- Eye angulation

Causes of TMD

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



Class II/III

Class II =

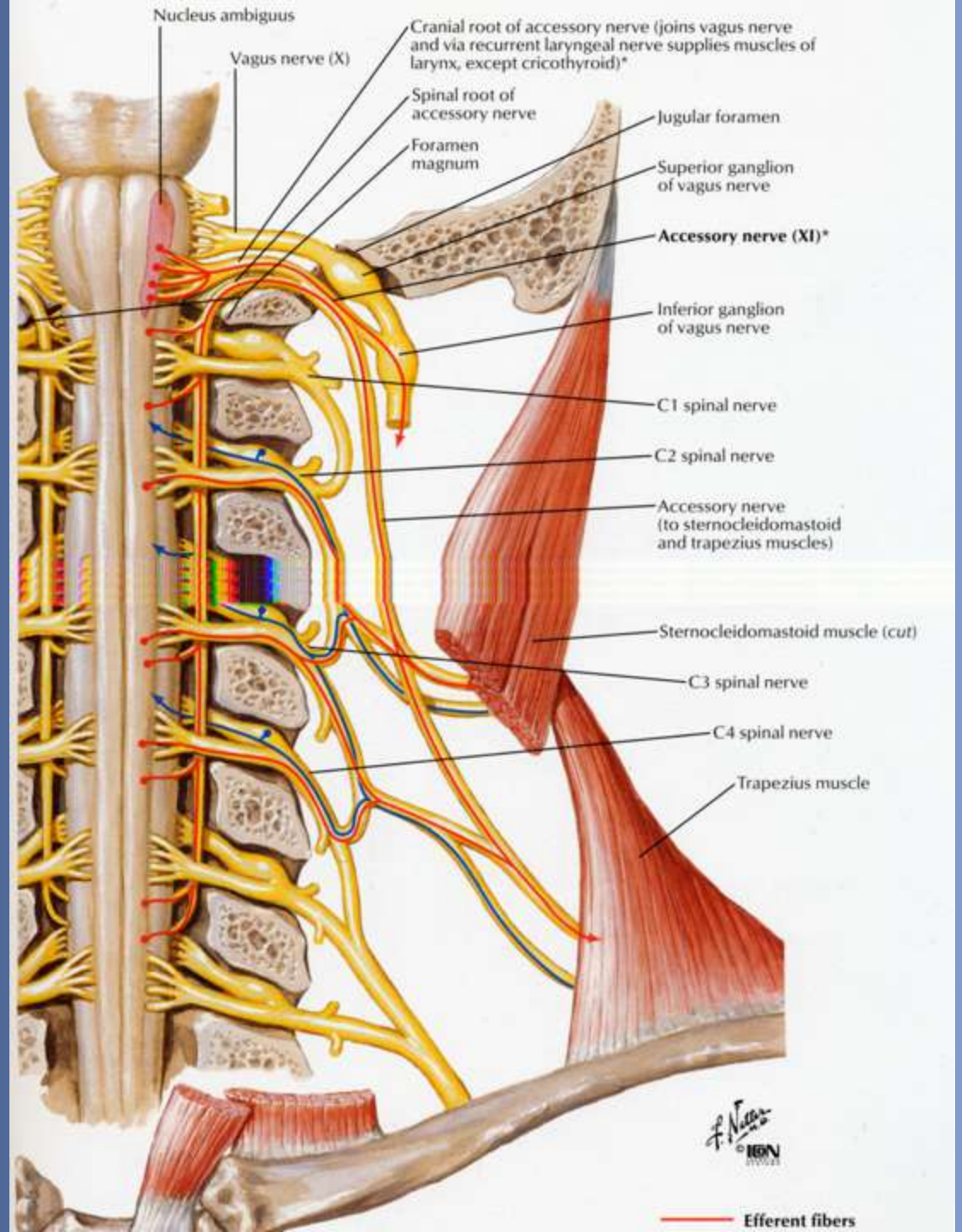
"***Goofy***"

Class III

= "***Desperate Dan***"

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

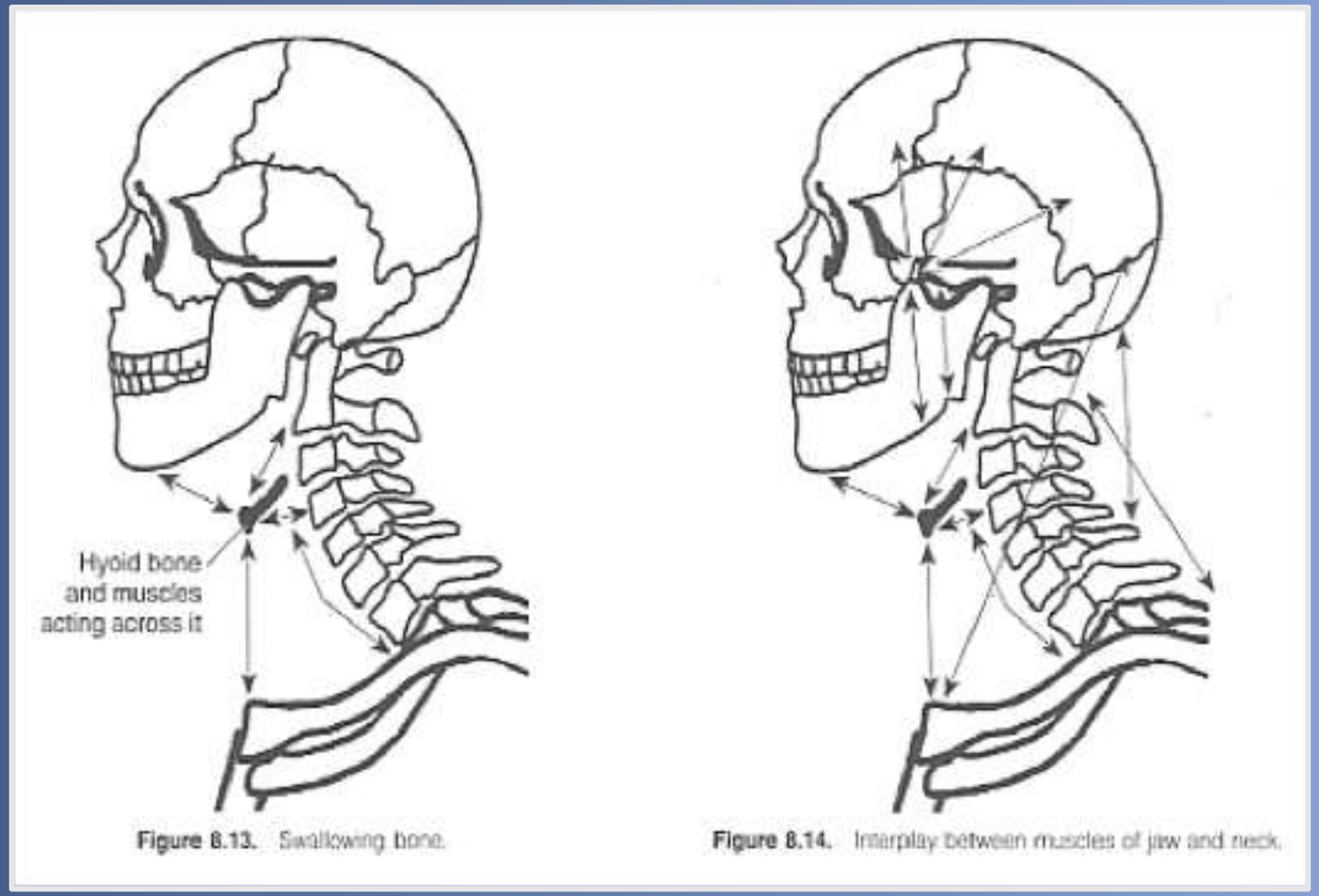


Figure 8.13. Swallowing bone.

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