# 치과의사가 왜 AK를 해야할까?

# Dentist = Dent ( Tooth )
# + ---ist

Artist, apologist, pianist, scientist

**D.D.S. = Doctor of Dental Surgery**

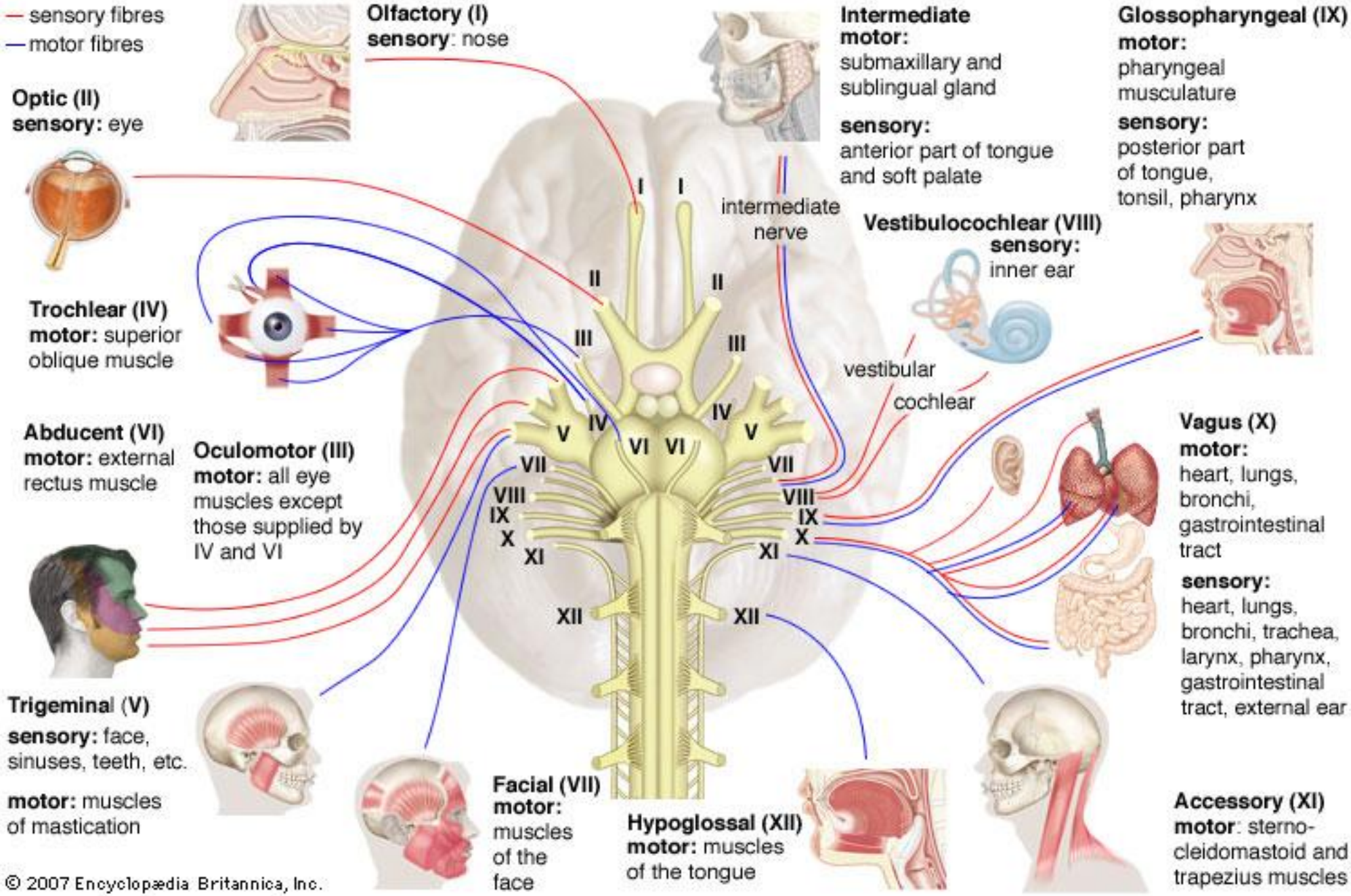
***D.M.D. = Doctor of Medicine in Dentistry***
***Doctor of Dental Medicine***


A **barber** (from the **Latin *barba*, "beard**") is a person whose occupation is mainly to cut, dress, groom, style and shave men's and boys' hair. In previous times, barbers (known as **barber surgeons) also performed surgery and dentistry.** With the development of safety razors and the decreasing prevalence of beards, in English-speaking cultures, most barbers now specialize in cutting men's scalp hair as opposed to facial hair.

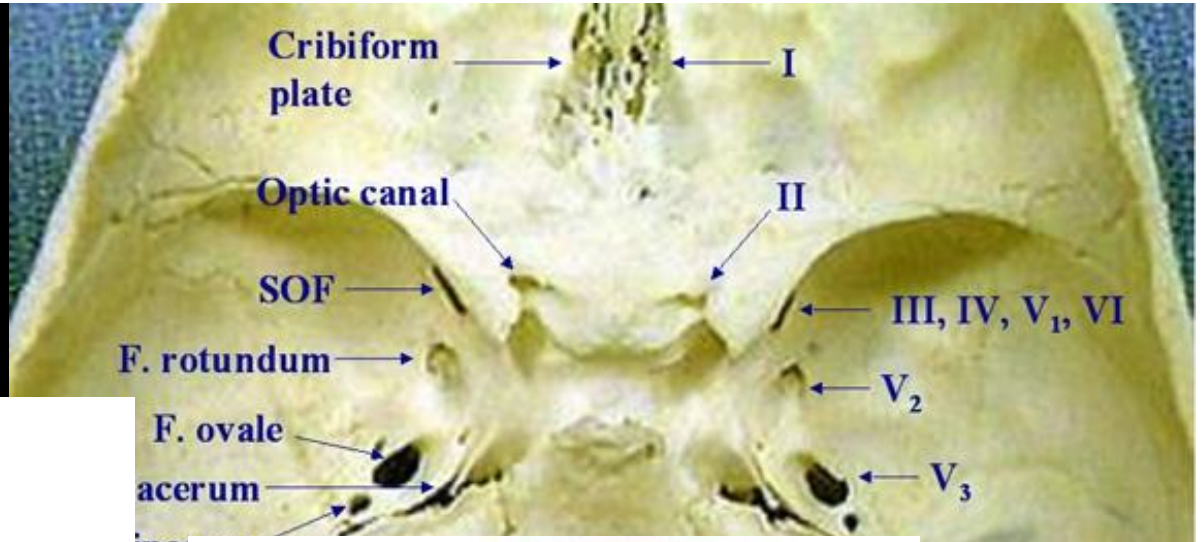
Known as barber-surgeons, they also took on such tasks as pulling teeth, setting bones and treating wounds. **Ambroise Pare, a 16th-century Frenchman considered the father of modern surgery, started his career as a barber-surgeon.**
The look of the barber pole is linked to bloodletting, **with red representing blood and white representing the bandages used to stem the bleeding. The pole itself is said to symbolize the stick that a patient squeezed to make the veins in his arm stand out more prominently for the procedure.**

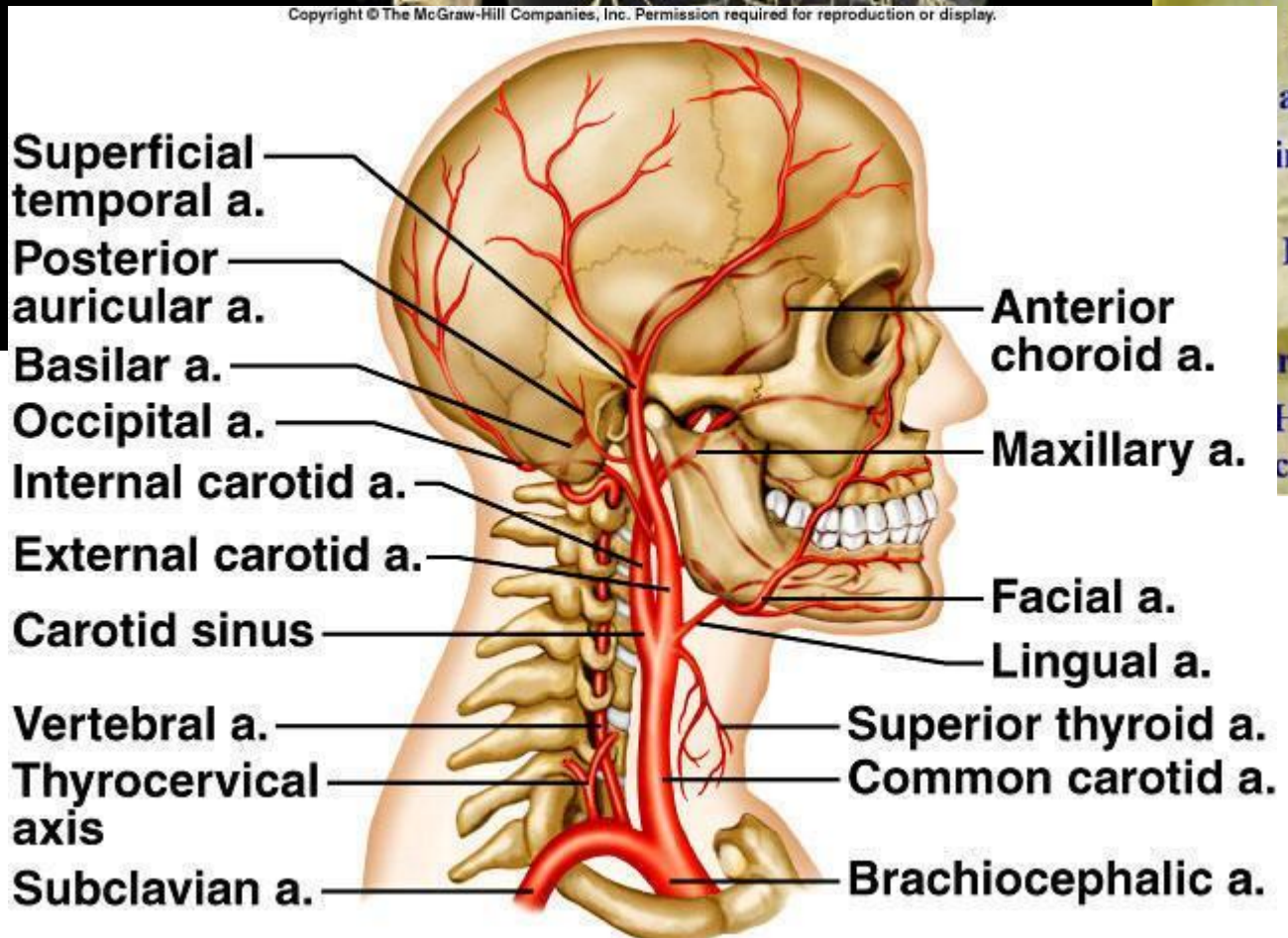
# BACK ALLEY BARBERS

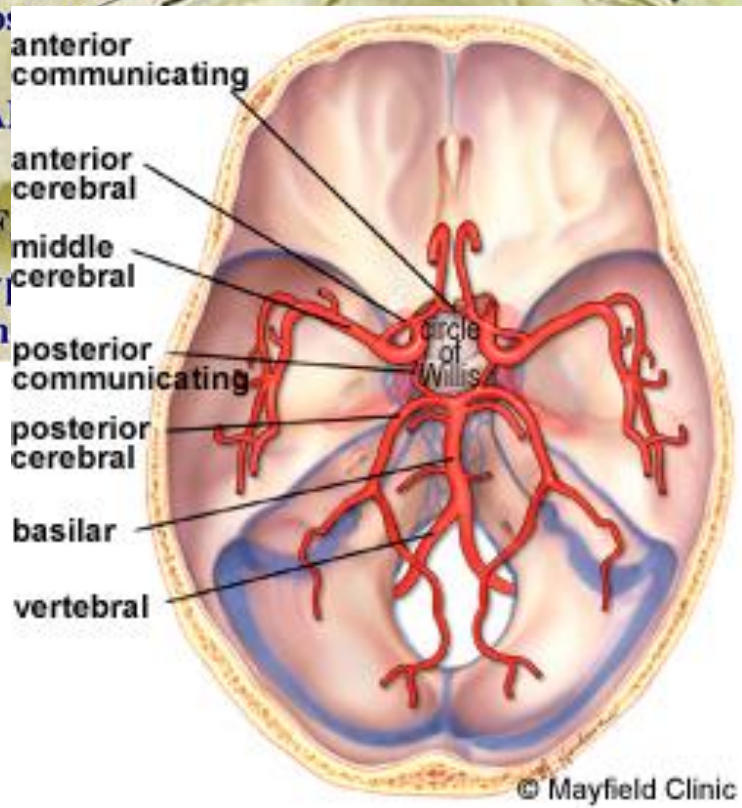
# 치과의사는
# 전신치료의사?



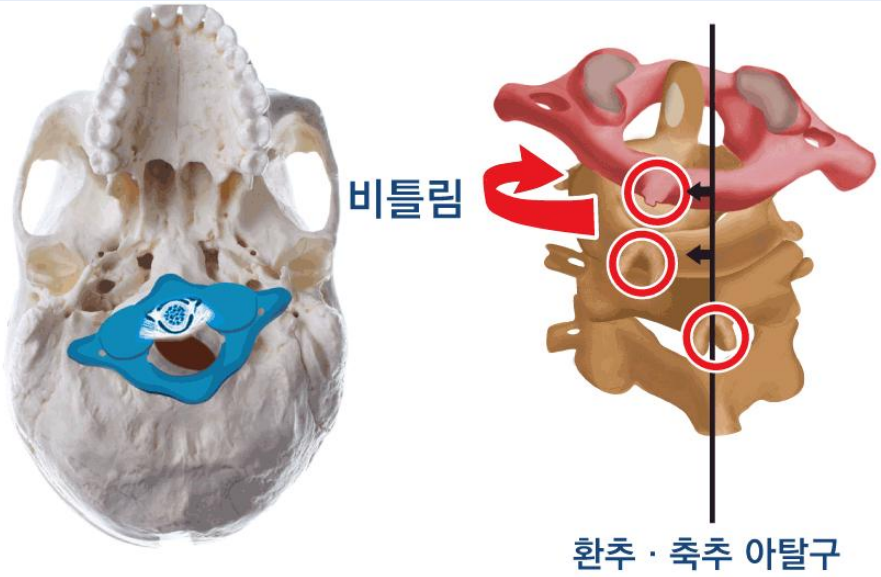




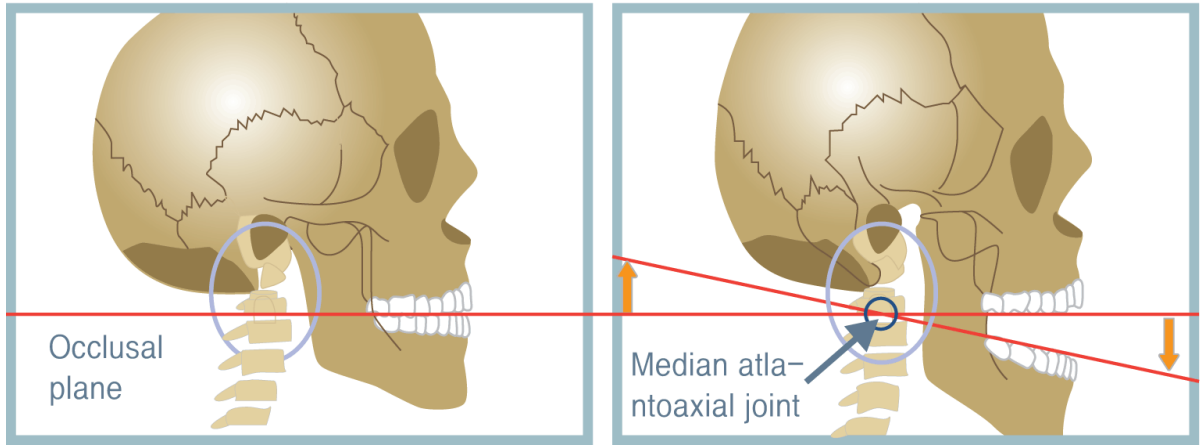



# 축추와 환추가 틀어졌을 때 신체변화

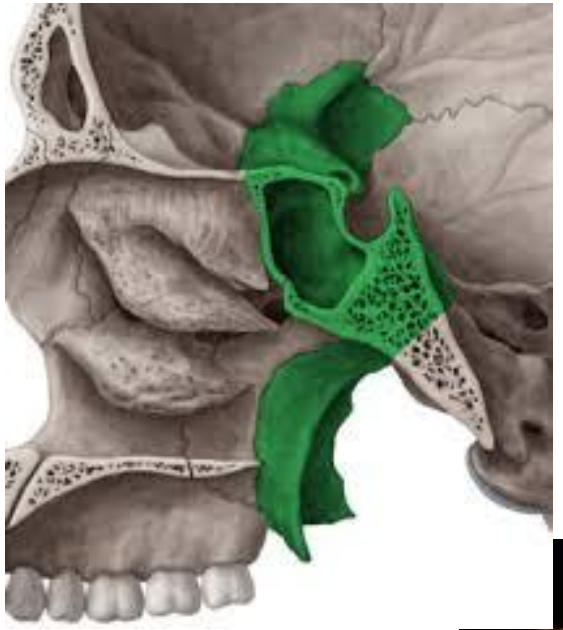


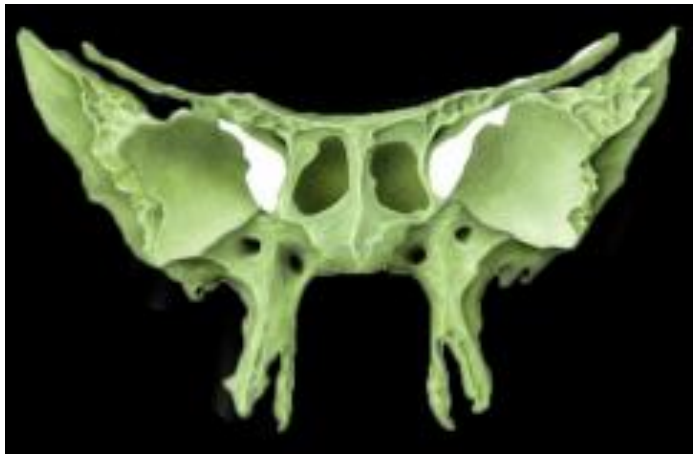

■ Axis (atlantoaxial joint), the axis of mandibular movement

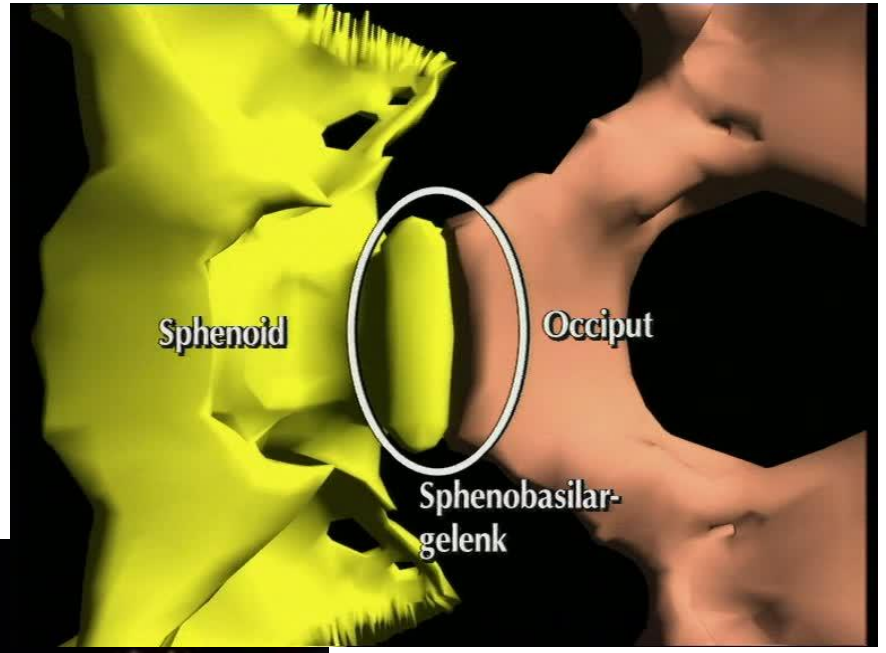


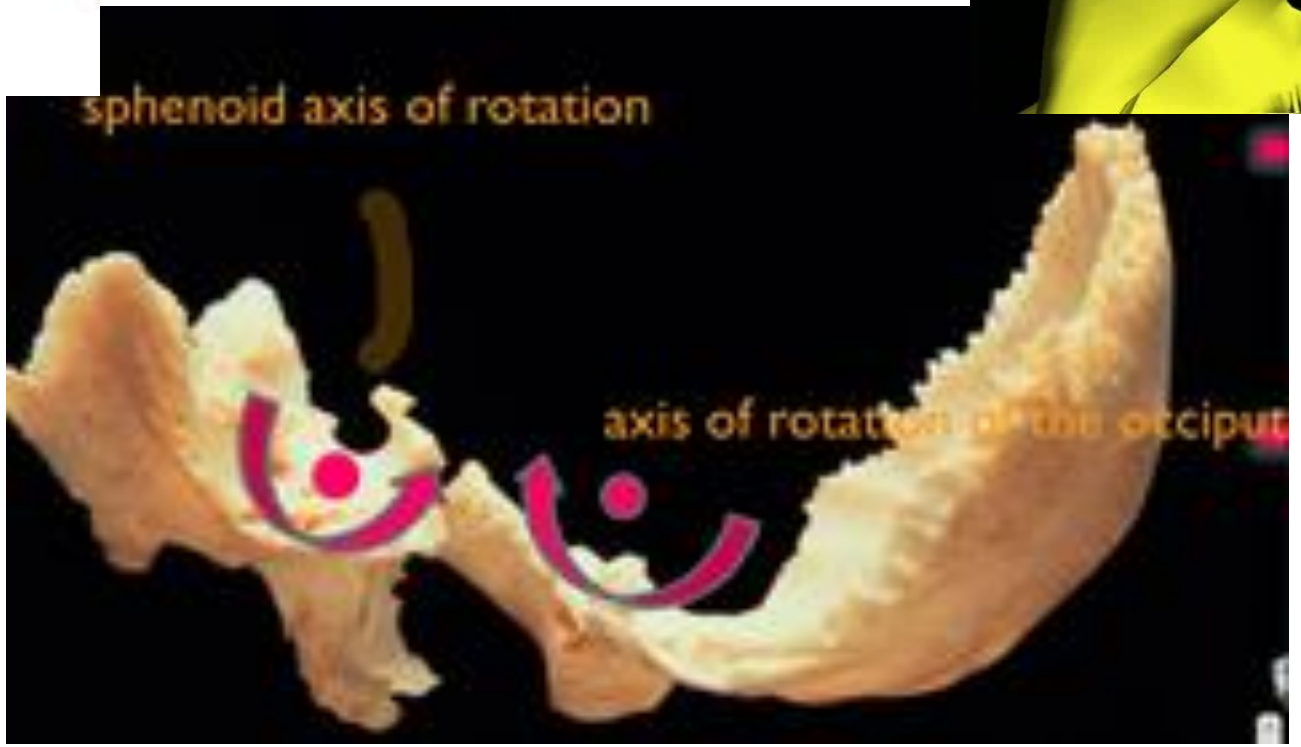

**Jurgular Foramen(CN 9,10,11)**


**뇌로 통하는 통로 이상**



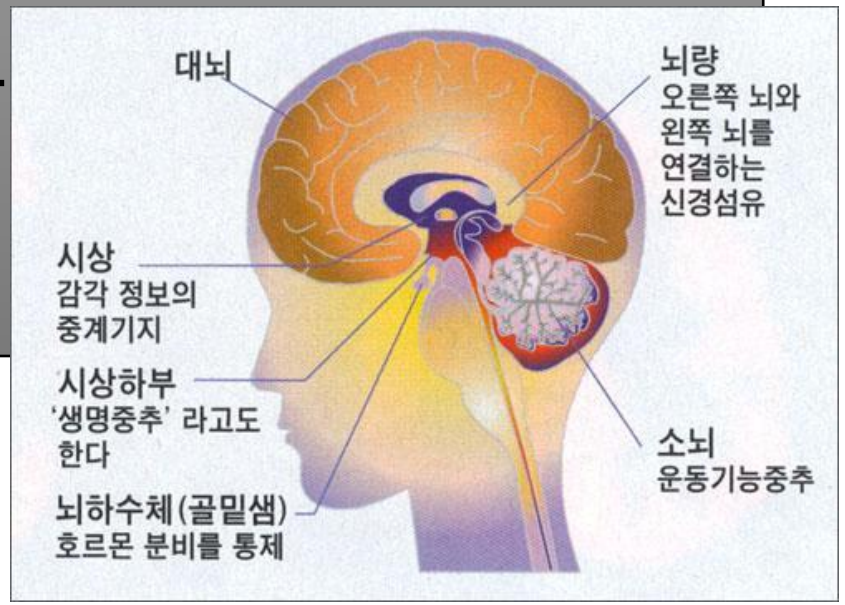


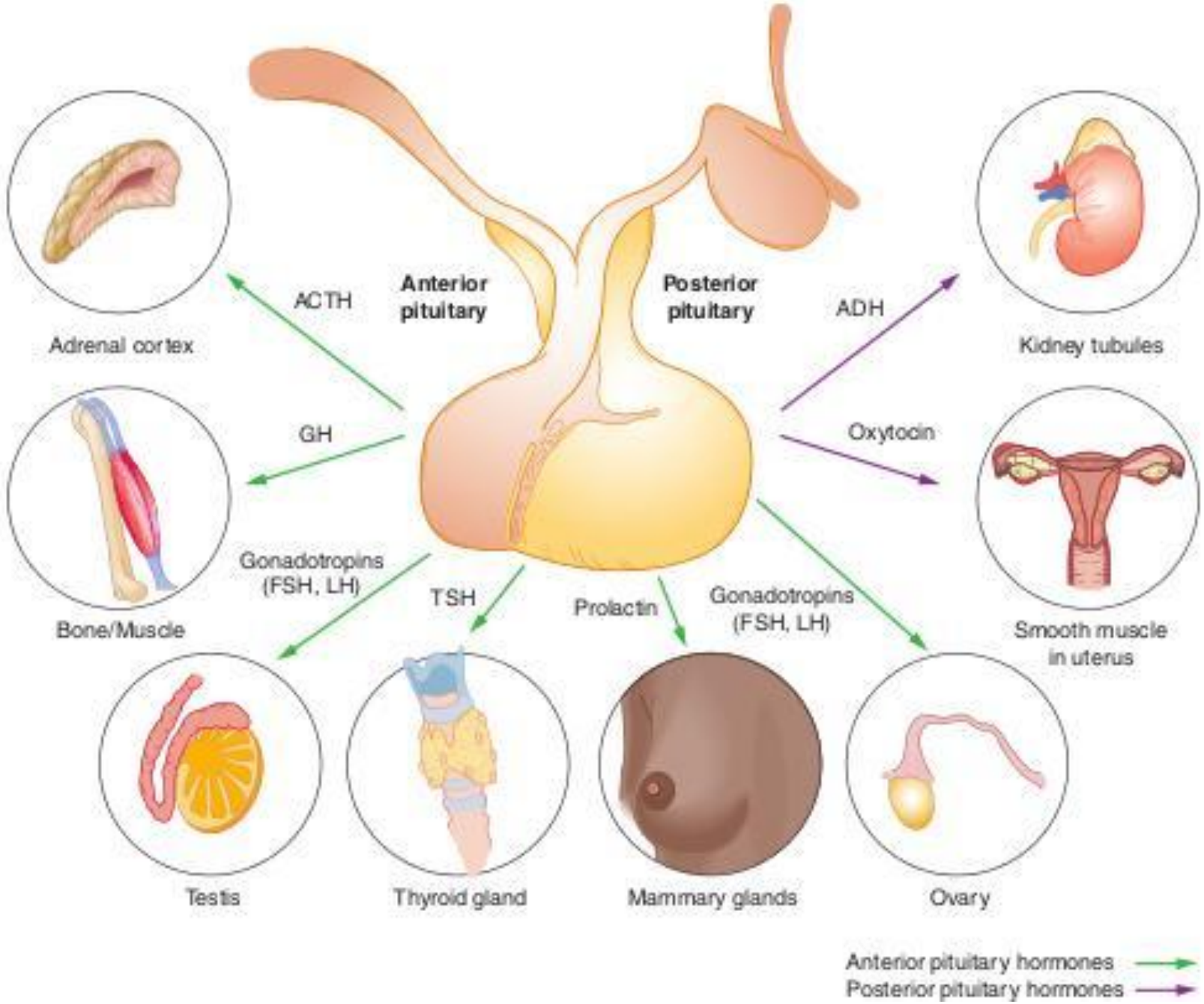

Sphenoid
Occiput
Sphenobasilar-
gelenk

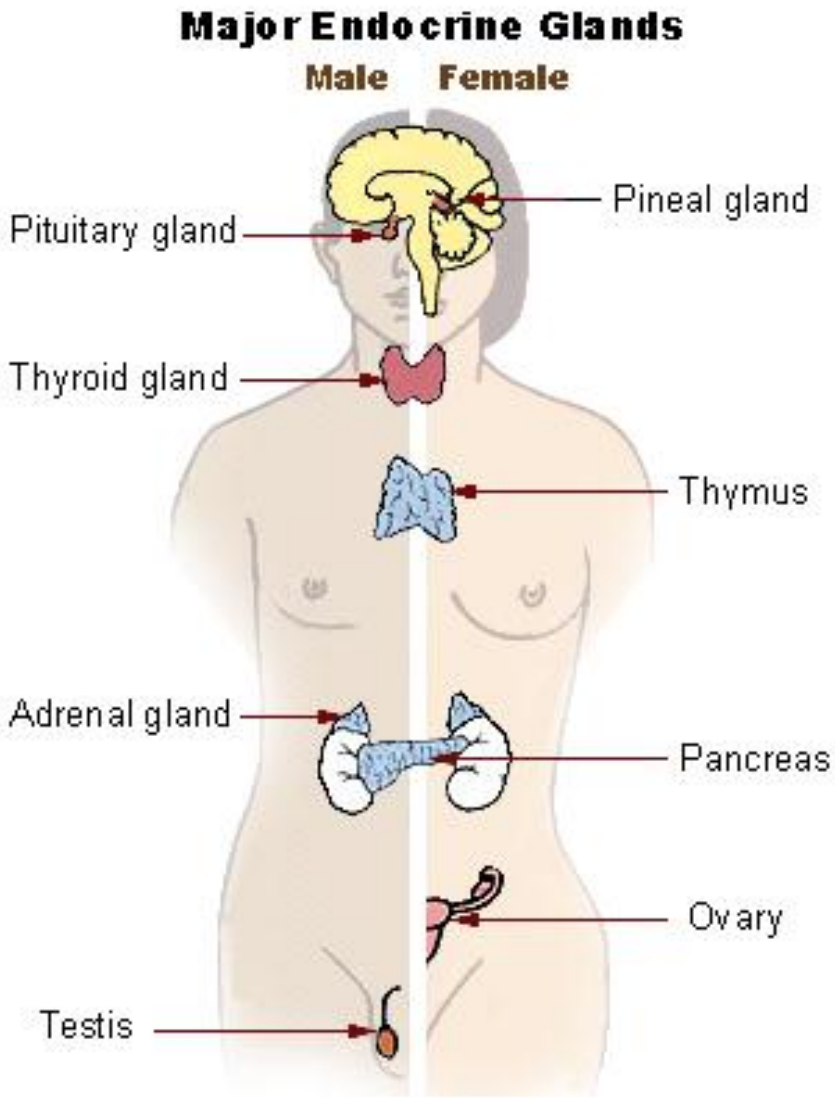

sphenoid axis of rotation

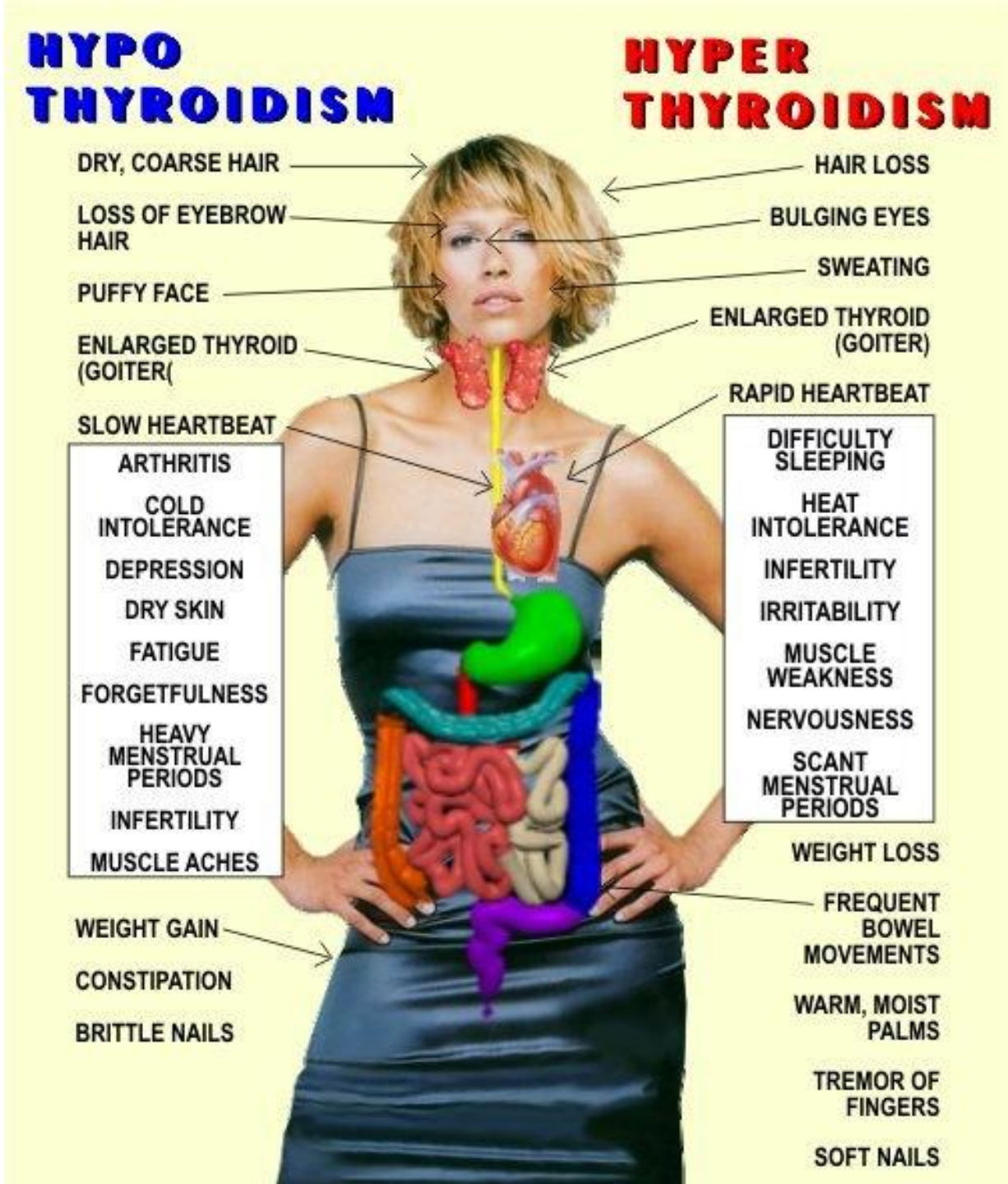
# 시상하부(Hypothalamus)의 역할

- 체중 증가에 대한 안정적인 '기준점'을 세워 놓아 **체내 열량 섭취와** 체중 조절에 영향
- 외부 온도의 변화에 대응하여 체온을 조절.
- 각성 상태와 **수면**을 결정하는 중
- **수분의 섭취와 갈증도 조절**

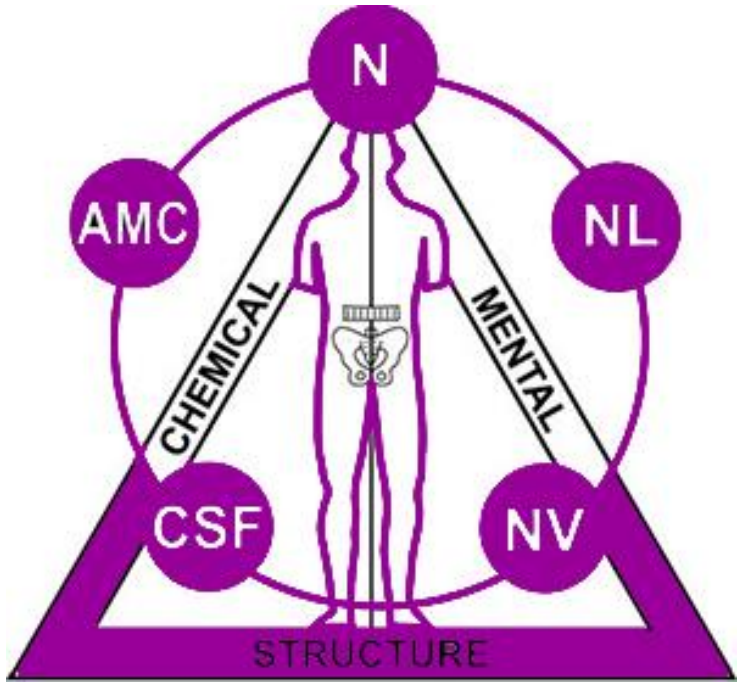



Anterior pituitary
Posterior pituitary
ACTH
Adrenal cortex
GH
Bone/Muscle
Gonadotropins (FSH, LH)
Testis
TSH
Thyroid gland
Prolactin
Mammary glands
Gonadotropins (FSH, LH)
Ovary
ADH
Kidney tubules
Oxytocin
Smooth muscle in uterus
Anterior pituitary hormones
Posterior pituitary hormones

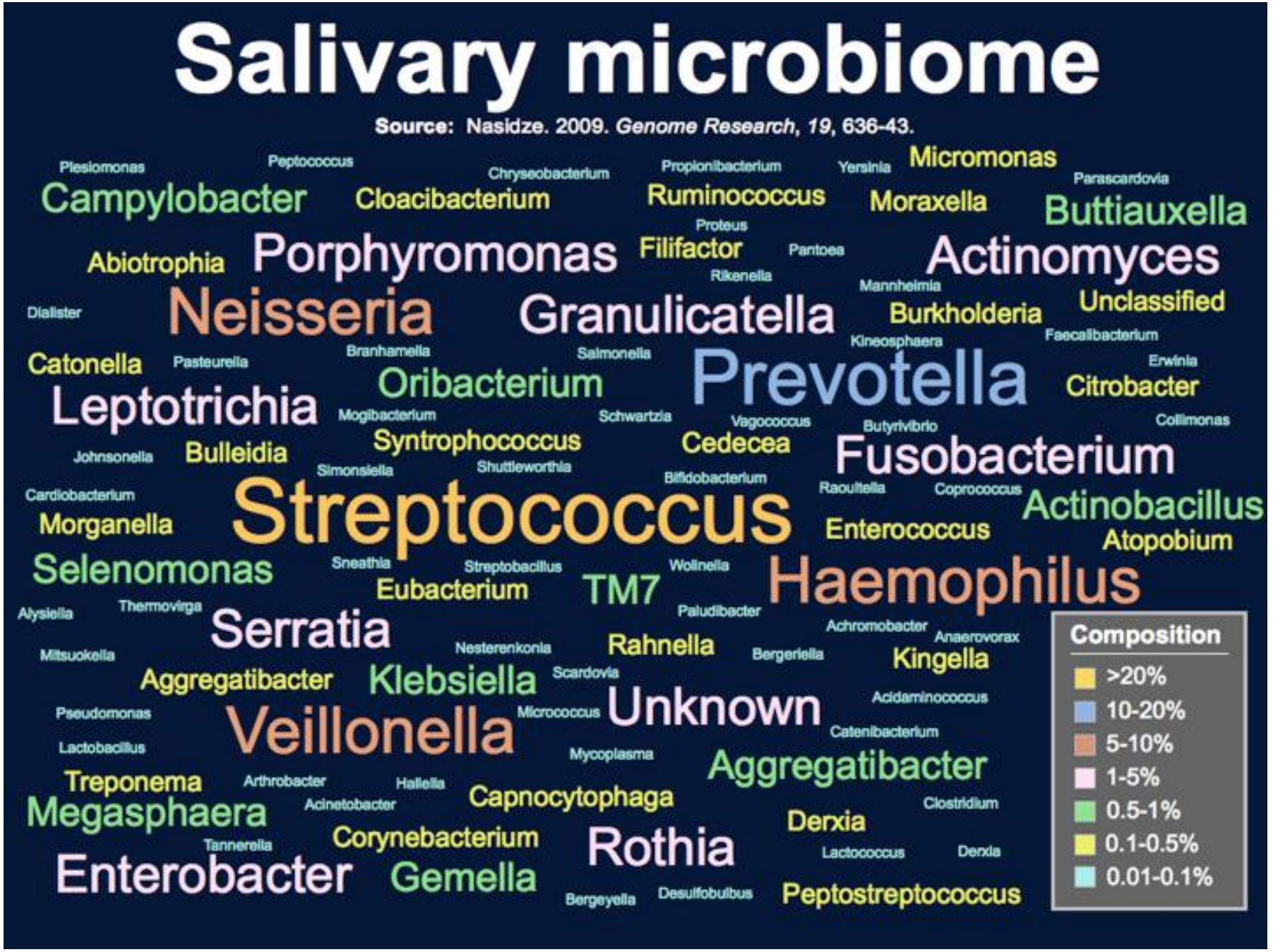

Major Endocrine Glands
Male
Female
Pituitary gland
Pineal gland
Thyroid gland
Thymus
Adrenal gland
Pancreas
Ovary
Testis


HYPO THYROIDISM
HYPER THYROIDISM
DRY, COARSE HAIR
LOSS OF EYEBROW HAIR
PUFFY FACE
ENLARGED THYROID (GOITER(
SLOW HEARTBEAT
ARTHRITIS
COLD INTOLERANCE
DEPRESSION
DRY SKIN
FATIGUE
FORGETFULNESS
HEAVY MENSTRUAL PERIODS
INFERTILITY
MUSCLE ACHES
WEIGHT GAIN
CONSTIPATION
BRITTLE NAILS
HAIR LOSS
BULGING EYES
SWEATING
ENLARGED THYROID (GOITER)
RAPID HEARTBEAT
DIFFICULTY SLEEPING
HEAT INTOLERANCE
INFERTILITY
IRRITABILITY
MUSCLE WEAKNESS
NERVOUSNESS
SCANT MENSTRUAL PERIODS
WEIGHT LOSS
FREQUENT BOWEL MOVEMENTS
WARM, MOIST PALMS
TREMOR OF FINGERS
SOFT NAILS

# Inside Mouth



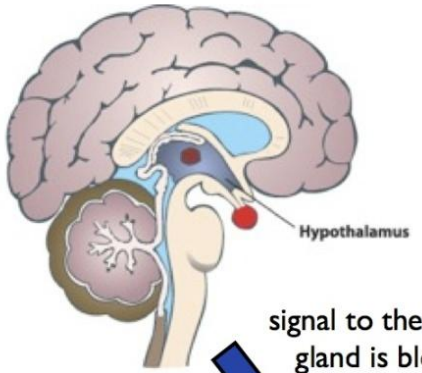

1. Ecosystem = Always 95$^0$F(35$^0$C), 100% humidty
2. Cell lining: 3-7일마다 바뀜
   ( Stratified squamous epthelium)
3. Bacteria :
   a. 600 -1000 types
   b. Total; 100억 정도( Plaque 1mg에 1억)
      - In Gut: 100조 정도
   c. 침에, 혹  plaque 속에 있다.
4. Brushing: 60% 정도만 도달됨
5. Saliva:
   a. 하루에 1L(34Oz) 생산,
   b. 1 티스푼(5ml)에 25억개 박테리아

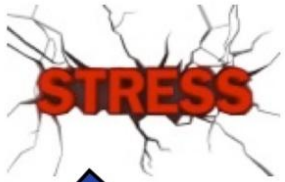

Salivary microbiome
Source: Nasidze. 2009. Genome Research, 19, 636-43.
Plesiomonas
Peptococcus
Chryseobacterium
Propionibacterium
Yersinia
Micromonas
Parascardovia
Campylobacter
Cloacibacterium
Ruminococcus
Moraxella
Buttiauxella
Proteus
Abiotrophia
Porphyromonas
Filifactor
Pantoea
Actinomyces
Rikenella
Mannheimia
Dialister
Neisseria
Granulicatella
Burkholderia
Unclassified
Kineosphaera
Faecalibacterium
Catonella
Pasteurella
Branhamella
Salmonella
Prevotella
Erwinia
Oribacterium
Citrobacter
Leptotrichia
Mogibacterium
Schwartzia
Vagococcus
Butyrivibrio
Collimonas
Syntrophococcus
Cedecea
Johnsonella
Bulleidia
Fusobacterium
Simonsiella
Shuttleworthia
Bifidobacterium
Raoultella
Coprococcus
Cardiobacterium
Streptococcus
Actinobacillus
Morganella
Enterococcus
Atopobium
Selenomonas
Sneathia
Streptobacillus
Wolinella
Haemophilus
Eubacterium
TM7
Alysiella
Thermovirga
Paludibacter
Achromobacter
Serratia
Anaerovorax
Nesterenkonia
Rahnella
Bergeriella
Kingella
Mitsuokella
Aggregatibacter
Klebsiella
Scardovia
Acidaminococcus
Unknown
Pseudomonas
Micrococcus
Veillonella
Catenibacterium
Lactobacillus
Mycoplasma
Aggregatibacter
Treponema
Arthrobacter
Hallella
Capnocytophaga
Clostridium
Megasphaera
Acinetobacter
Derxia
Tannerella
Corynebacterium
Rothia
Lactococcus
Derxia
Enterobacter
Gemella
Bergeyella
Desulfobulbus
Peptostreptococcus
Composition
>20%
10-20%
5-10%
1-5%
0.5-1%
0.1-0.5%
0.01-0.1%

# Dental Decay: A Systemic Disease

**Cariogenic Diet**
(sugar & refined carbohydrates)

↑ blood glucose



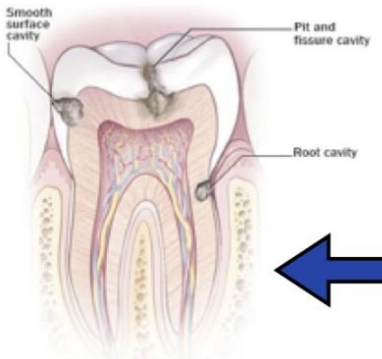




signal to the parotid gland is blocked

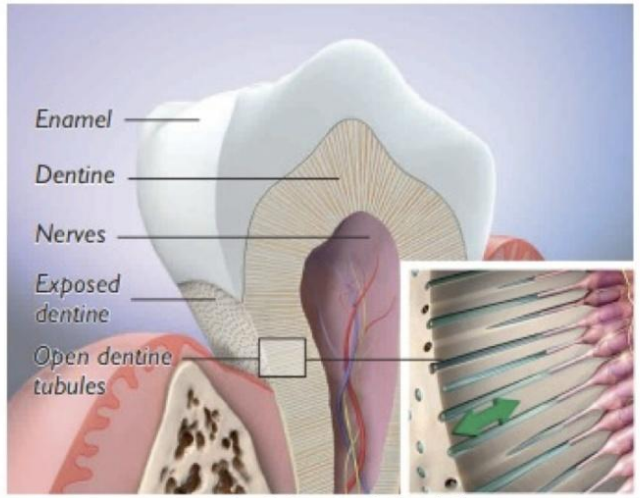
People with mercury fillings are more likely to be deficient in antioxidants

**Antioxidant deficiency**

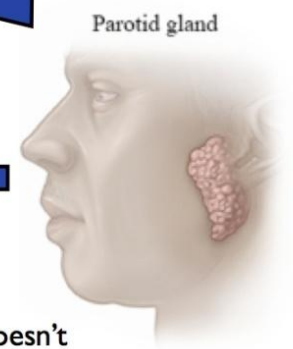
↓ Iodine
↓ vitamin D
↓ vitamin C
↓ selenium




**Dental Decay**
(penetration of bacteria & toxins into the tooth causing inflammation and the breakdown of tooth structure)




reversal of dentinal fluid flow



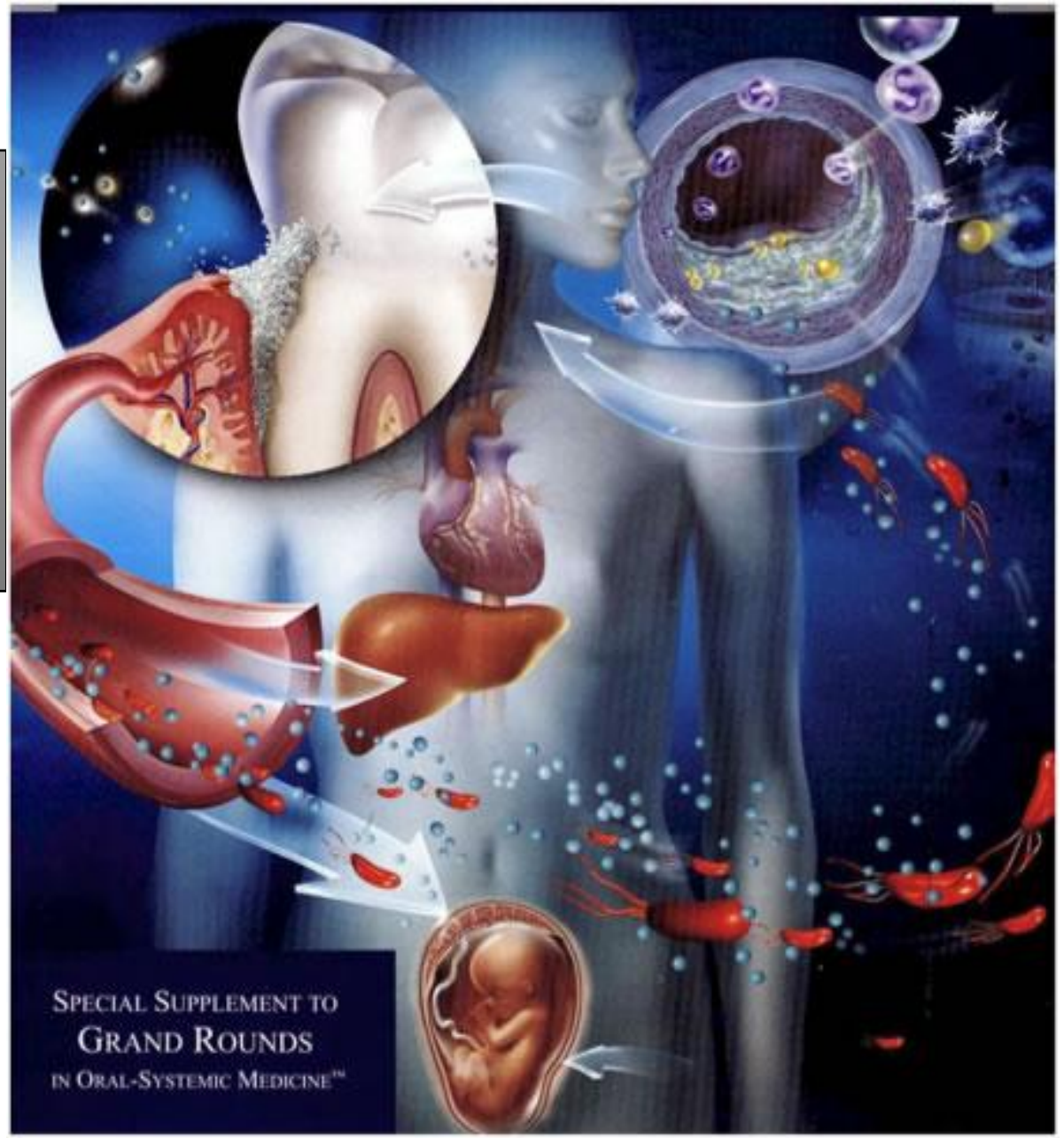

parotid gland doesn't release parotid hormone

Leonora J, Steinman RR. Evidence suggesting the existence of a hypothalamus-parotid gland endocrine axis. Endocrinology 1968;83: 807-815.
Leonora J, Tieche JM, Steinman RR. Further evidence for a hypothalamus-parotid gland endocrine axis in the rat. Arch Oral Biol 1993;38(10): 911-916.
Southward K. The Systemic Theory of Dental Caries. General Dentistry September/October 2011;367-373

# 치주병과 전신질환의 연관성

The association between periodontitis and systemic disease

서울대학교 치의학대학원 예방치학교실
질병관리본부 질병예방센터 만성병조사과



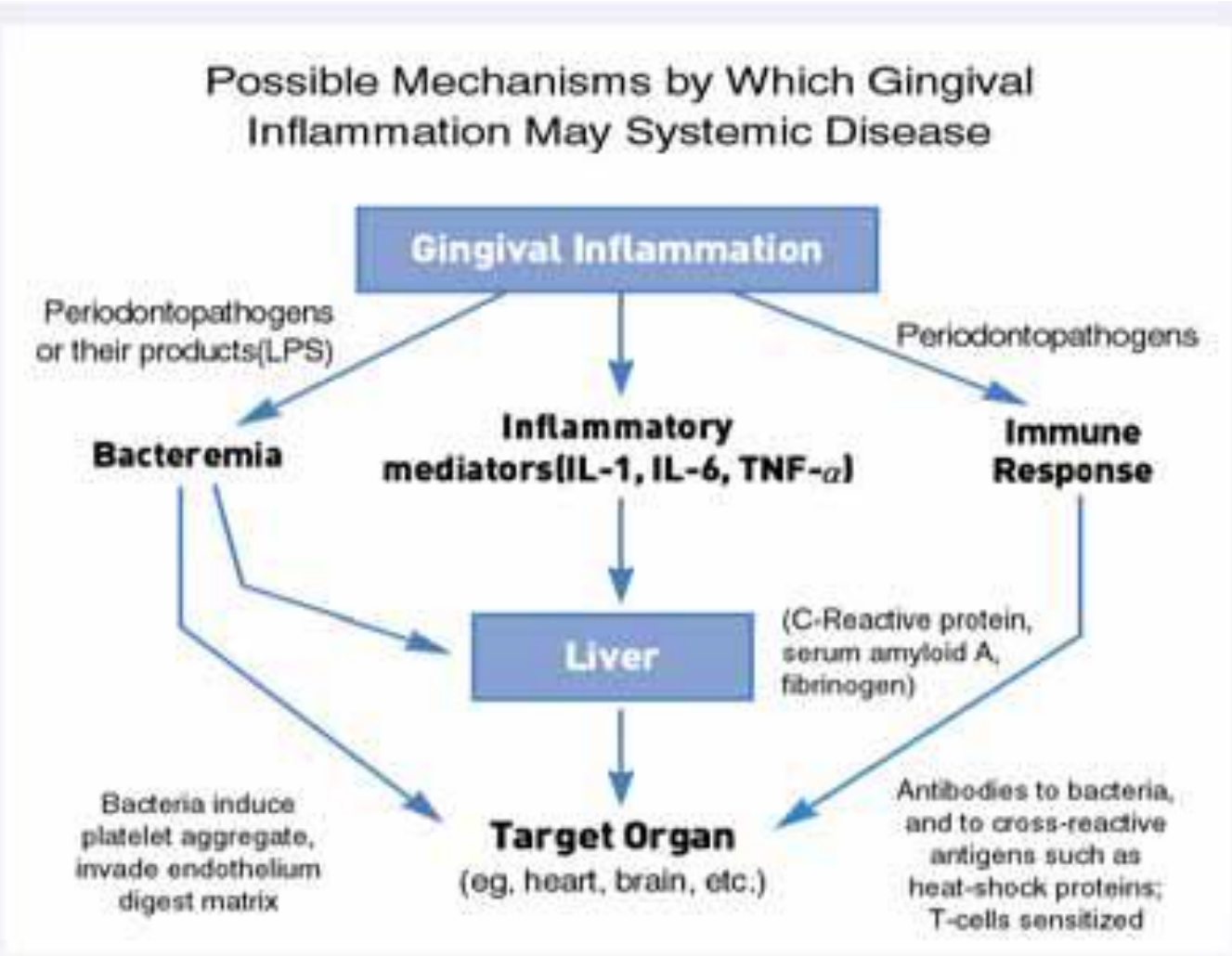
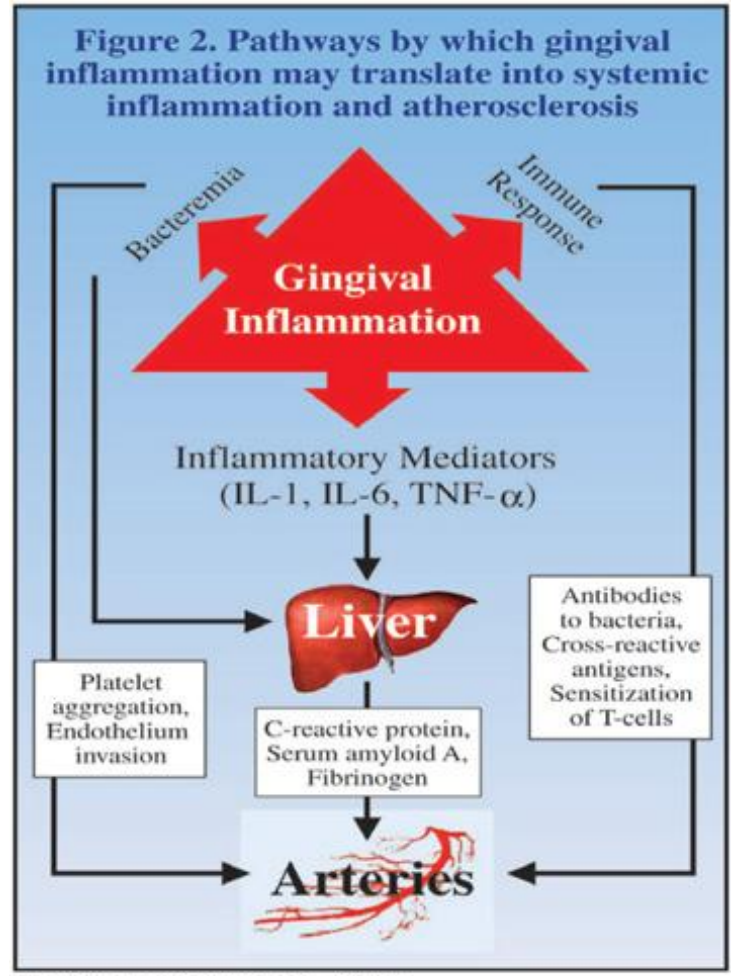



Figure 1. Theoretical pathways by which the gingival inflammatory response may impact systemic inflammation and systemic process such as atherosclerosis[7].



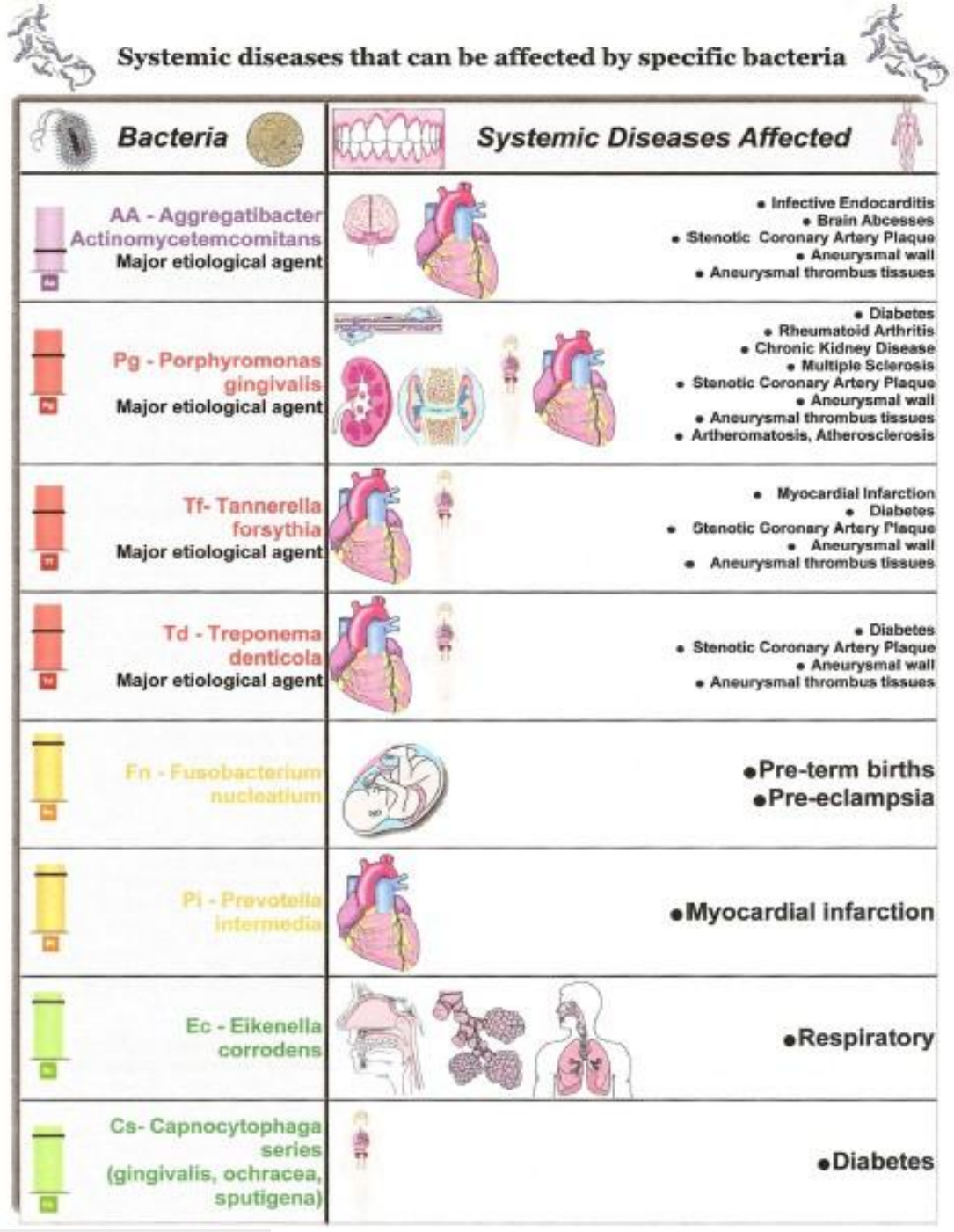

Adapted from Scannapieco, 2004[13]

Table 1. Association between periodontitis (pocket depth ≥4 mm) and independent variables

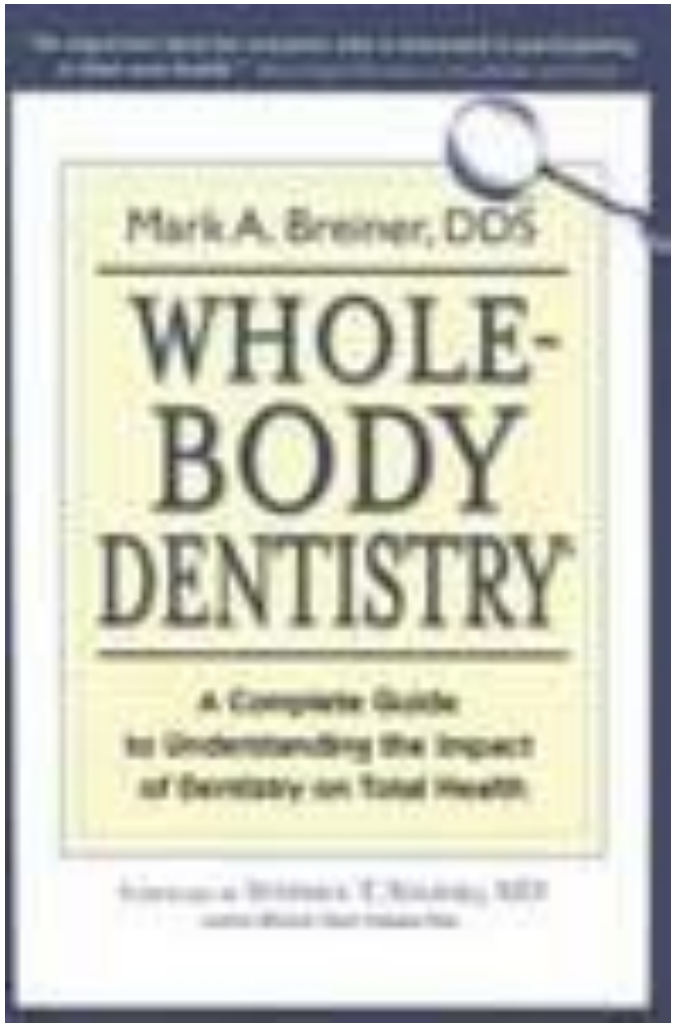
| Variable | | Number (%) | Periodontitis (%) |
|---|---|---|---|
| Age (years) | 20-29 | 304 (10.5) | 28 (2.6) |
| | 30-39 | 615 (21.2) | 149 (13.6) |
| | 40-49 | 549 (19.0) | 224 (20.4) |
| | 50-59 | 493 (17.0) | 249 (22.7) |
| | 60-69 | 478 (16.5) | 251 (22.9) |
| | 70 and over | 457 (15.8) | 196 (17.9) |
| House income | 1st quartile | 613 (22.3) | 287 (27.5) |
| | 2nd quartile | 720 (26.2) | 283 (27.1) |
| | 3rd quartile | 697 (25.4) | 240 (23.0) |
| | 4th quartile | 716 (26.1) | 235 (22.5) |
| Sex | male | 1,210 (41.8) | 548 (50.0) |
| | female | 1,686 (58.2) | 549 (50.0) |
| Smoking | yes | 1,085 (38.0) | 495 (45.7) |
| | no | 1,771 (62.0) | 587 (54.3) |
| Stroke | yes | 75 (2.6) | 37 (3.4) |
| | no | 2,784 (97.4) | 1,046 (96.6) |
| Angina/MI | yes | 85 (3.0) | 51 (4.7) |
| | no | 2,777 (97.0) | 1,032 (95.3) |
| Osteoporosis | yes | 177 (6.2) | 72 (6.6) |
| | no | 2,682 (93.8) | 1011 (93.4) |
| DM | yes | 227 (7.8) | 113 (10.3) |
| | no | 2,668 (92.2) | 984 (89.7) |
| Hypertension | yes | 562 (19.4) | 288 (26.3) |
| | no | 2,333 (80.6) | 809 (73.7) |
| Hypercholesterolemia | yes | 280 (10.6) | 141 (13.9) |
| | no | 2,364 (89.4) | 877 (86.1) |
| Hypertriglyceridemia | yes | 394 (13.6) | 169 (16.6) |
| | no | 2,250 (77.7) | 849 (83.4) |

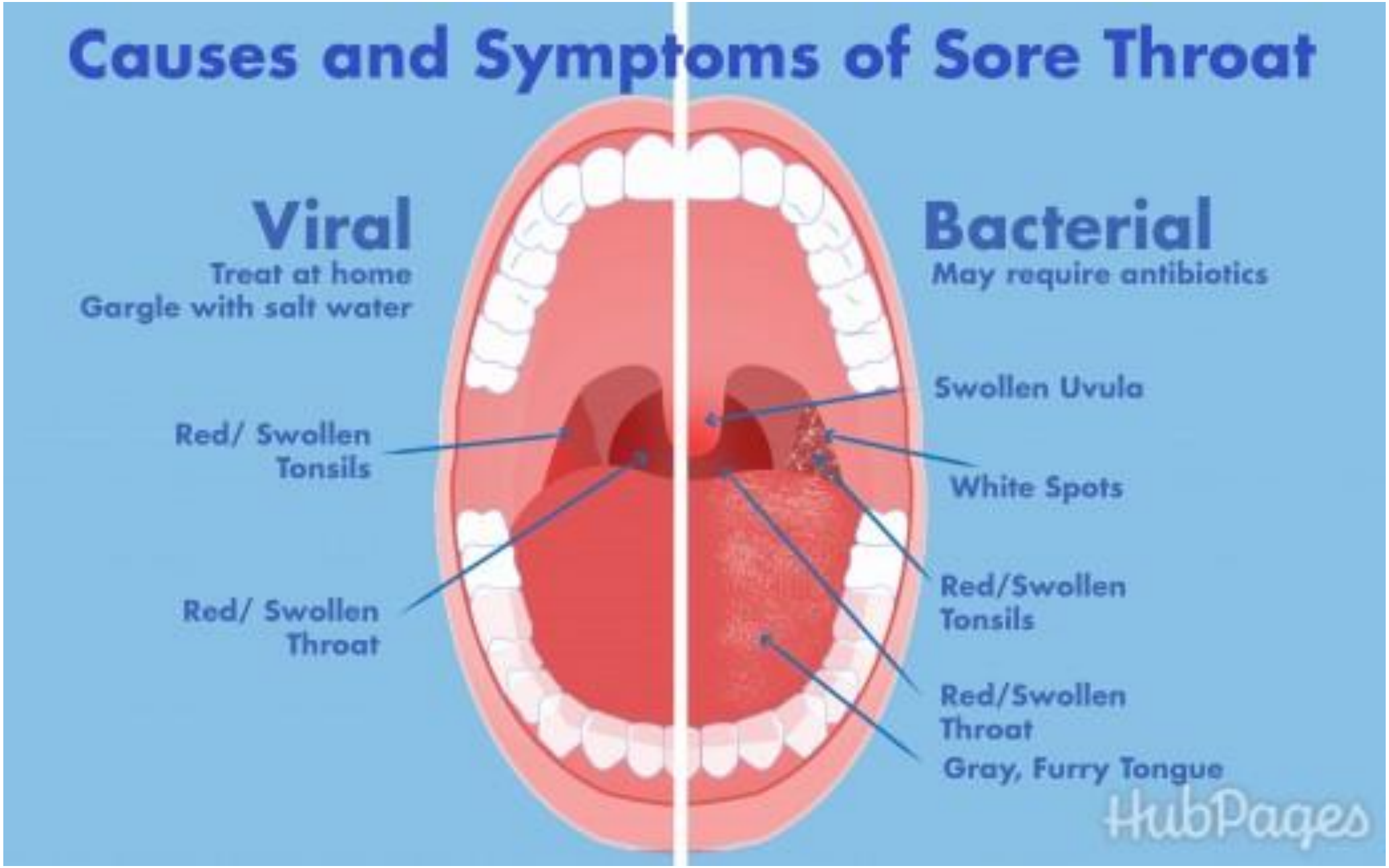
*determined from chi-statistic

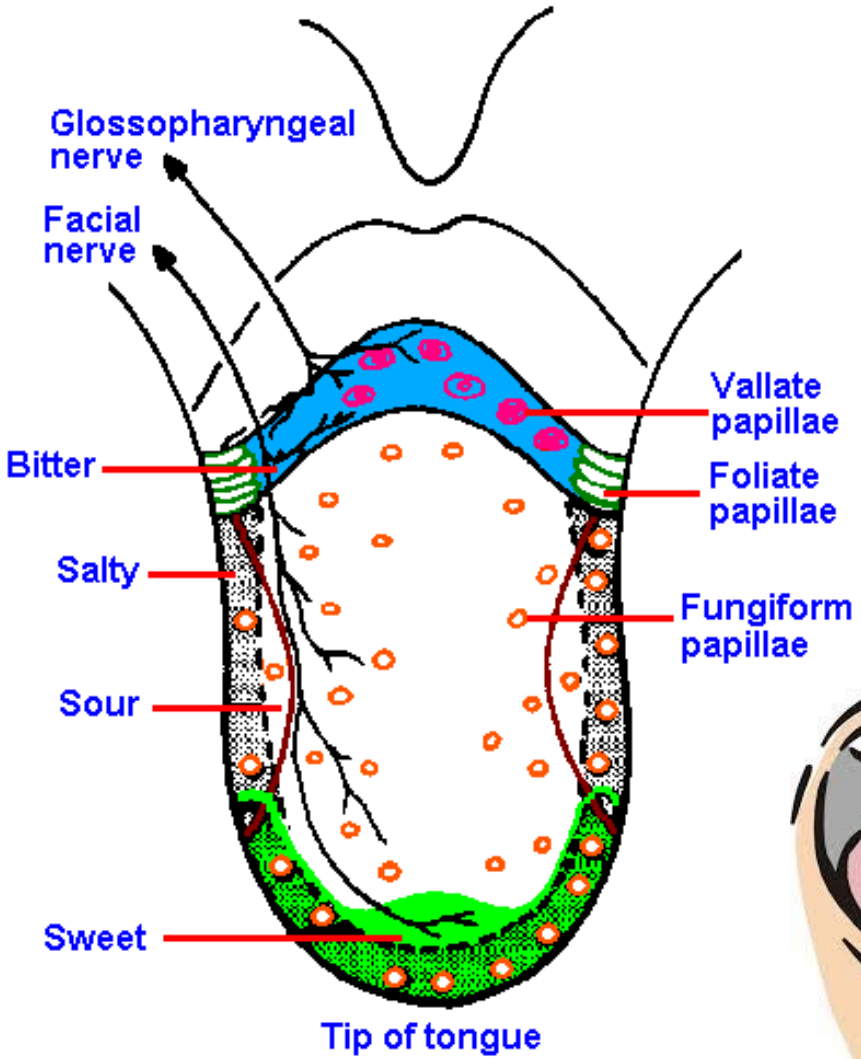
Abbreviations: MI, Miocaridal infartion; DM, Diabetes mellitus

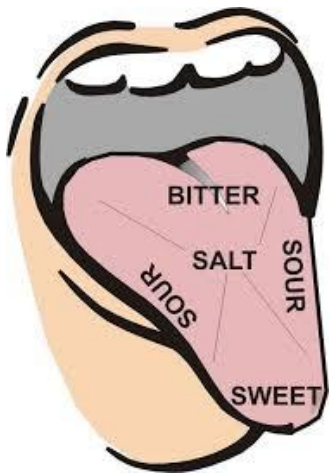


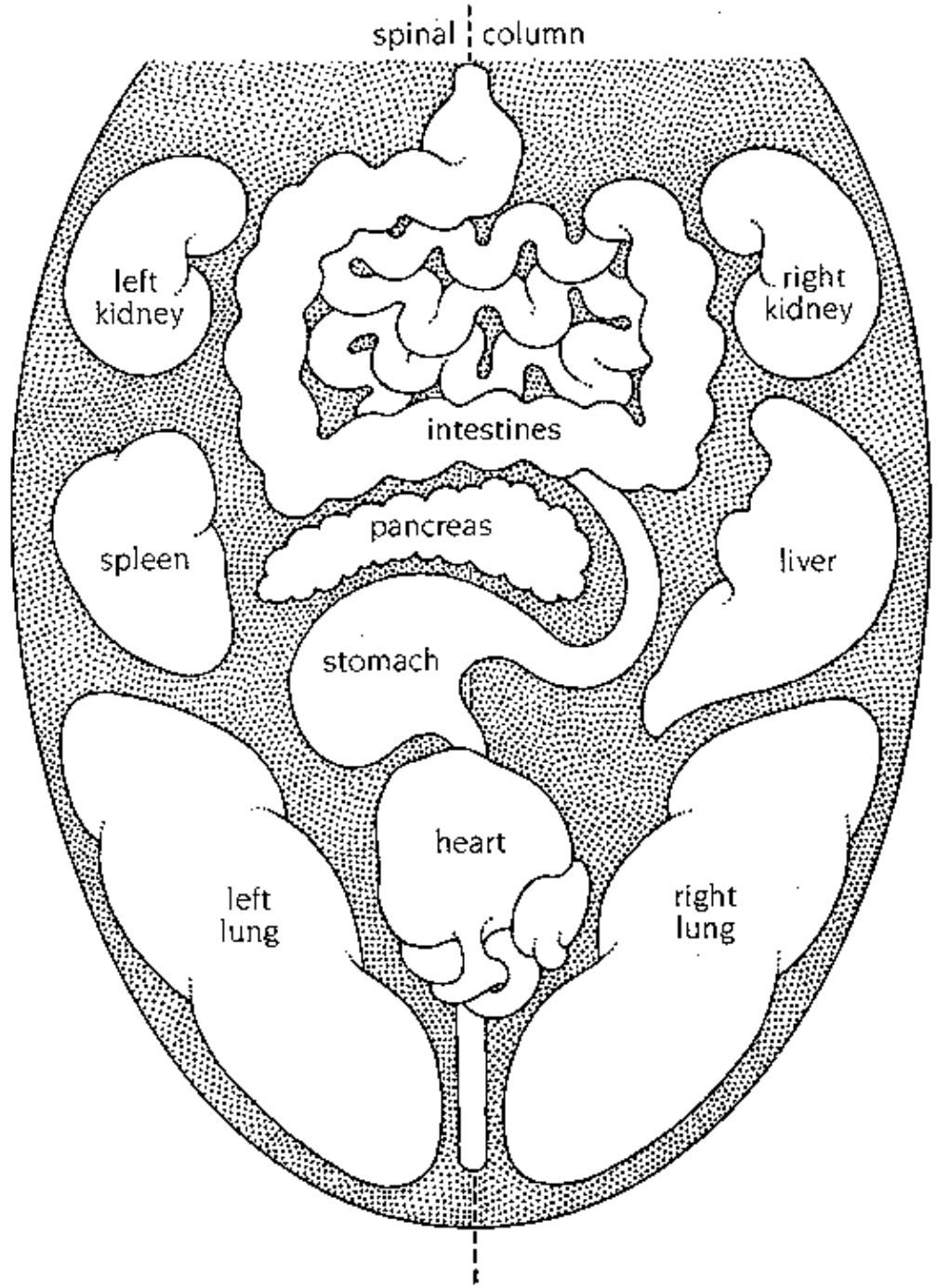

The Integrative Medicine Wheel
Manipulative Therapies
Surgery
Pharmaceutical Drugs
Herbal Medicine
Nutritional Medicine
Lifestyle & Behavior
Mind/Body Medicine
Energy Medicine
Copyright ©2000 by William College, Ph.D.


Mark A. Breiner, DDS
WHOLE-BODY DENTISTRY
A Complete Guide to Understanding the Impact of Dentistry on Total Health


Causes and Symptoms of Sore Throat
Viral
Treat at home
Gargle with salt water
Red/ Swollen Tonsils
Red/ Swollen Throat
Bacterial
May require antibiotics
Swollen Uvula
White Spots
Red/Swollen Tonsils
Red/Swollen Throat
Gray, Furry Tongue
HubPages

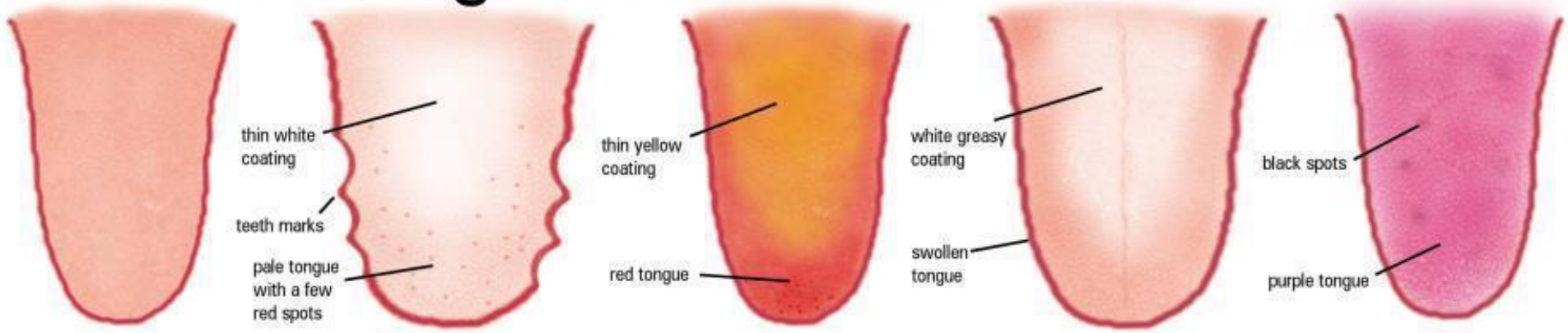

Glossopharyngeal nerve
Facial nerve
Vallate papillae
Bitter
Foliate papillae
Salty
Fungiform papillae
Sour
Sweet
Tip of tongue


BITTER
SALT
SOUR
SOUR
SWEET


spinal column
left kidney
right kidney
intestines
pancreas
spleen
liver
stomach
heart
left lung
right lung

# Which Tongue Are You?

Nine Common Syndromes & Possible Symptoms...



## NORMAL

## QI DEFICIENCY

thin white coating
teeth marks
pale tongue with a few red spots

Fatigue, Poor appetite, Spontaneous sweating, Shortness of breath, Over-thinking and worrying...

## HEAT

thin yellow coating
red tongue

Feel hot, Sweat easily, Thirsty, Constipated, Irritable and bad tempered, Skin problems...

## DAMP RETENTION

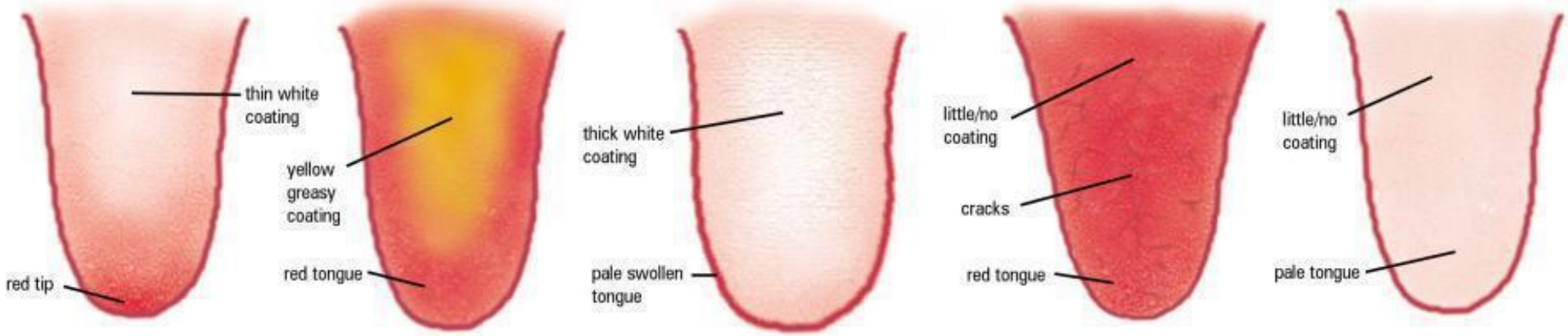
white greasy coating
swollen tongue

Bloated, Fullness in chest and abdomen, Feel heavy and lethargic...

## BLOOD STASIS

black spots
purple tongue

Cold limbs, Varicose veins, Painful legs, Headaches, Chest pain, Liver spots, Lack of skin lustre...



## QI STAGNATION

thin white coating
red tip

Stressed, Tendency to be depressed and upset, Unstable emotional state, PMT....

## DAMP HEAT

yellow greasy coating
red tongue

Skin problems, Urinary infections, Clammy skin, Angry and uncomfortable...

## YANG DEFICIENCY

thick white coating
pale swollen tongue

Feel cold easily, Always need warmth, Pale complexion, Back pain, Tendency to panic, Emotionally low, Impotence, Infertility...

## YIN DEFICIENCY

little/no coating
cracks
red tongue

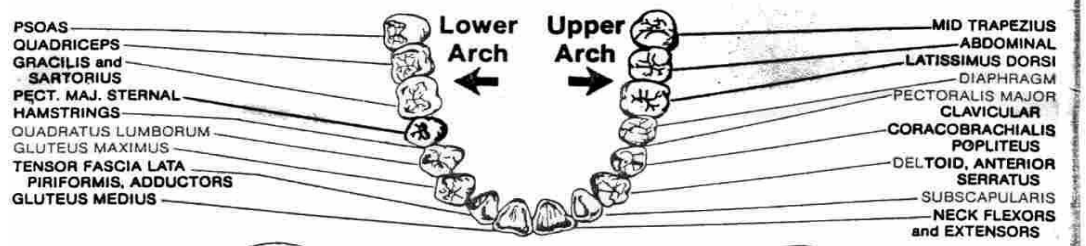
Hot Flushes, Sweat at night, Insomnia, Irritable, Ringing in the ears, Menopause/ irregular menstruation...

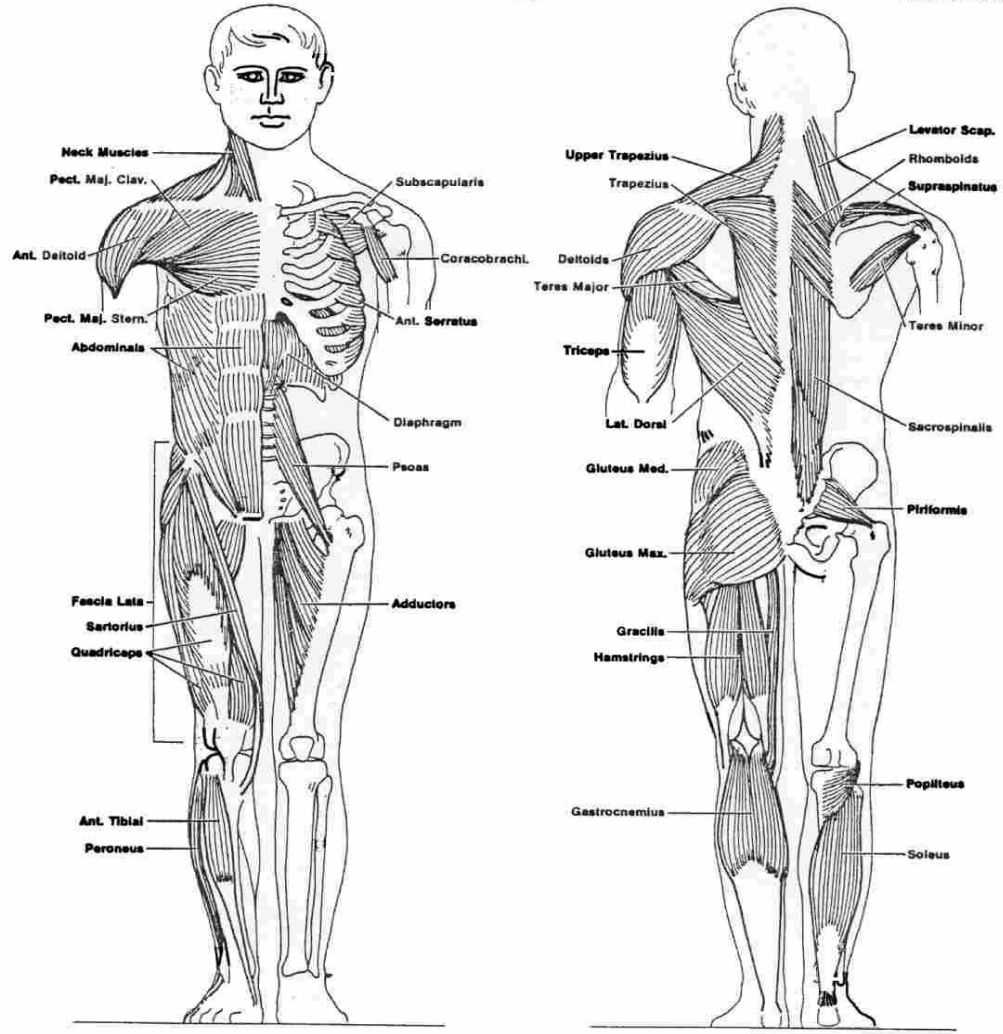
## BLOOD DEFICIENCY

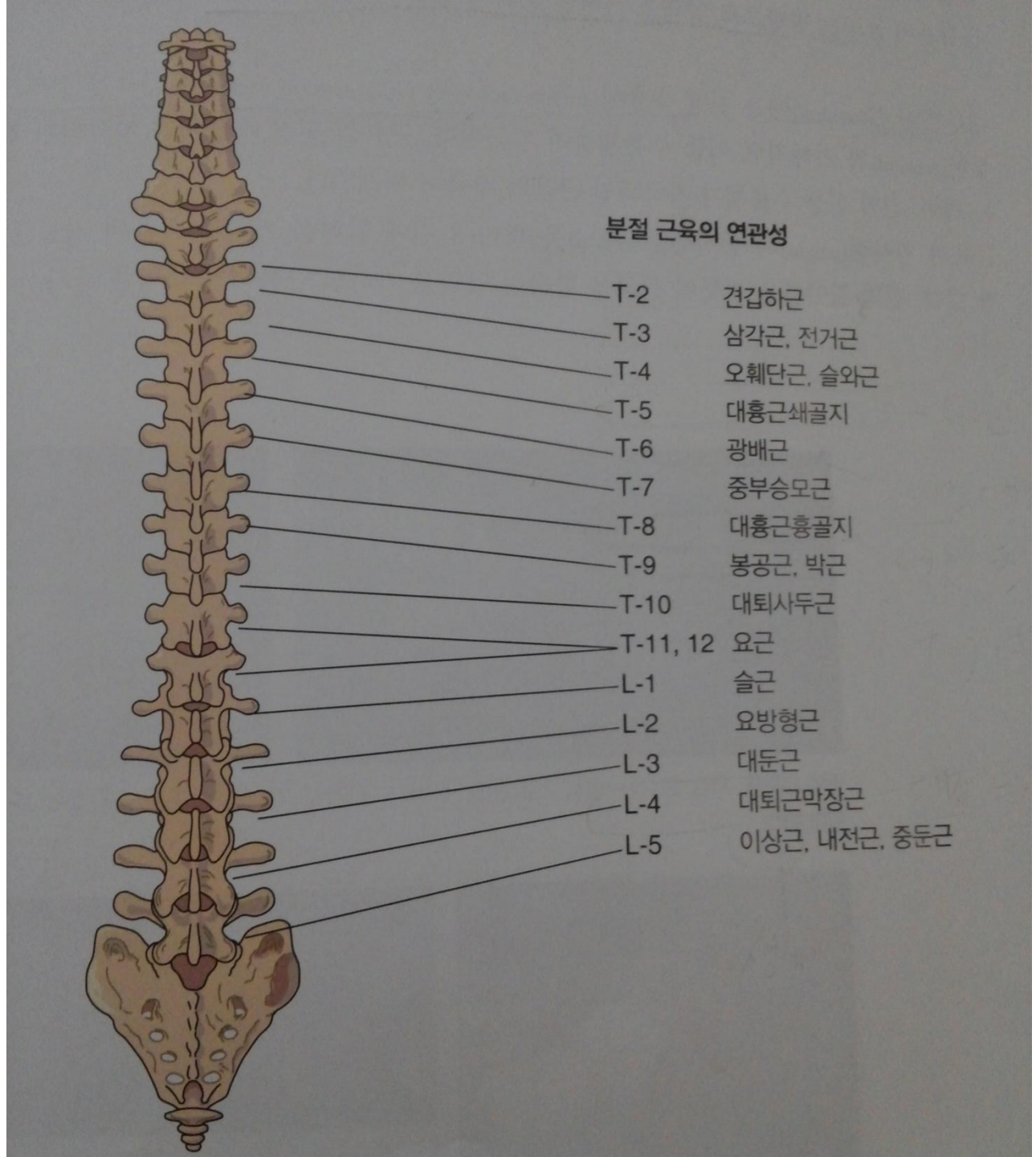
little/no coating
pale tongue

Dizziness, Fatigue, Palpitations, Poor concentration and memory, Insomnia, Women's problems...

# TOOTH/MUSCLE CHART




분절 근육의 연관성
T-2 견갑하근
T-3 삼각근, 전거근
T-4 오훼단근, 슬와근
T-5 대흉근쇄골지
T-6 광배근
T-7 중부승모근
T-8 대흉근흉골지
T-9 봉공근, 박근
T-10 대퇴사두근
T-11, 12 요근
L-1 슬근
L-2 요방형근
L-3 대둔근
L-4 대퇴근막장근
L-5 이상근, 내전근, 중둔근

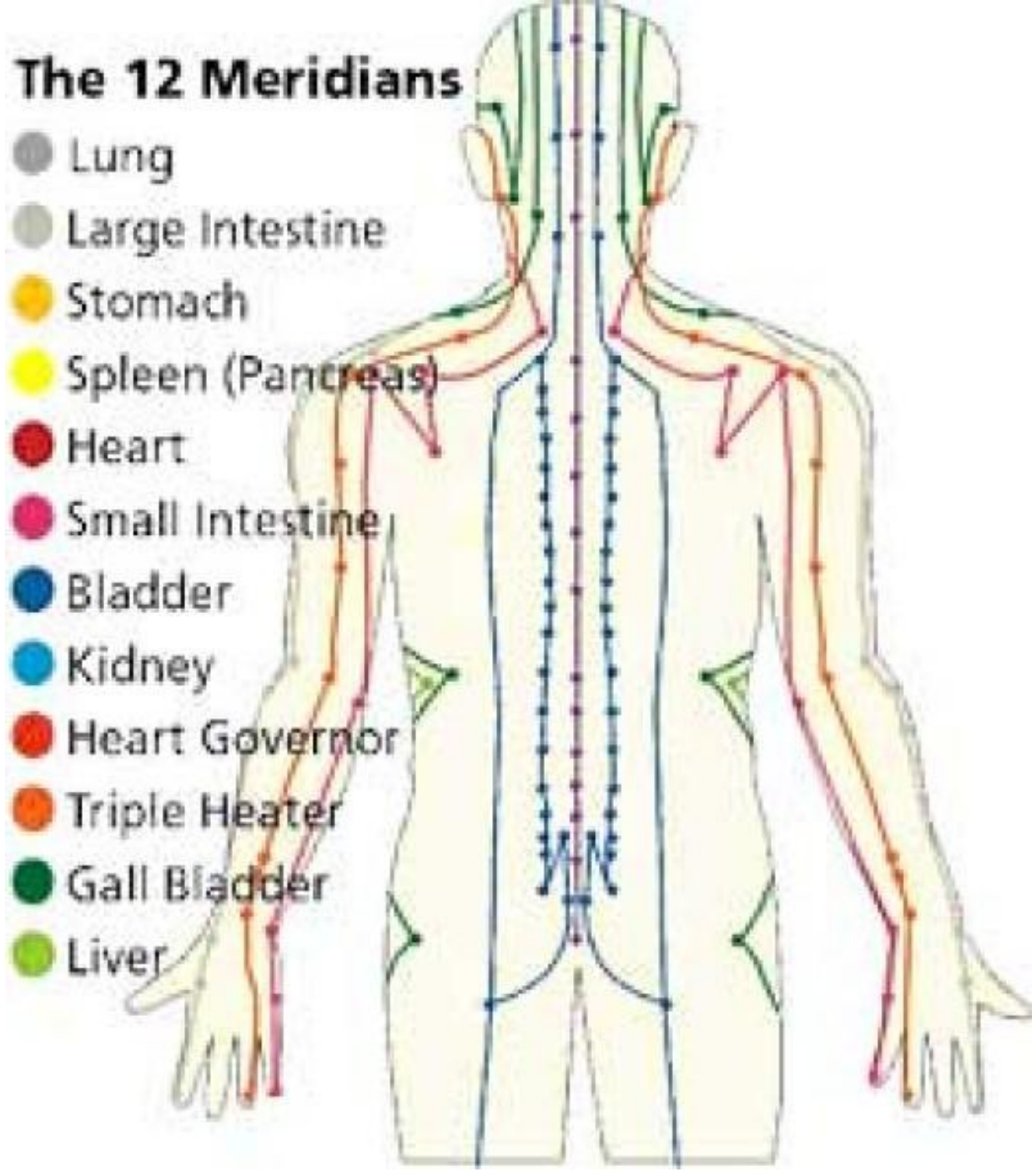
# Spinal Associated Points

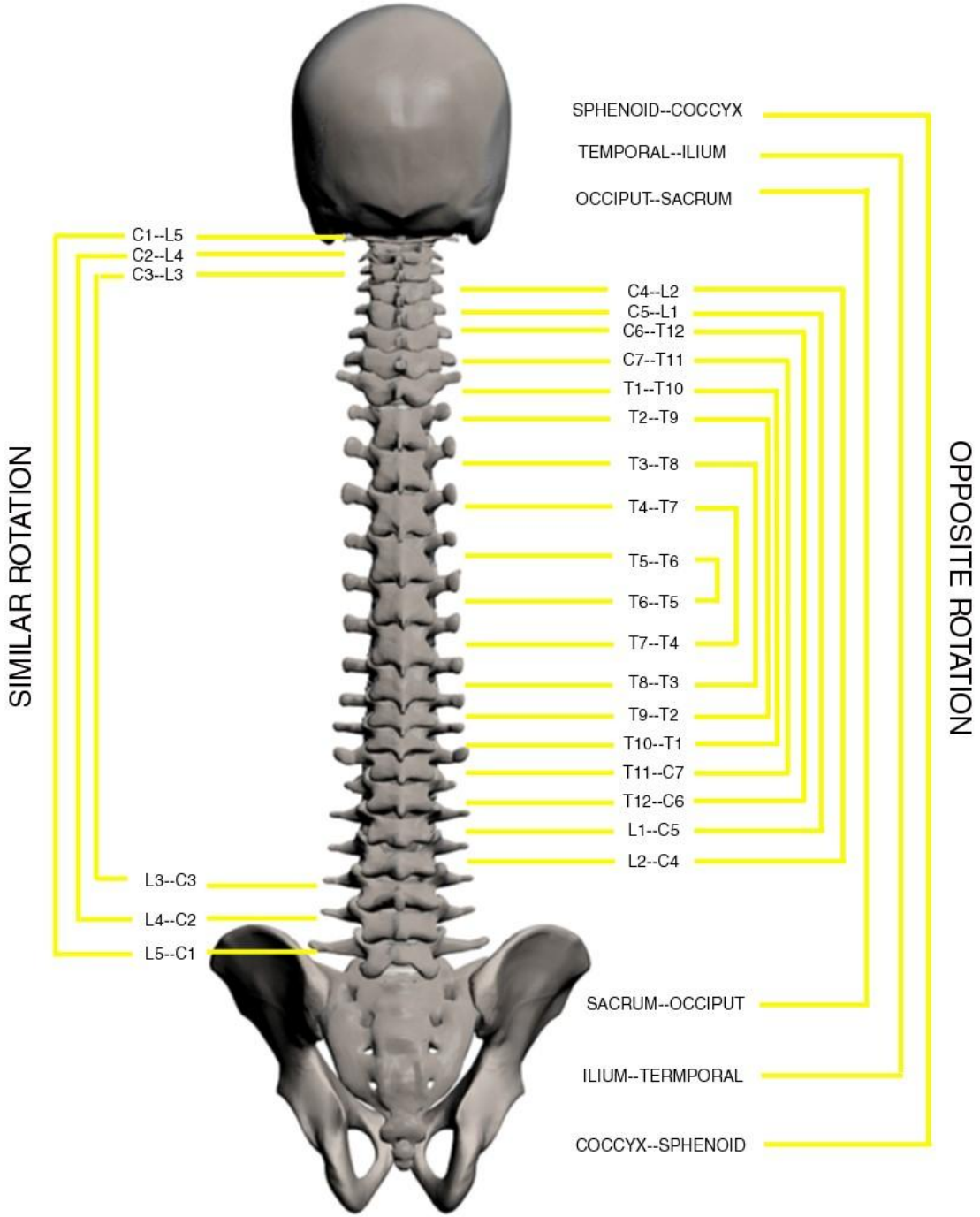
- T3-4 Lung
- T4-5 Circulation Sex
- T5-6 Heart
- T6-7 Governing Vessel
- T8-9 Conception Vessel
- T9-10 Liver
- T10-11 Gall Bladder
- T11-12 Spleen
- T12-L1 Stomach
- L1-2 Triple Heater
- L2-3 Kidney
- L4-5 Large Intestine
- S1 Small Intestine
- S2 Bladder

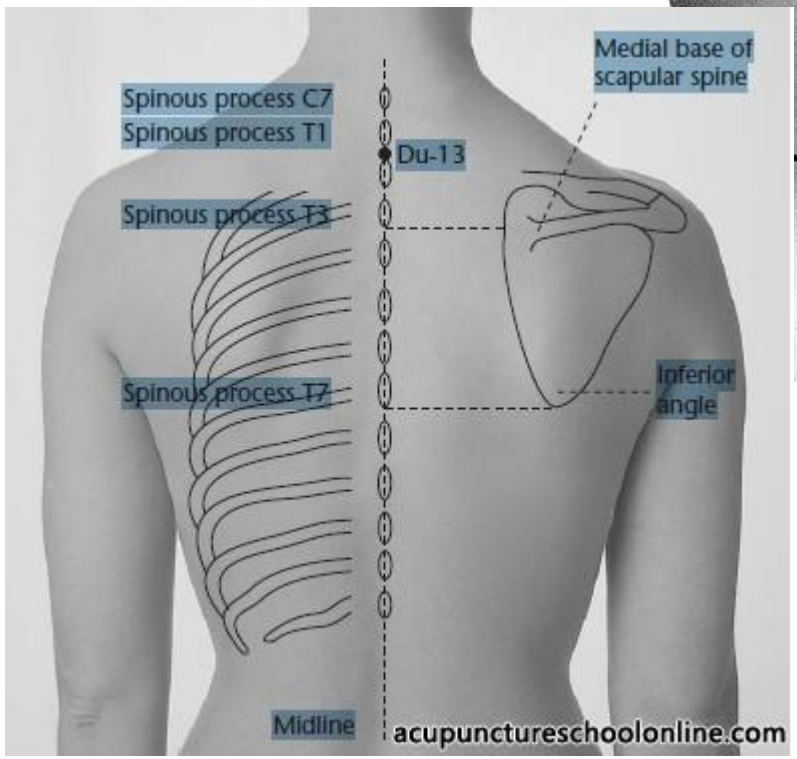
# Meridian-muscle relationships

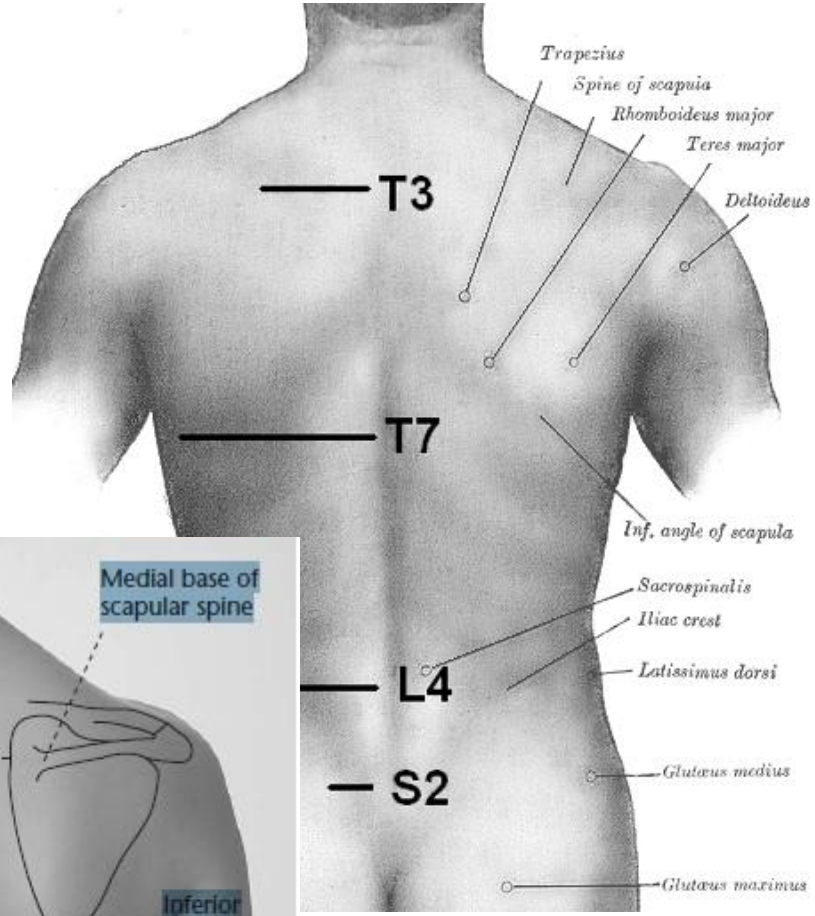
- LU- Deltiods, Ant. Serratus, Coracobrachialis
- LI- TFL, Hamstrings, Quad Lumborum
- SP- Latissimus, Triceps, Mid Lower Trap…
- ST- Pectoralis Clavicular, Neck Flex/Ext…
- TW- Teres Minor, Infraspinatus
- CX- Sartotious, Gracilis, G Max/Med…
- SI- Quads, Abdominals
- HT- Subscapularis
- GB- Popliteus
- LV- Pec Major Sternal, Rhomboid
- BL- Tib. Ant., Peroneus Longus/Brevis, Sacropinalis
- KI- Psoas, Iliacus, Upper Trapezius

http://www.muscletestingdoctor.com/wp-content/uploads/2012/11/Applied-Kinesiology-Session-1-notes.pdf

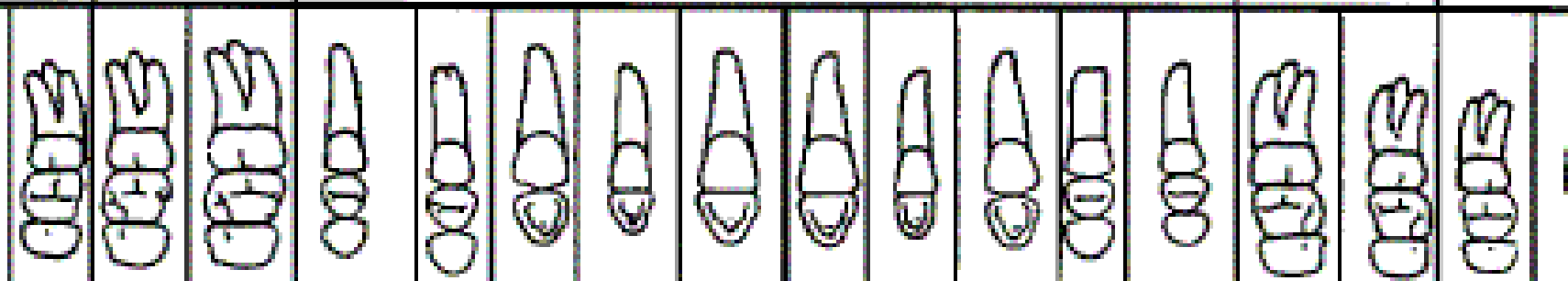

The 12 Meridians
Lung
Large Intestine
Stomach
Spleen (Pancreas)
Heart
Small Intestine
Bladder
Kidney
Heart Governor
Triple Heater
Gall Bladder
Liver


SIMILAR ROTATION
OPPOSITE ROTATION
SPHENOID--COCCYX
TEMPORAL--ILIUM
OCCIPUT--SACRUM
C1--L5
C2--L4
C3--L3
C4--L2
C5--L1
C6--T12
C7--T11
T1--T10
T2--T9
T3--T8
T4--T7
T5--T6
T6--T5
T7--T4
T8--T3
T9--T2
T10--T1
T11--C7
T12--C6
L1--C5
L2--C4
L3--C3
L4--C2
L5--C1
SACRUM--OCCIPUT
ILIUM--TERMPORAL
COCCYX--SPHENOID


Spinous process C7
Spinous process T1
Spinous process T3
Spinous process T7
Du-13
Medial base of scapular spine
Inferior angle
Midline
acupunctureschoolonline.com

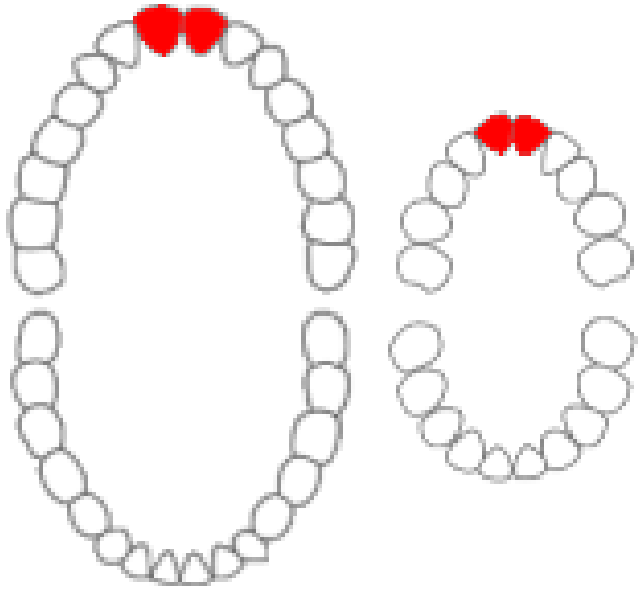

Trapezius
Spine of scapula
Rhomboideus major
Teres major
Deltoideus
T3
T7
Inf. angle of scapula
Sacrospinalis
Iliac crest
L4
Latissimus dorsi
S2
Glutæus medius
Glutæus maximus

| SENSE ORGANS | Inner Ear | Maxillary Sinus | Ethmoid Cell | Eye | Frontal Sinus | Frontal Sinus | Eye | Ethmoid Cell | Maxillary Sinus | Inner Ear |
|---|---|---|---|---|---|---|---|---|---|---|
| JOINTS | Shoulder Elbow | Jaws | Shoulder Elbow | Back of knee | | Back of knee | | Shoulder Elbow | Jaws | Shoulder Elbow |
| | Hand ulnar foot plantar toes, sacroiliac joint | Front of knee | Hand radial foot Big toe | Hip | Sacrococcyx | Sacrococcyx | Hip | Hand radial foot Big toe | Front of knee | Hand ulnar foot plantar toes, sacroiliac joint |
| | | | | Foot | | Foot | | | | |
| VERTEBRAE | C7 T1 T5 T6 S1 S2 | T11 T12 L1 | C5 C6 C7 T3 T4 L4 L5 | T9 T10 | L2 L3 S3 S4 S5 Coccyx | | T9 T10 | C5 C6 C7 T3 T4 L4 L5 | T11 T12 L1 | C7 T1 T5 T6 S1 S2 |
| ORGANS | Heart | Pancreas | Lung | Liver | Kidney | Kidney | Liver | Lung | Pancreas | Heart |
| | Duodenum | Stomach | Large intestine | Gall-blad-der | Bladder Urogenital area | Bladder Urogenital area | Gall-blad-der | Large intestine | Stomach | Duodenum |
| ENDOCRINE GLANDS | Ant. lobe of pituitary | Para-thy-roid | Thy-roid | Thy-mus | Post. lobe of pituitary | Pineal gland | Pineal gland | Post. lobe of pituitary | Thy-mus | Thy-roid | Para-thy-roid | Ant. lobe of pituitary |
| OTHERS | CNS Psyche | Mammary gland | | | | | | | Mammary gland | CNS Psyche |




| Tooth | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | Tooth | 32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 | 17 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | R |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | L |
| OTHERS | | Energy metabolism | | | Mammary gland | | | | | | | | Mammary gland | | | | Energy metabolism | |
| ENDOCRINE GLDS TISSUE SYSTEMS | | Peripheral nerves | Ar-teries | Veins | Lymph vessels | Gonad | | Adrenal gland | | Adrenal gland | | Gonad | | Lymph vessels | Veins | Ar-teries | Peripheral nerves | |
| ORGANS | | Ileum | Large intestine | | Stomach Pylorus | | Gall-blad-der | Bladder Urogenital area | | Bladder Urogenital area | | Gall-blad-der | | Stomach Pylorus | Large intestine | | Ileum | |
| | | Ileocoecal region | | | | | | | | | | | | | Ileocoecal region | | | |
| | | Heart | Lung | | Pancreas | | Liver | Kidney | | Kidney | | Liver | | Pancreas | Lung | | Heart | |
| VERTEBRAE | | C7 T1 T5 T6 S1 S2 | C5 C6 C7 T3 T4 L4 L5 | | T11 T12 L1 | | T9 T10 | L2 L3 S3 S4 S5 Coccyx | | L2 L3 S3 S4 S5 Coccyx | | T9 T10 | | T11 T12 L1 | C5 C6 C7 T3 T4 L4 L5 | | C7 T1 T5 T6 S1 S2 | |
| JOINTS | | Shoulder and elbow | | | Front of knee | | | Back of knee | | Back of knee | | Front of knee | | | Shoulder and elbow | | | |
| | | Hand ulnar Foot plantar Toes. sacro-iliac joint | Hand radial Foot Big toe | | Jaws | | Hip | Sacrococcyx | | Sacrococcyx | | Hip | | Jaws | Hand radial Foot Big toe | | Hand ulnar Foot plantar Toes. sacro-iliac joint | |
| SENSE ORGANS | | Ear | Ethmoid cells | | Maxillary sinus | | Eye | Frontal sinus | | Frontal sinus | | Eye | | Maxillary sinus | Ethmoid cells | | | |

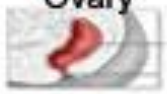


**MUSCLES:**

FLEXORS:
- Longus colli (경장근)
- Longus capitis(두장근)

LATERAL FLEXORS:
- Scalenes(Ant., med., Post.)

EXTENSORS:
- Splenius capitis(두판상근)
- Splenius Cervicis(경판상근)
- Semispinalis capitis(두반극근)
- Semispinalis Cervicis (경반극근)

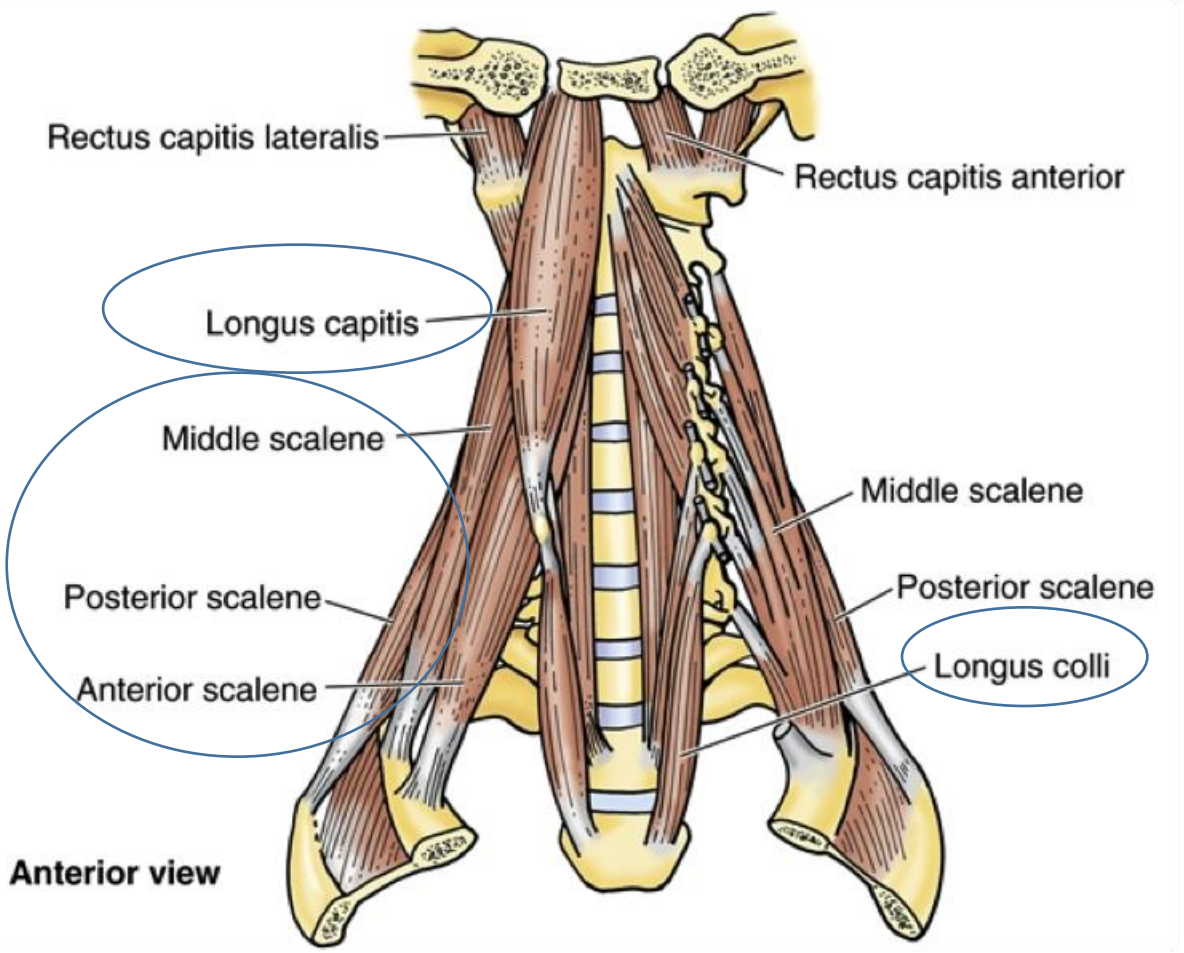
| | |
|---|---|
| Organs yin/yang |  Kidney  Bladder  Ovary  Testicle  Prostate  Uterus  Rectum  Anus |
| Joints | Posterior Knee, Sacro-coccygeal, |
| Vertebrae | C-1, C-2, L-2, L-3, S-3, S-4, S-5 Coccyx |
| Endocrine |  Pineal Epididymis |
| Systems | None |
| Sensory |  Nose Frontal Sinus |
| Muscles | Neck - Flex and Extensors |
| Sinus | Frontal, Sphenoid |

**#8,**
**Upper Central Incisor, 1**

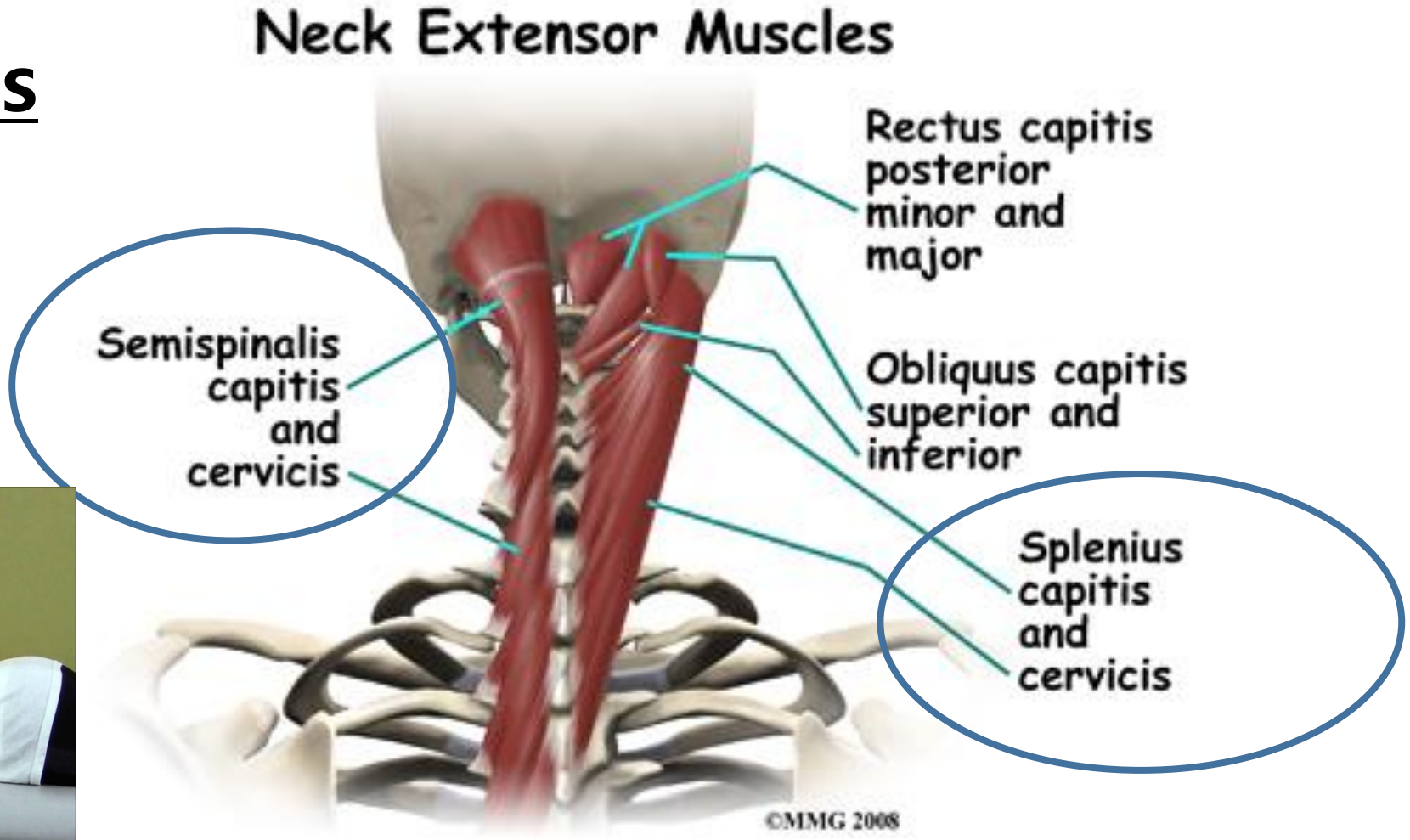
# Upper Central Incisor, 1

| Muscles | Neck Flexors & Extensors | SCM |
|---|---|---|
| Organ | Sinus | |
| Endocrine | Pineal gland | |
| NL | 전면: 첫번째 늑골간 공간 3인치 측방 | |
| | 후면: Axis lamina 위 | |
| NV | Mandibular Ramus | |
| **Meridian** | **위경** | |
| **Spinal level** | | |
| **Nutrition** | **B6 : Niacin( Niacinamide ) = 5:1 로 혼합**<br>**Iodine - 부비동 울혈시** | |

# Neck Flexors

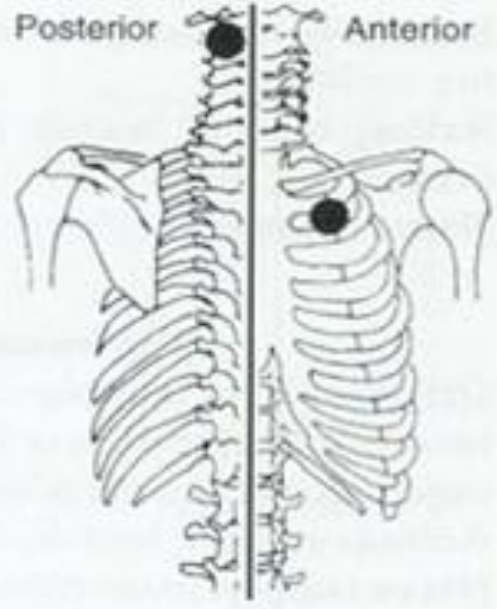
# Neck Extensors



# Neck Flexors

NEUROVASCULAR

STRESS RECEPTOR




NEUROLYMPHATIC
BILATERAL

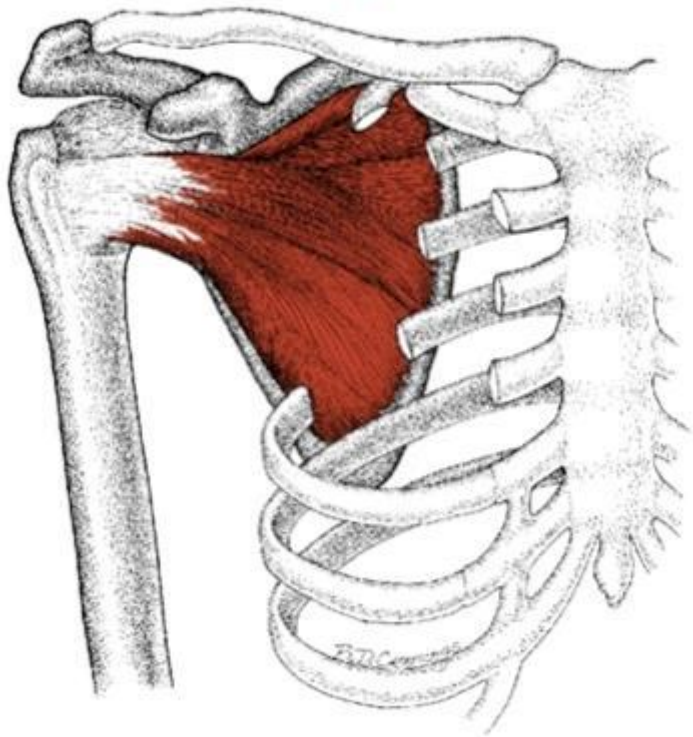
| | |
|---|---|
| Organs yin/yang |  Kidney  Bladder  Ovary  Testicle  Prostate  Uterus  Rectum  Anus |
| Joints | Posterior Knee, Sacro-Coccygeal |
| Vertebrae | C-1, C-2, L-2, L-3, S-3, S-4, S-5 Coccyx |
| Endocrine |  Pineal Epididymis |
| Systems | None |
| Sensory |  Nose Frontal Sinus |
| Muscles | Subscapularis |
| Sinus | Frontal, Sphenoid |

#10, 2

# Upper Lateral Incisor, 2

| Muscles | Subscapularis |
|---|---|
| Organ | **Heart** |
| Endocrine | **Pineal** |
| NL | **전면: 두번째 늑골간 공간의 흉골부근** |
| | **후면: T 2-3 사이** |
| NV | **전정위 (Bregma)** |
| **Meridian** | **심경** |
| **Spinal level** | **T2** |
| **Nutrition** | **V-E, V-B complex의 Vasodilator( Riboflavin, Niacin ) Carnitine** |

# Subscapularis





# Heart Meridian Subscapularis

5

## MUSCLE ORIGIN AND INSERTION

### Subscapularis

**Origin:** Underside of the shoulder blade.

**Insertion:** Top front of the upper arm (Humerus).

**Feel this muscle** contracting under the shoulder blade when the arm is held at ninety degrees from the side of the body and the forearm is held to form a right angle and pulled posterior. It can also be felt by placing the back of the hand at the small of the back and pressing it against the body and feeling the contraction under the shoulder blade. Subscapularis cannot be seen or palpated (felt with the touch) because it is underneath the Scapula.

### MUSCLE METAPHOR QUESTIONS TO CONSIDER

What are you hiding or keeping private?

Is there something that you need to reveal?

What do you feel in your heart as opposed to your head?

How are you in receiving and sending messages about your life to yourself and others?

How is your communication and circulation within your Soul, or in your daily activities, literally or figuratively?


### NEUROLYMPHATIC MASSAGE POINTS

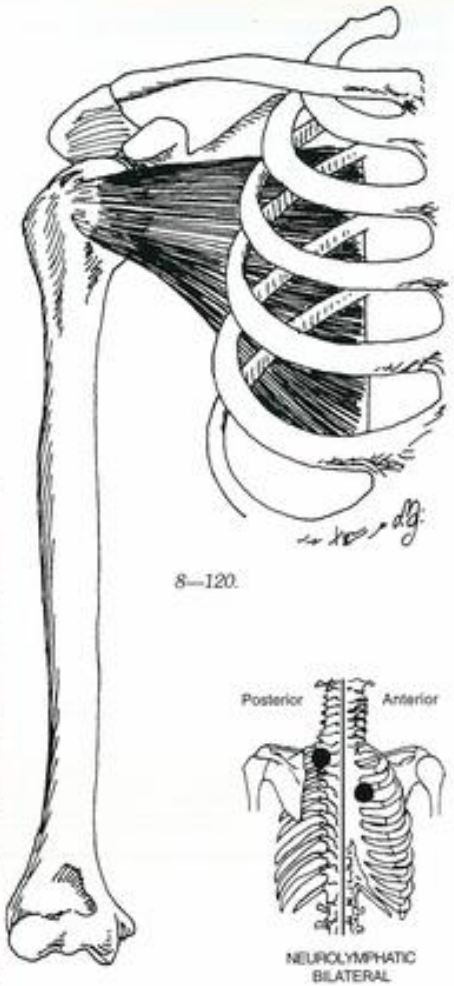
- **Front:** Between the 2nd and 3rd ribs beside the Sternum (breastbone).
- **Back:** Between T2 and T3, 1" to each side of the spine.


## Subscapularis

**Origin:** subscapular fossa.
**Insertion:** lesser tuberosity of humerus and capsule of shoulder joint.
**Action:** internally rotates humerus. Draws head of humerus forward and down when arm is raised, acting as part of the force couple of shoulder abduction.
**Test:** The seated or prone patient abducts the shoulder to 90°, with the elbow flexed to 90°. The humerus is placed in slight internal rotation. The examiner directs pressure against the patient's wrist to externally rotate the humerus, using the forearm for leverage.
**Nerve supply:** upper and lower subscapular, **C5, 6**.
**Neurolymphatic:**
**Anterior:** 2nd intercostal space near sternum.
**Posterior:** T2, 3 between transverse processes.
**Neurovascular:** bregma.
**Nutrition:** heart concentrate or nucleoprotein extract, vitamin E, B complex, C.
**Meridian association:** heart.
**Organ association:** heart.

*8—118.*

*8—119. Failure of scapula to be stabilized by rhomboids and middle trapezius.*



*8—120.*




NEUROLYMPHATIC
BILATERAL

NEUROVASCULAR

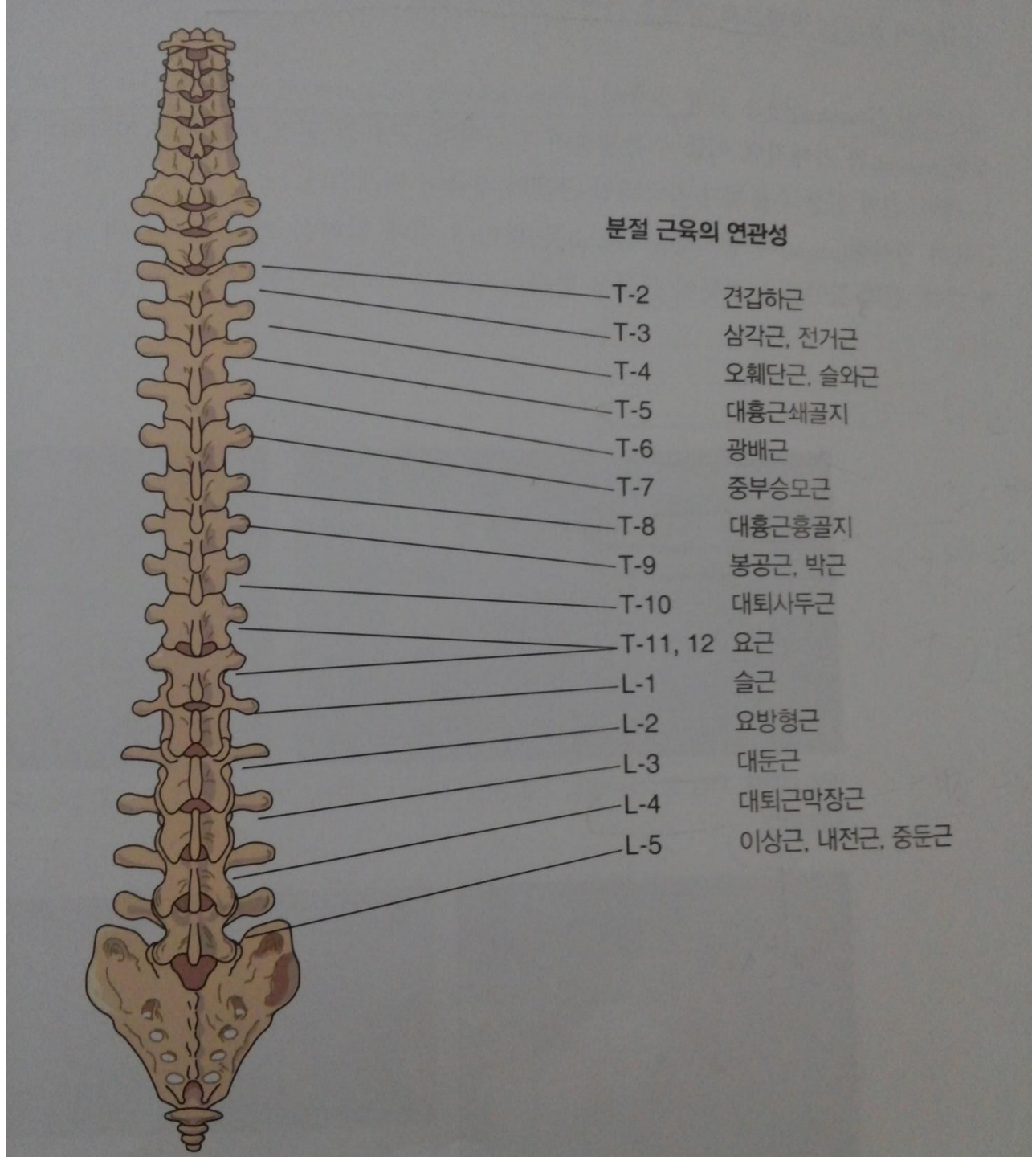
STRESS RECEPTOR

# Upper Canine, 3

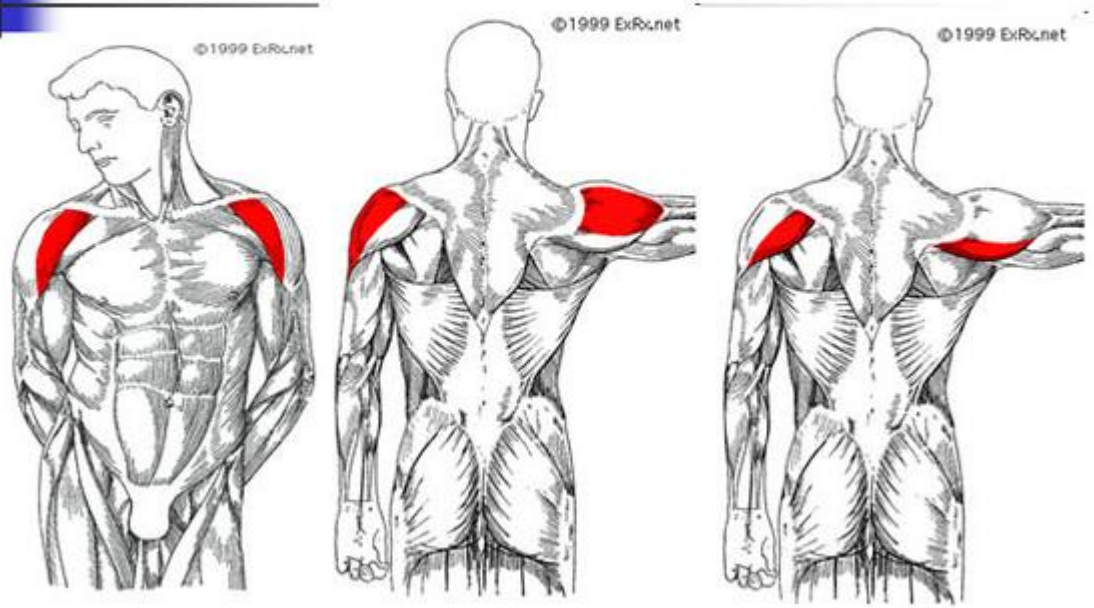
| Muscles | Deltoid, | Ant. Serratus |
|---|---|---|
| Organ | **Lung** | |
| Endocrine | **Intermediate. Lobe of Pituitary** | |
| NL | **전면: T3번째 늑골간의 흉골연접부** | **T345 늑골간 공간** |
| | **후면: T3-4 사이** | T3-6 횡돌기간 공간 |
| NV | **전정위, Bregma** | |
| **Meridian** | **수태음폐경,** | **폐경** |
| **Spinal level** | **T3** | |
| **Nutrition** | **V-C, betacarotine,<br>폐추출물** | |

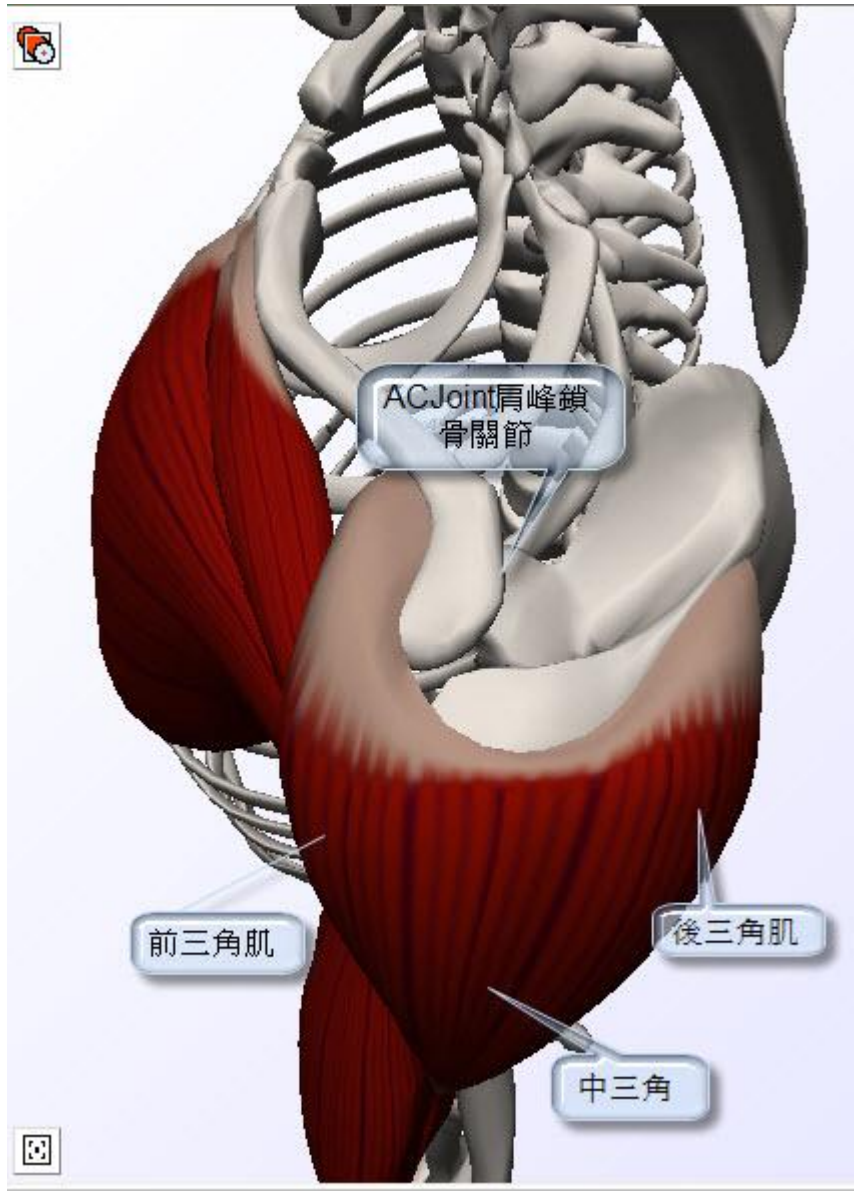
| | |
|---|---|
| Organs yin/yang |  Liver  Heart  Biliary Ducts |
| Joints | Posterior Knee, Hip, Ankle, Foot |
| Vertebrae | C-1, C-2, Th-8, Th-9, Th-10 |
| Endocrine |  Intermediate Pituitary  Hypothalamus |
| Systems | None |
| Sensory |  Posterior Eye |
| Muscles | Deltoid, Anterior Serratus |
| Sinus | Sphenoid |

#11, 3


분절 근육의 연관성
T-2 견갑하근
T-3 삼각근, 전거근
T-4 오훼단근, 슬와근
T-5 대흉근쇄골지
T-6 광배근
T-7 중부승모근
T-8 대흉근흉골지
T-9 봉공근, 박근
T-10 대퇴사두근
T-11, 12 요근
L-1 슬근
L-2 요방형근
L-3 대둔근
L-4 대퇴근막장근
L-5 이상근, 내전근, 중둔근

# Deltoid (Anterior, Middle, Posterior)



# Deltoid (Anterior, Middle, Posterior)


上臂往前前臂朝上測
前三角肌

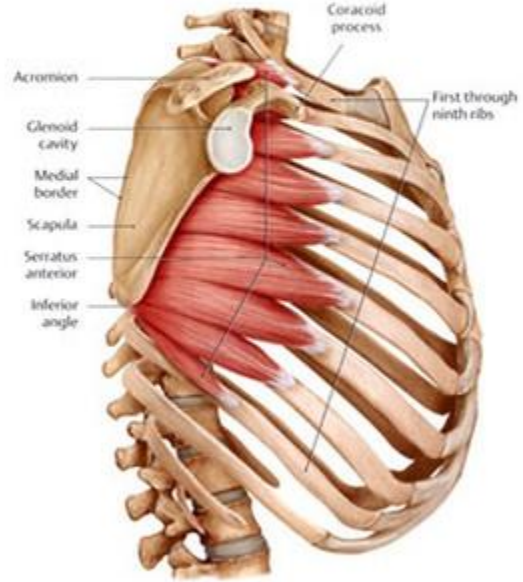
肘關節水平
呈九十度測
中三角肌

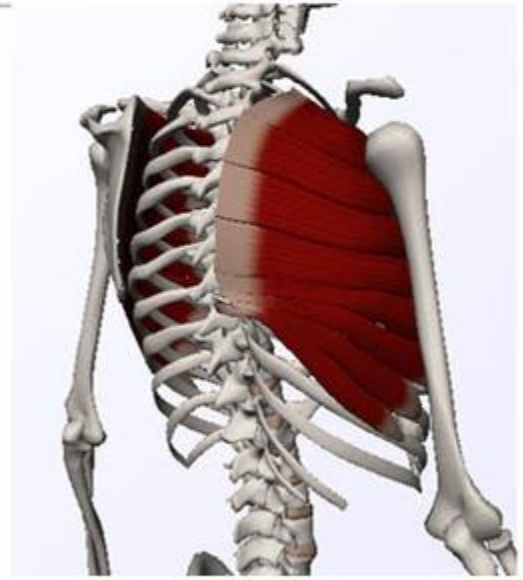
上臂往後前臂朝下測
後三角肌

## Lung Meridian Anterior Serratus 13

MUSCLE ORIGIN AND INSERTION

# Serratus Anterior前鋸肌

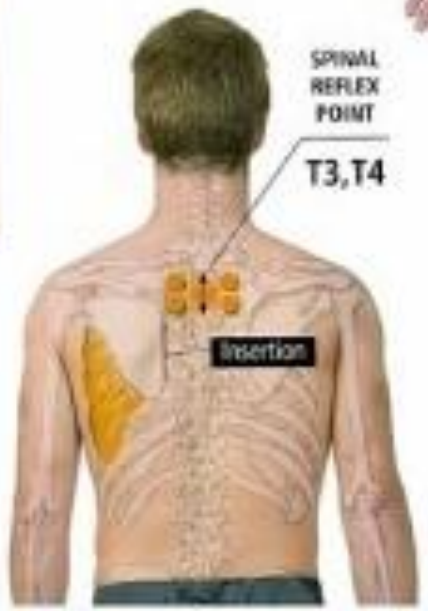


NEUROLYMPHATIC MASSAGE POINTS

- **Front:** Between the 3rd and 4th & 4th and 5th ribs beside the breastbone.
- **Back:** Between T3-T4, T4-T5, 1" to each side of the spine.





# 13 Lung Meridian Anterior Serratus

## MUSCLE FUNCTION

Draws the shoulder blade forward and raises the ribs.

## INDICATIONS

Weakness will make it difficult to push things forward with the arms straight, causing the shoulder blades to wing out in back. It needs to be functioning fully for ideal breathing and activities that require good breath control. It can also affect chest conditions and the diaphragm's ability to regulate breathing. Sometimes if both sides are weak, it may be due to stiffness in the lower bones of the neck. Rotating the head and neck gently may loosen them up, although chiropractic adjustment may be necessary.

## FOODS FOR BALANCING

Foods rich in vitamin C (green peppers, citrus). Increased water intake.

## NEUROVASCULAR HOLDING POINTS

Anterior fontanel, the baby's soft spot on the top of the head.

## MUSCLE TEST POSITIONS

### Anterior Serratus

SITTING / STANDING / LYING FACE UP

1. Position the straight arm in front and slightly higher than the shoulder.
2. Thumb points up while reaching forward, extending shoulder.
3. To monitor stability, the tip of the shoulder blade on the same side is held.
4. Pressure is against the forearm to bring the arm toward the feet.


**PRESSURE TARGET** | Downward against forearm near wrist.



**Test Also:** Deltoids, Coracobrachialis, and Diaphragm

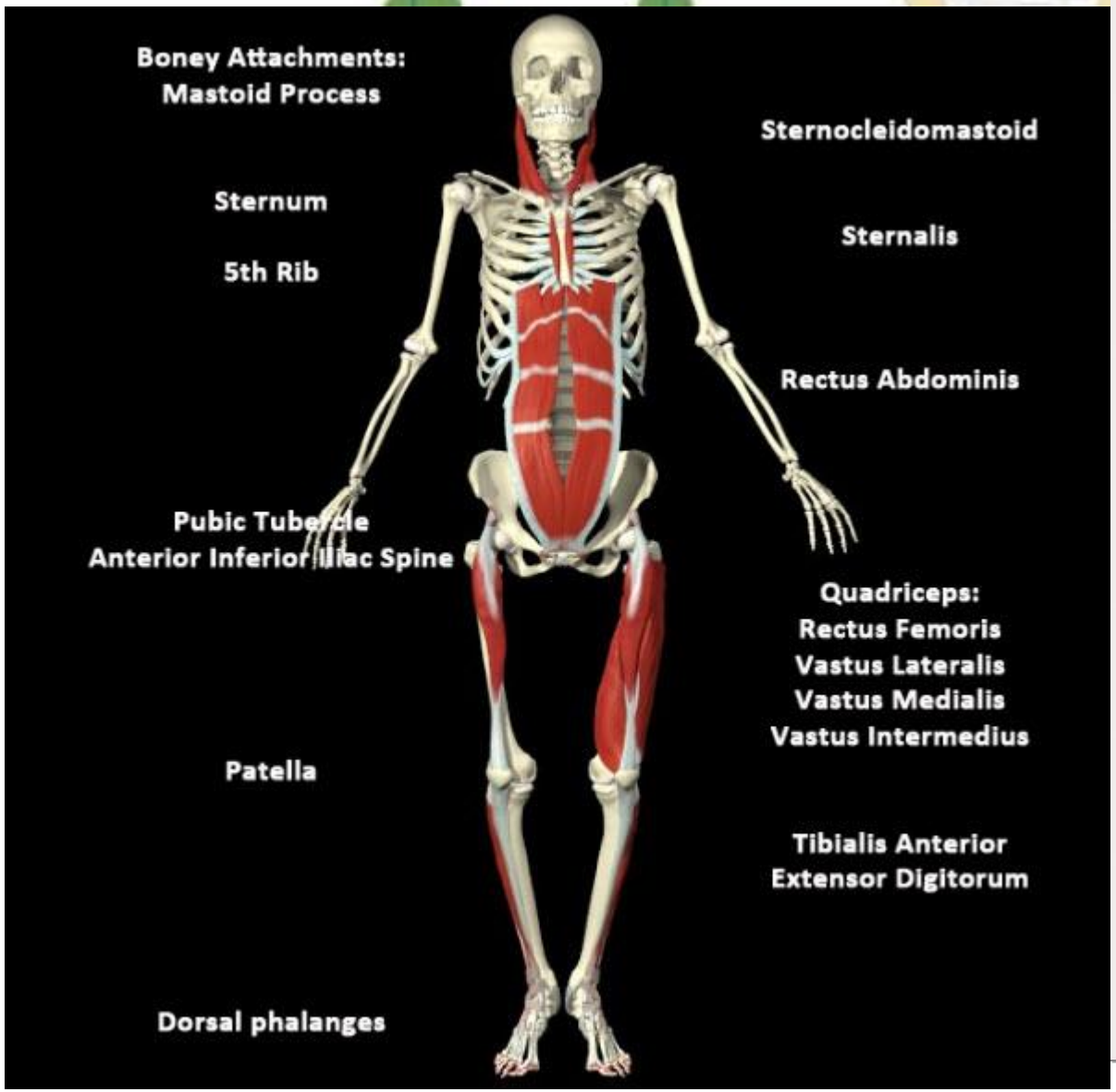
# 척추와 관련된 근육

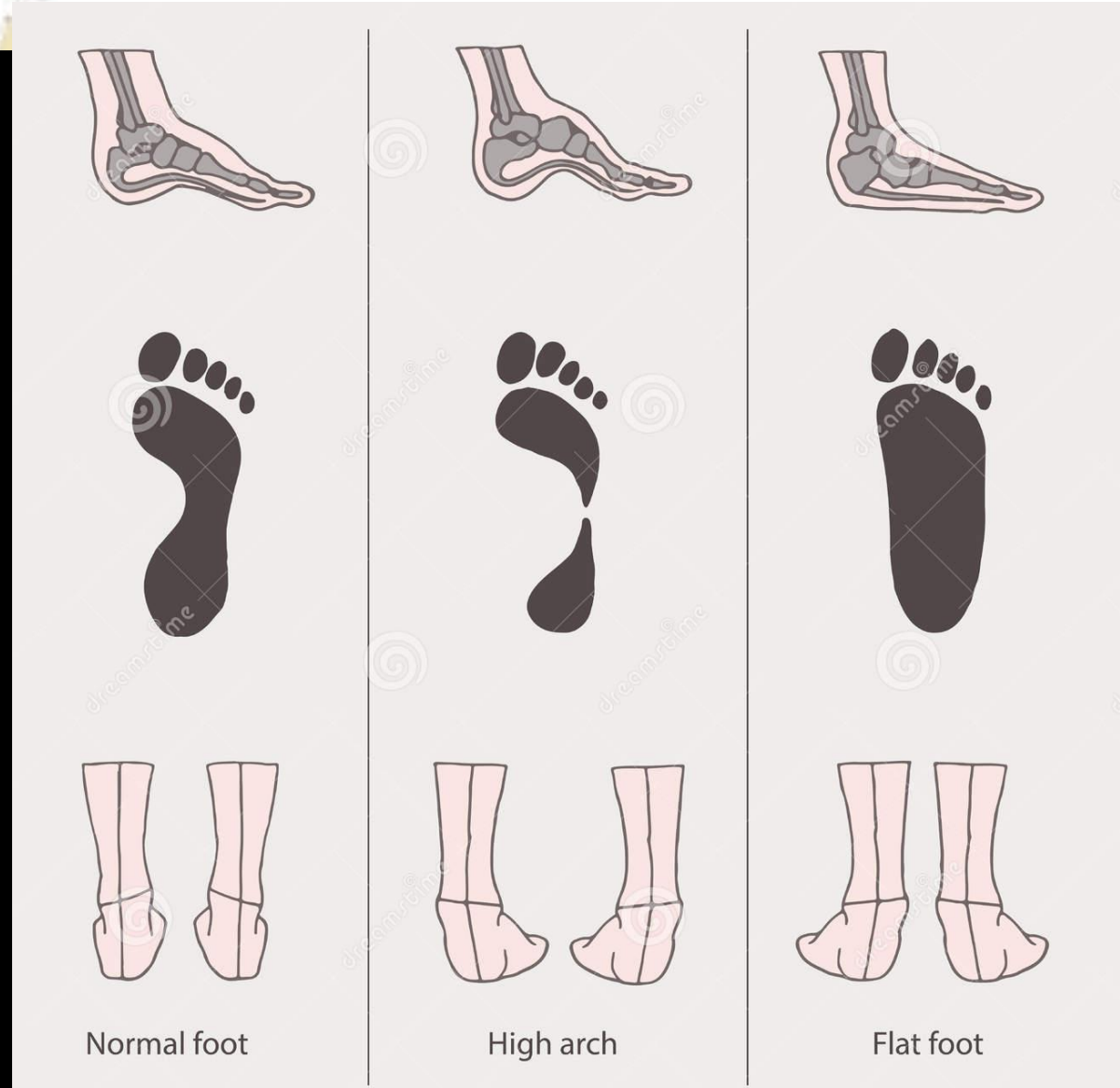
| Muscle | Tx |
| --- | --- |
| Neck Extensors | Sacral/ Lumbar Fixation |
| Abdominalis | Sagittal suture |
| Psoas | Occiput |
| Gracilis, Sartorius | PI |
| G-Max, Hamstring | AS |
| G-Medius, Abdominal Oblique | Ex, In |

# Integrative body Relationship

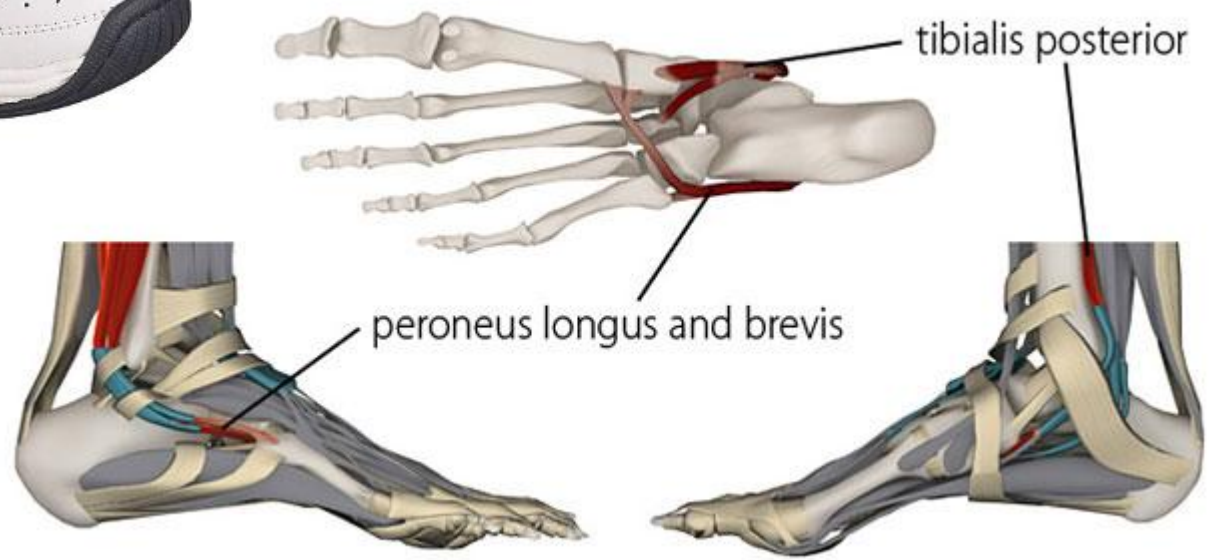
| Organ | Muscle | Nutrient | Spine | Tooth |
|---|---|---|---|---|
| **Liver** | **Pectorals Major Sternum**, Rhomboid | Liver Extract, V-A (Glutathione) | **T8** | **L.5** |
| **Gall Bladder** | **Popliteus** | Bile Salt | **T4** | **U4** |
| **Stomach** | **Pectoralis Major Clavicle**, Biceps, Brachialis, Brachioradialis, Pronator Quadratus/Teres, Supinator, Opponens Pollicis/Digit Minimi | Betaine HCl | **T5** | **U6,5** |
| **Pancreas** | **Latissimus Dorsi**, Deltoid | **Se, Cr**, V-A & F, Pancreas Extracts | **T6** | **U6,3** |
| **Spleen** | **Middle**/Lower **Trapezius** | Spleen Extracts, V-C | **T7** | **U8** |
| **Sex Organ(Ovary)** | **Piriformis, Gluteus** Maximus/**Medium**/Minimum, | **Niacin, Zinc & V-E** | **L5** | **L.1,3** |
| **PMS** | **Adductor** | **Niacin, Zinc & V-E** | | **L.1** |
| **Large Intestine** | **TFL** | **Fe**, Acidophilus | **L4** | **L.2** |
| **Appendix** | Quadratus Lumborum | V-C, E, A | **L2** | **L.4** |
| **Rectus** | Hamstring | V-E, (경련시 Ca, Mg) | **L1** | **L.4** |
| **Small Intestine** | **Rectus Femoris,** Abdominals | **Ca, V-D(Iliocaecal),** V-B | **T10** | **U7** |

| Organ | Muscle | Nutrient | Spine | Tooth |
|---|---|---|---|---|
| **Adrenal** | **Gracilis(Cortex)**, **Sartorius(Medulla)**, Soleus, Gastrocnemius, Tibialis Posterior | **Pantothenic Acid, Folic Acid, V-C & E**, **Adrenal Extract** | **T9** | **L.6** |
| **Bladder** | **Tibialis Anterior**, Peroneus Longus/Brevis, Peroneus Tertius, Rectus Spinals | B complex | | |
| **Lung** | **Deltoid,** Serratus Ant., Coracobrachialis, Levator Scapularis | **V-C, Betacarotene**, V-A, Lung Extract | **T3** | **U3, 4** |
| **Heart** | **Subscapularis** | V-E & B, heart extracts | **T2** | **U2** |
| **Thymus** | **Infraspinatus** | **V-C & A**, Thymus Extract | | |
| **Brain** | Supraspinatus | Brain Extracts RNA | | |
| **Thyroid** | **Teres Minor** | **Iodine, Tyrosine**, Thyroid Extract | | |
| **Kidney** | **Psoas**, Iliopsoas | V-A & E, Kidney Extract, | **T11,12** | |
| **Eye/ Ear** | Upper Trapezius | V-A, B, F. Ca | | |
| **Sinus** | **SCM** | **Niacin** | | **U1** |



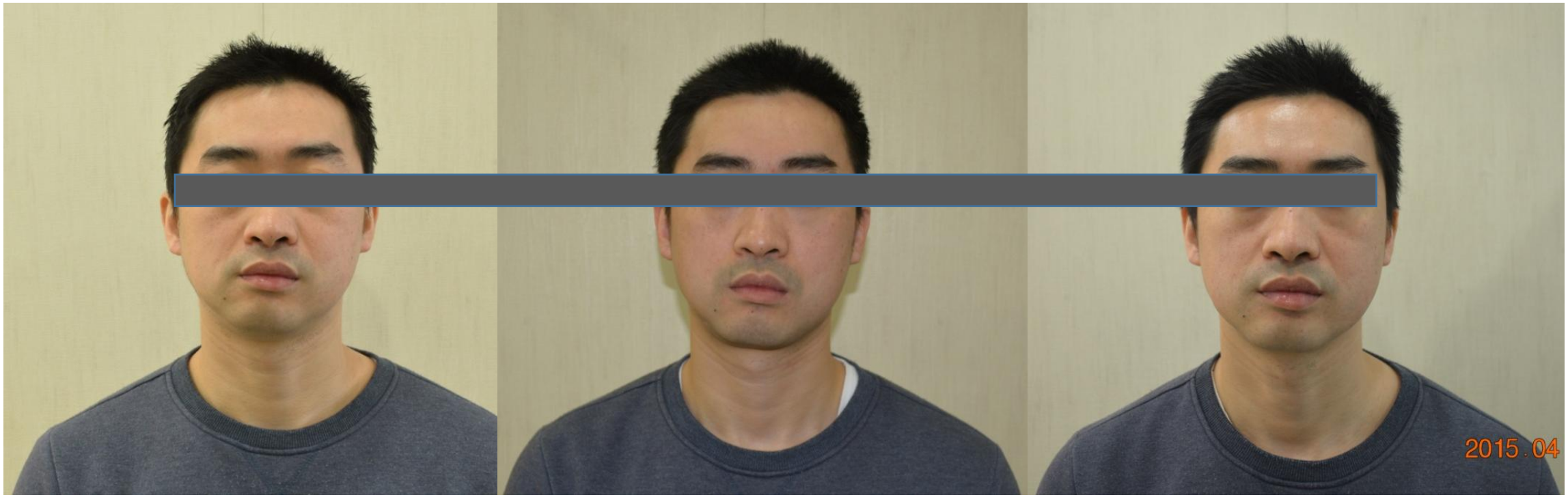



# OrthoFeet®




# 권 * *, 32세, 남

1. Tmj Pain
2. Numbness in left side of face, arm & leg
3. Generalized weakness and pain




14.12.16

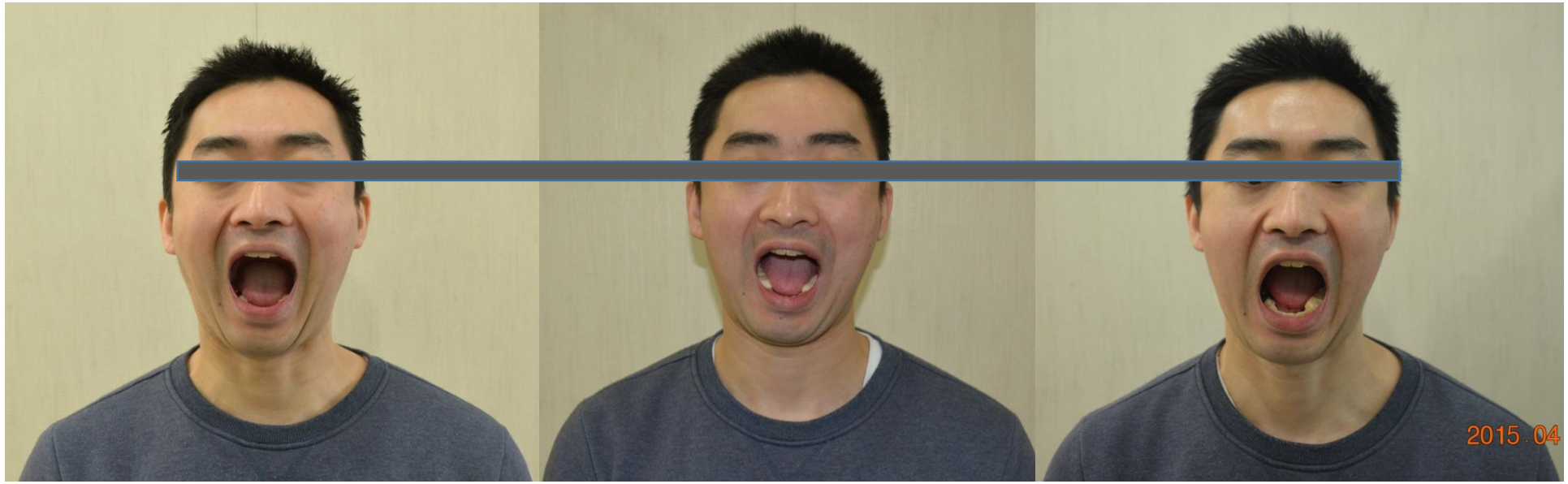
15.01.26

15.04.14


14.12. 16

15.01.26

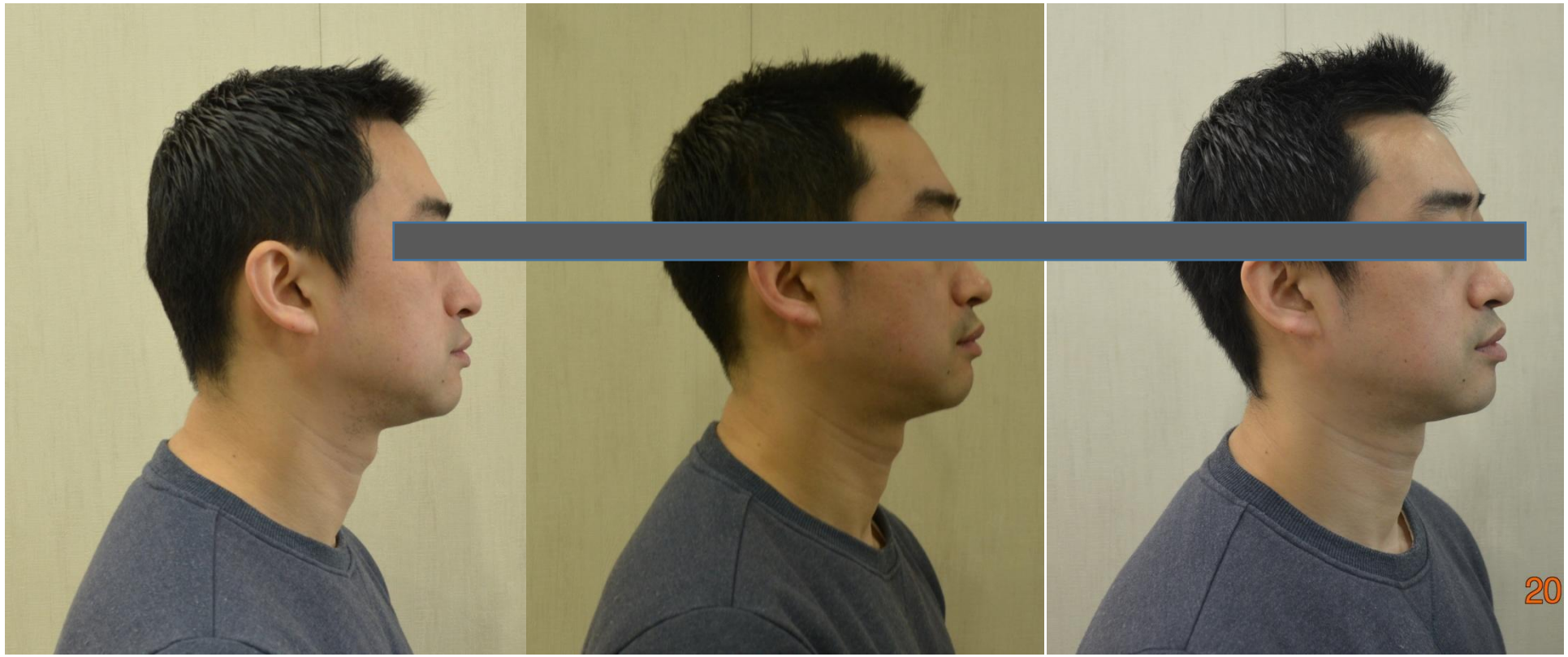
15.04.14




14.12. 16

15.01.26

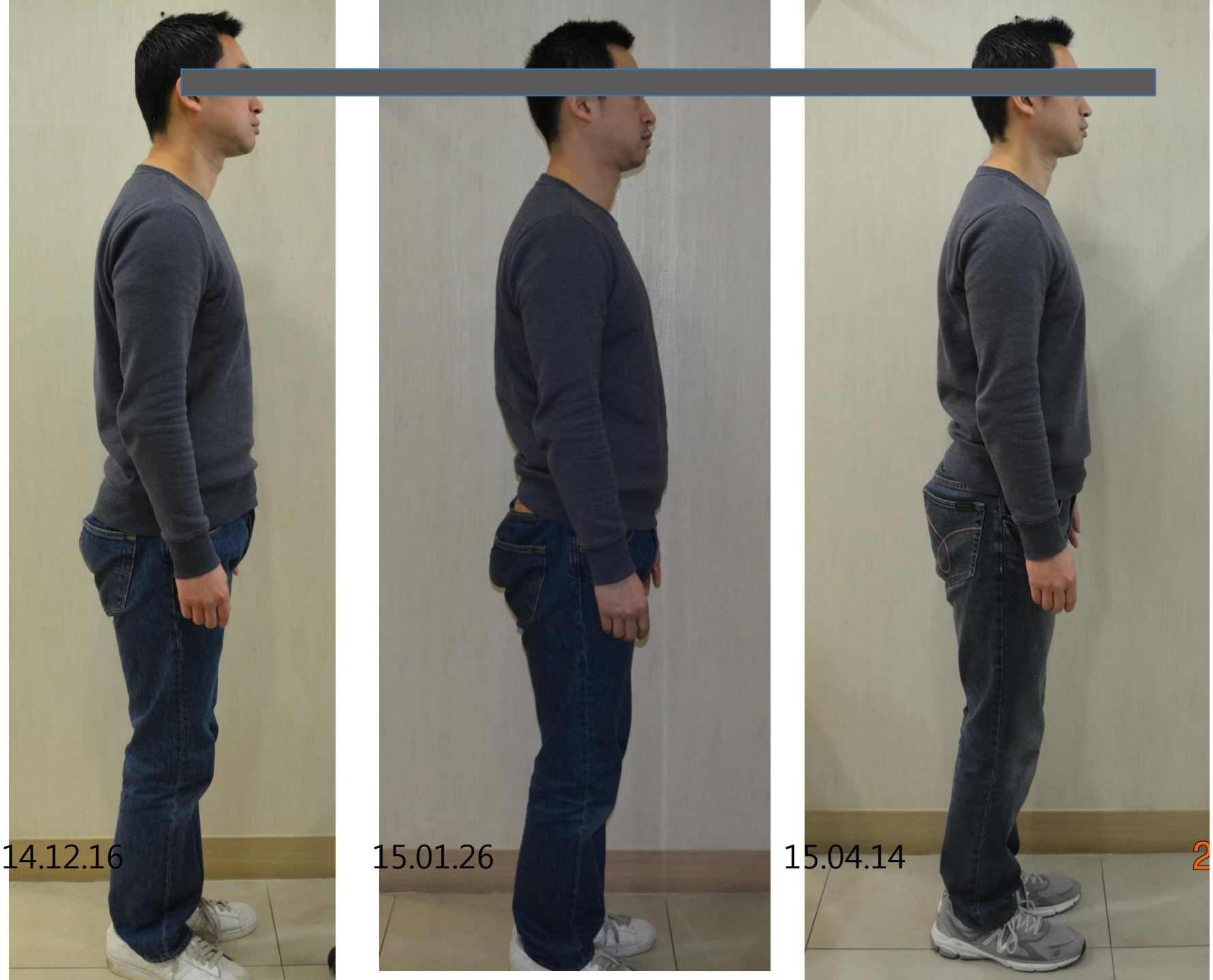
15.04.14




14.12.16

15.01.26

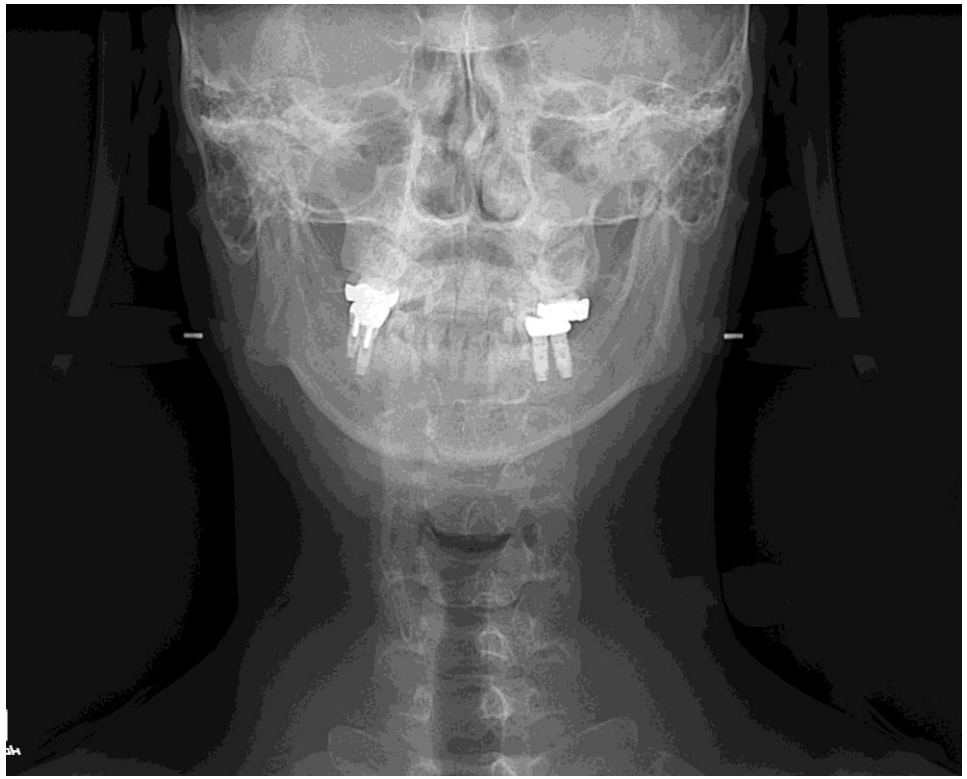
15.04.14


14.12.16
15.01.26
15.04.14


14.12.16
15.01.26
15.03.03
2015.

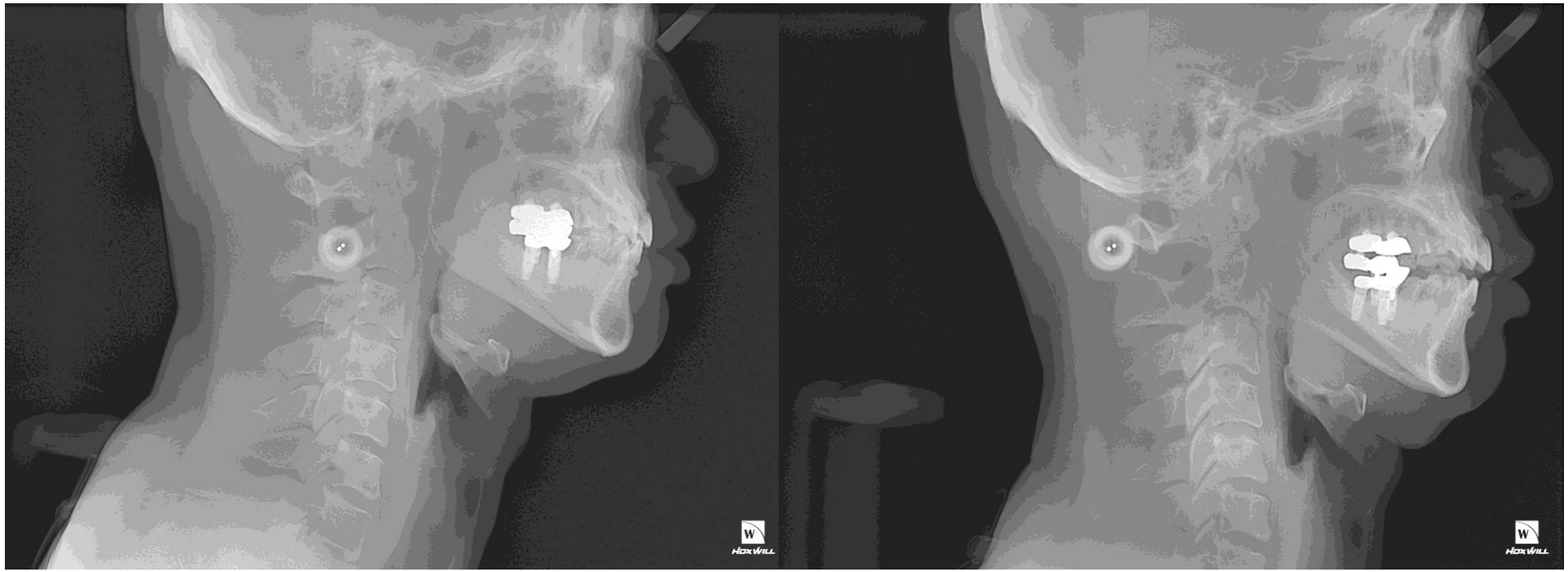

14.12.09


15.03.09



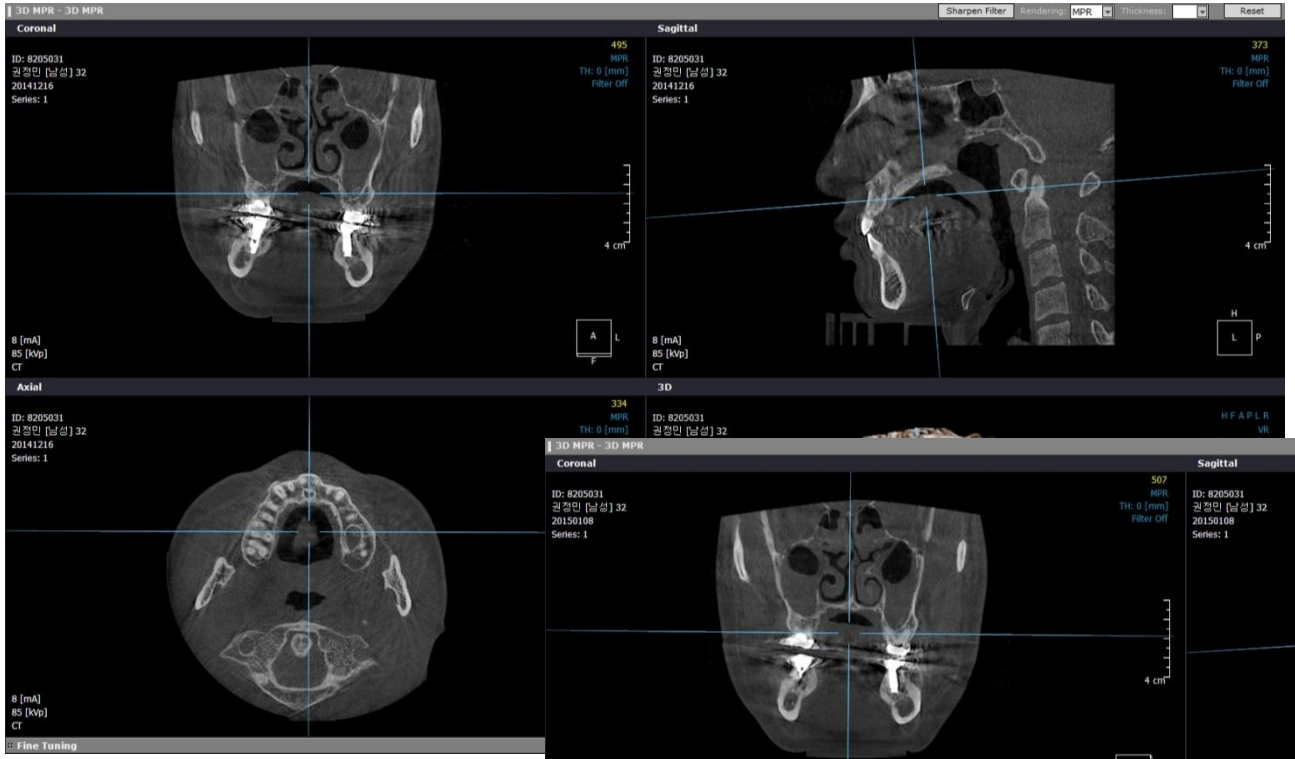
14.12.09

15.01.26

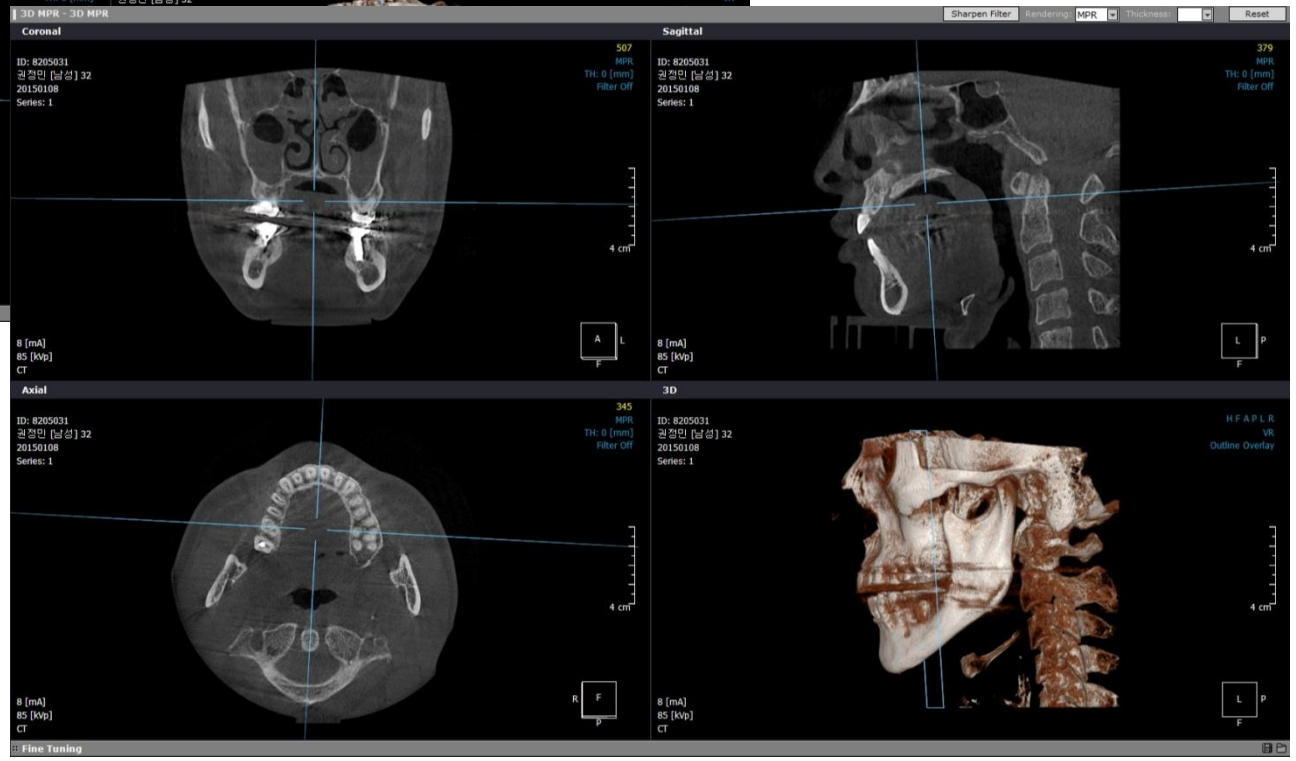


14.12.09

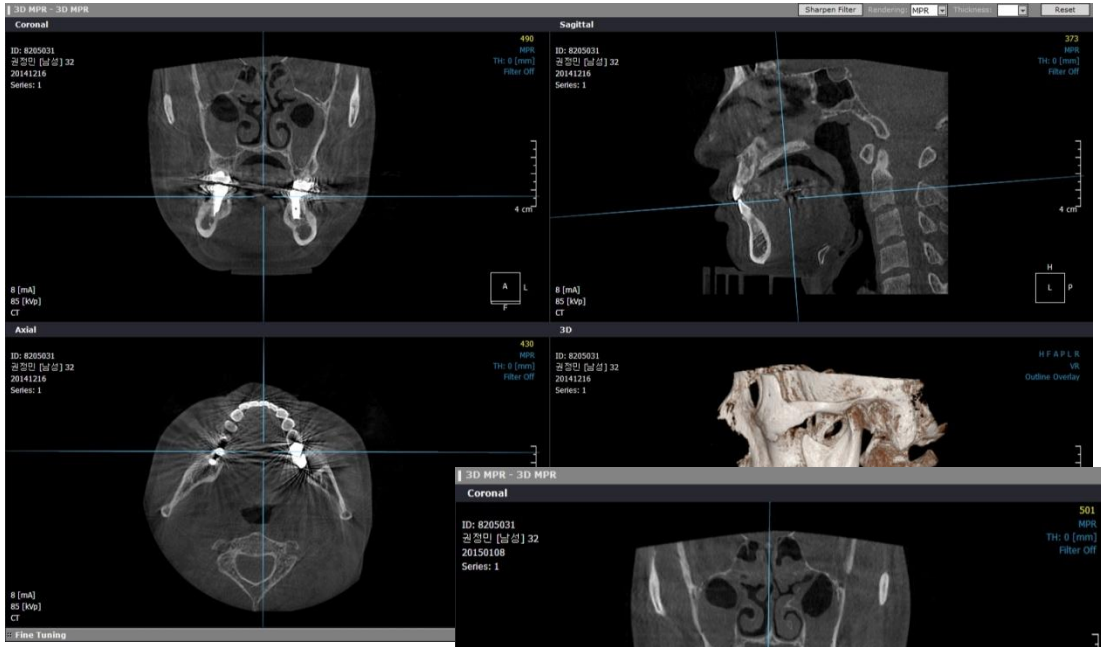
15.01.26



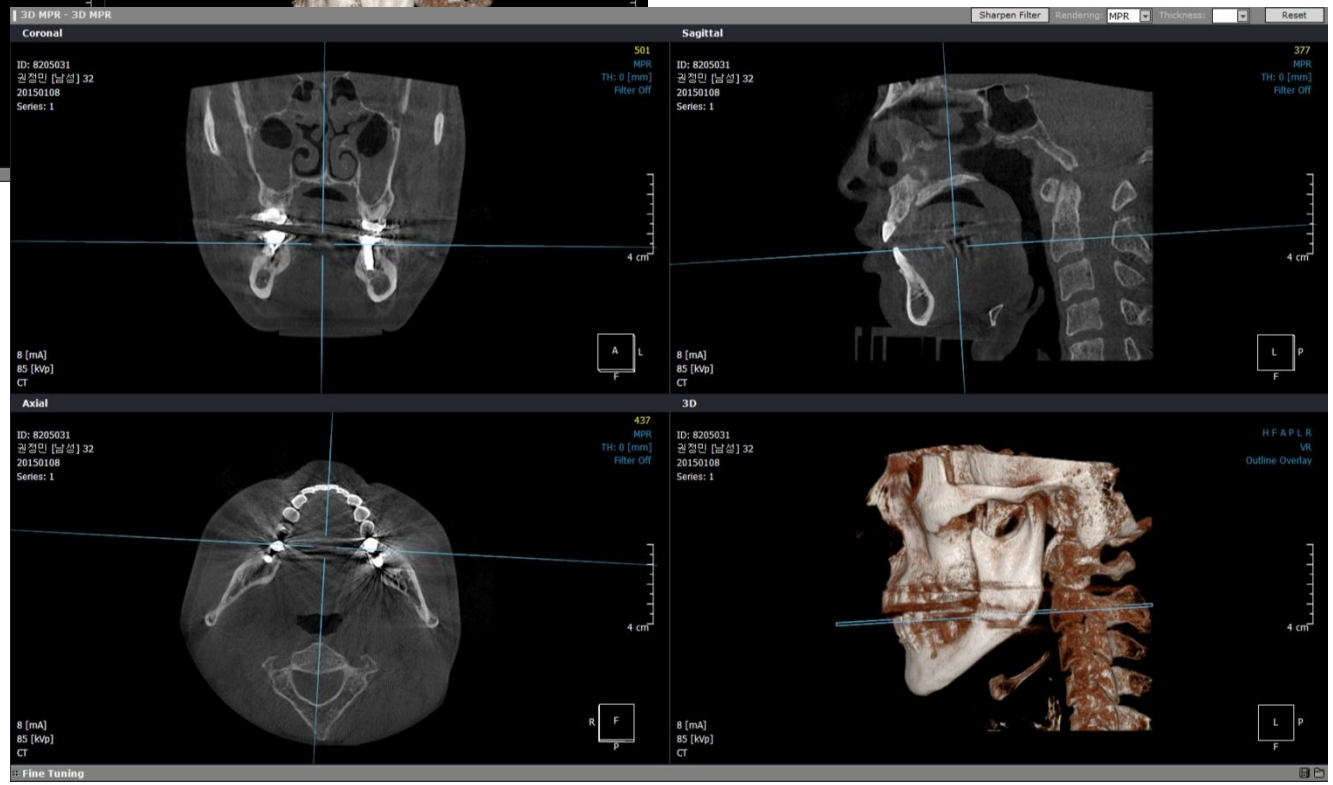

14-12-16



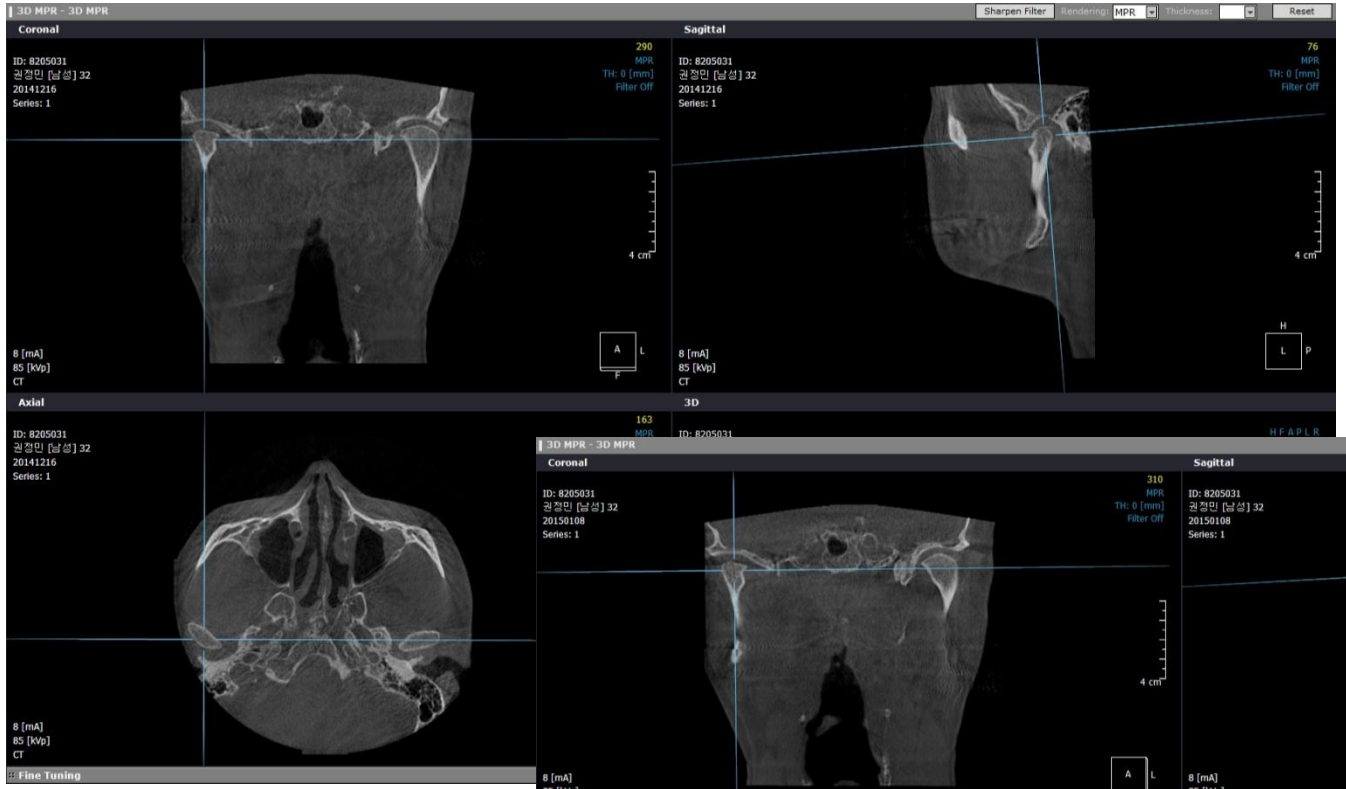

15-01-08



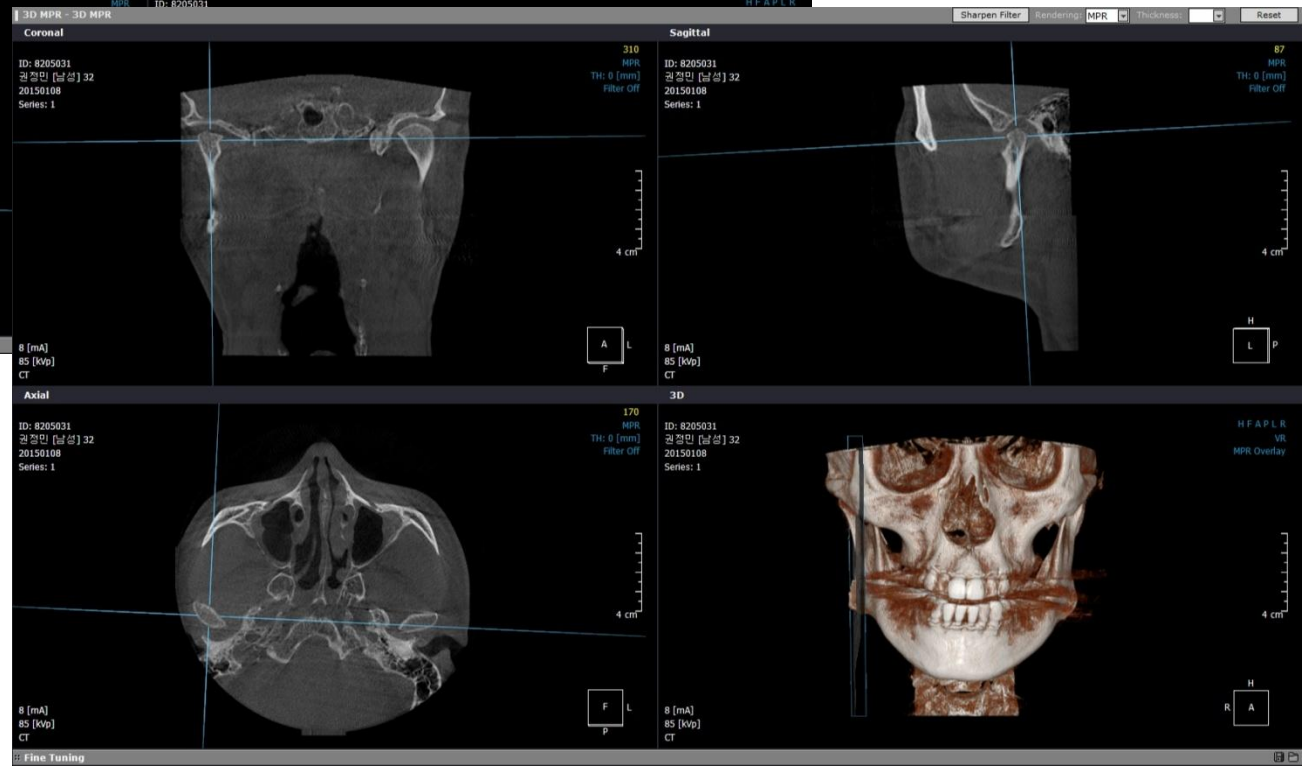

14-12-16 c2



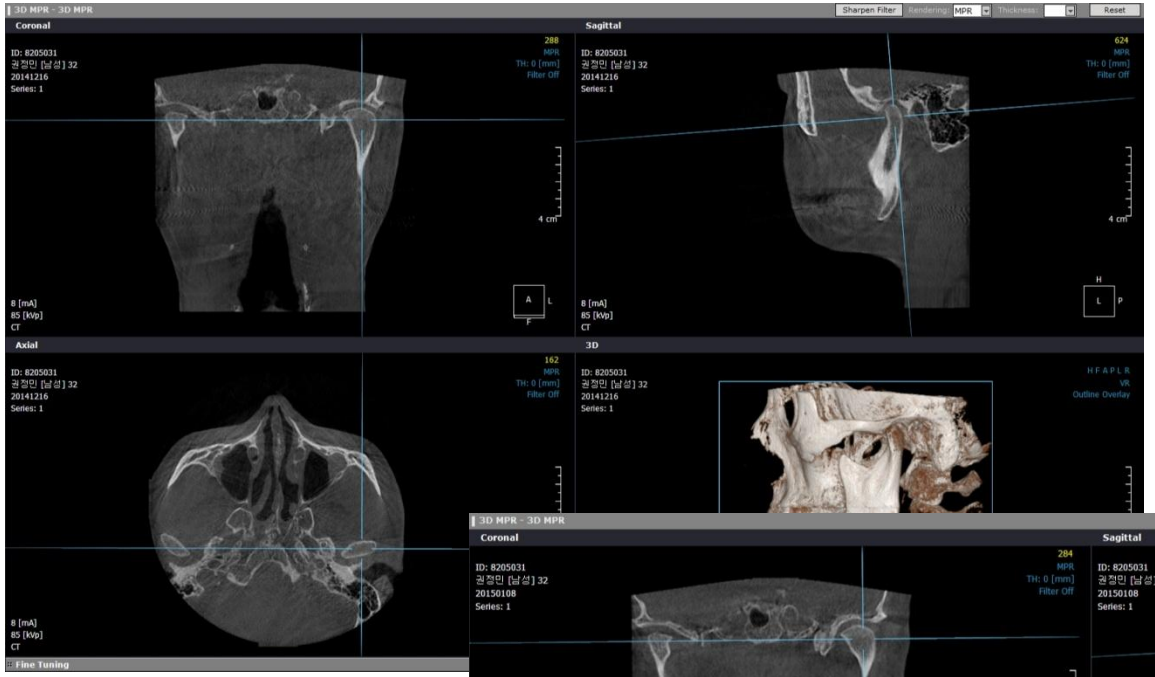

15-01-08 C2



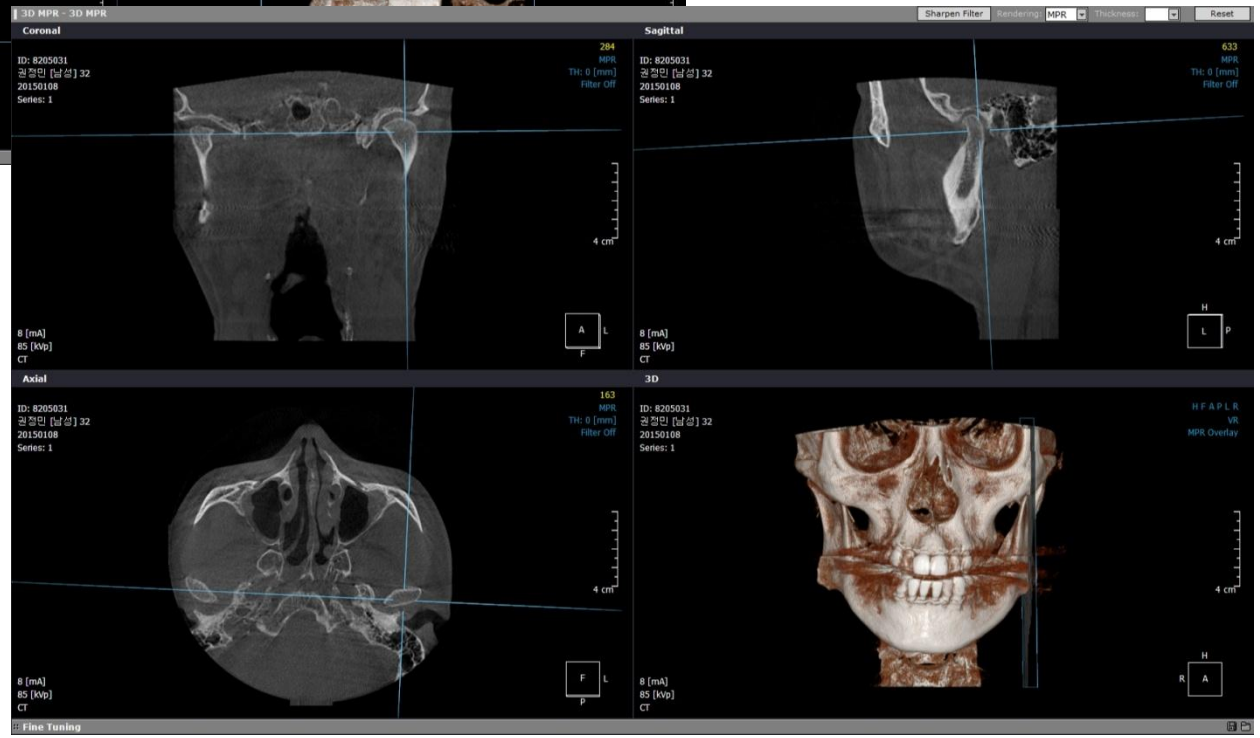

14-12-18 rt TMJ




15-01-08 Rt TMJ




14-12-18 Lt TMJ




15-01-08 Lt TMJ

# Thank you for joining TMJ AK world !!!!!

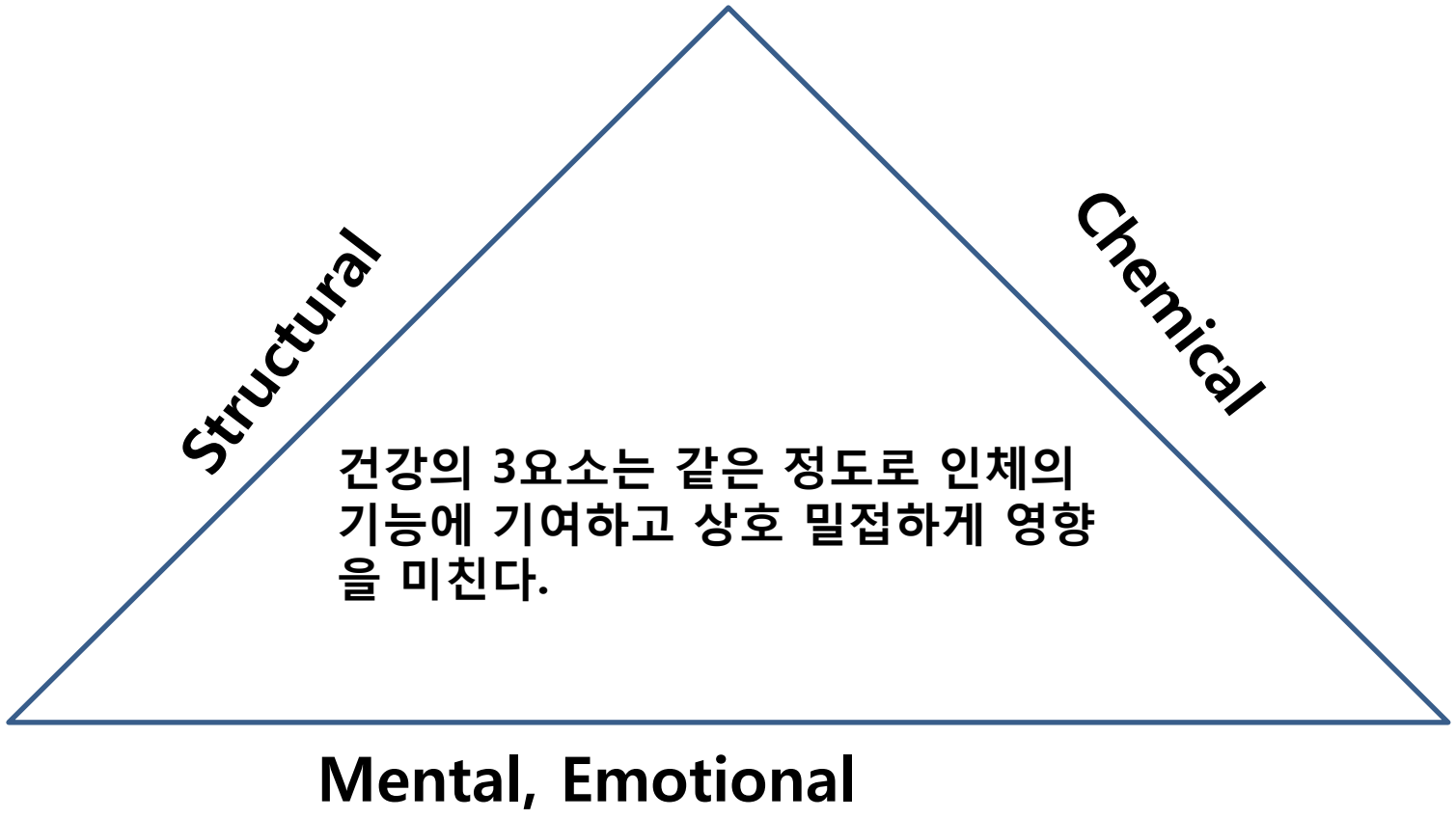
캘리포니아 미형치과

California Cosmetic Dentistry

# 전인적인 치료에 관심이 있는 치과의사를 위한 Applied Kinesiology (AK)소개

이승원
AK연구회 회장

# Dr. Goodheart 건강의 3요소



# 응용근신경학(Applied Kinesiology)이란?

- 응용근신경학은 근육의 반응을 매개로 하여 인체의 건강 3요소 즉 구조, 화학, 정신적인 면을 모두 검사하고 치료하는 전인적인 의학으로 카이로프랙틱을 비롯한 도수치료법, 두개골 치료법, 침구경락, 임상영양학, 기능의학(functional medicine), 운동치료법, 족부의학, 자연치료법(Naturopathy), 임상심리학 등을 유기적으로 통합하여 양방, 한방 그리고 대체의학의 통합적인 패러다임을 제시하고 있다

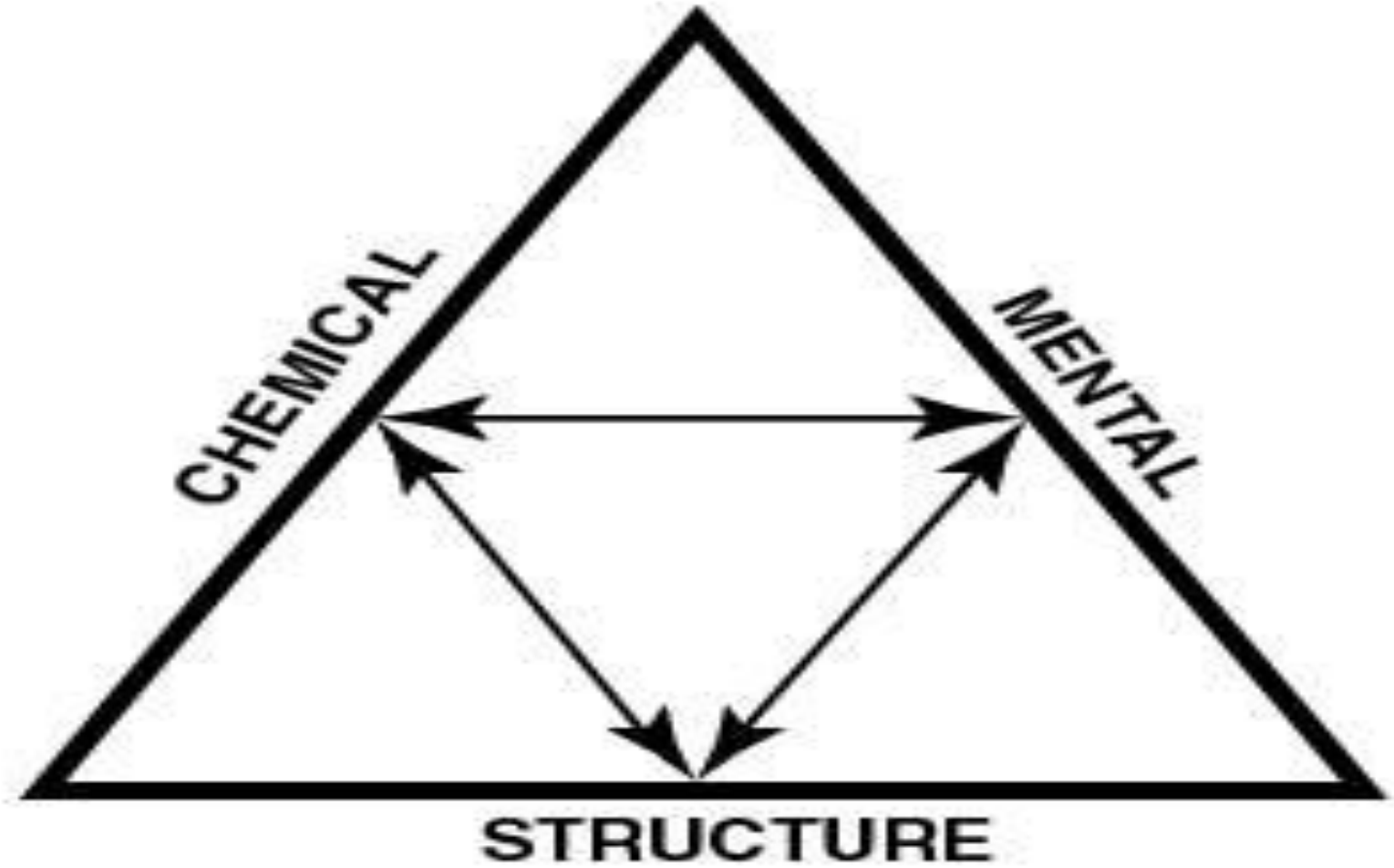

ORTHODOX
MEDICINE
정통의학
Clinical
psychology
임상심리학
FUNCTIONAL
MEDICINE
기능의학
Chiropractic
카이로프랙틱
수기치료
CRANIAL
THERAPY
두개골
치료법
AK
CLINICAL
NUTRITON
임상영양학
PODIATRY
족부의학
FUNCTIONAL
BIOCHEMISTRY
기능생화학
SPORTS
MEDICINE
스포츠의학
ACUPUNCTURE
MERIDIAN
한방경락

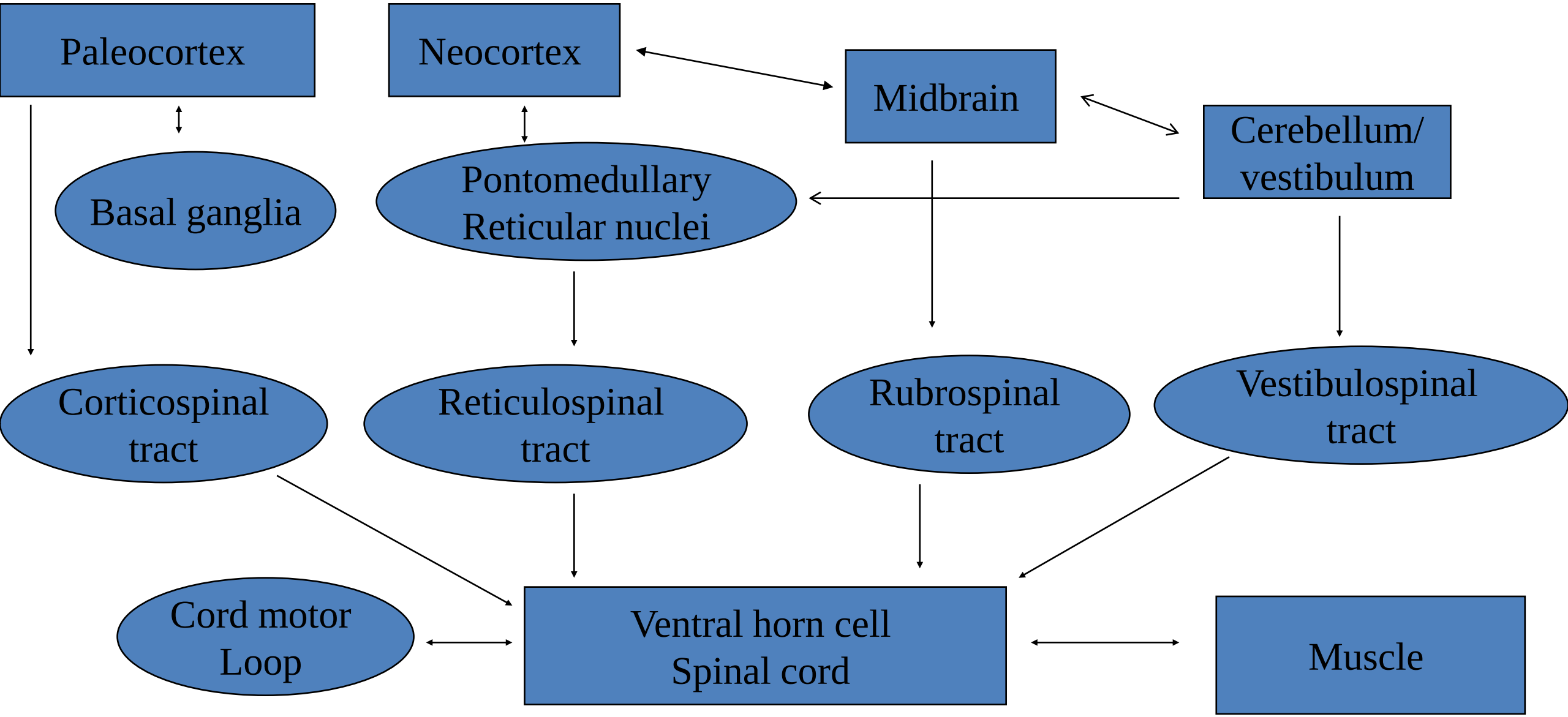
# 근육검사를 통한 시스템의 반영

# International College of Applied Kinesiology

- Formed in 1975 to study use of muscle testing in diagnosis and treatment
- Multidisciplinary group of MD's, OMD's, DDS's, DC's and DO's.
- Chapters in over 20 countries
- **www.icak.com**
- **www.icakusa.com**

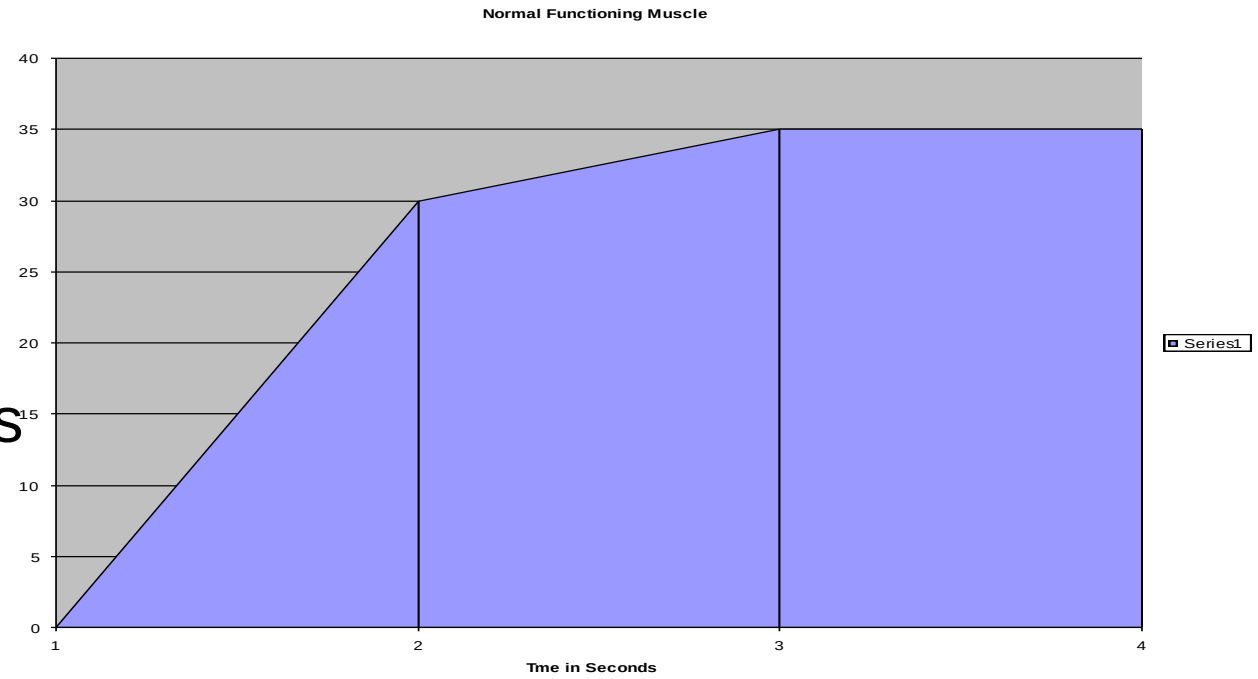
# 구조적인 면, 화학적인 면, 정신적인 면이 서로 조화와 균형을 이루어야 한다




Paleocortex
Neocortex
Midbrain
Cerebellum/
vestibulum
Basal ganglia
Pontomedullary
Reticular nuclei
Corticospinal
tract
Reticulospinal
tract
Rubrospinal
tract
Vestibulospinal
tract
Cord motor
Loop
Ventral horn cell
Spinal cord
Muscle

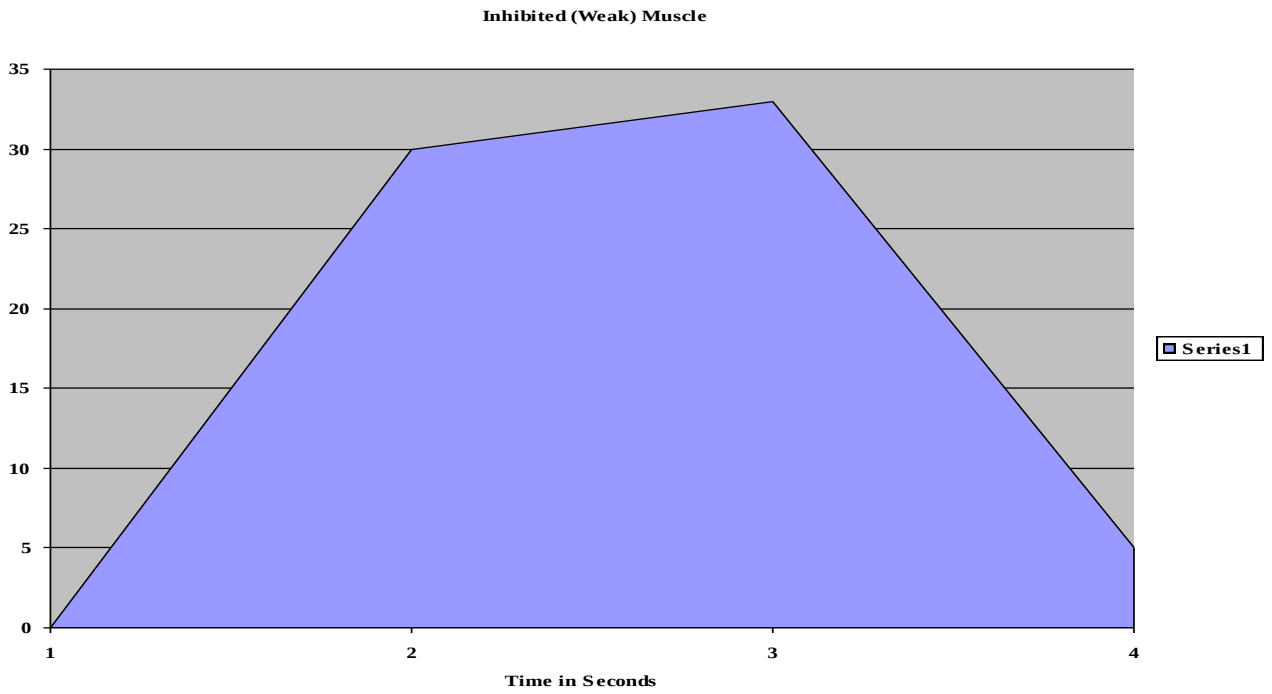
# 정상 근육(Normal Test)

- 환자가 검사자가 가하는 힘에 저항한다Patient applies pressure against tester
- 검사자는 더 힘을 가한다.Tester increases force
- 환자는 그 힘에 적응한다. Patient is able to adapt



# 약한 근육

- 환자는 검사자가  가하는 힘에 저항한다.
- 검사자는 힘을 증가시킨다.
- 환자는 적응할 수 없다.



- Muscle testing is an important tool in the decision making process of what to do for a patient than confronted with a number of different alternatives.
- 근육검사는 여러가지 가능성을 앞에 두고 무엇이 문제인지 혹은 어떤 것을 해야 하는지를 알려주는 중요한 도구다.
- -Walter Schmitt Jr. –

# 접촉검사(therapy localization)

- 1974 Dr. Goodheart
- 어디에 문제가 있는지를 알려준다.
- 어떤 문제인지를 알려주지는 못한다.
- 초기에 약한 근육이 강해질 수가 있고
- 초기에 강한 근육이 약해질 수 있다.

접촉검사는 일차적인
진단방법은 아니다.
이것은 확진되어야 한다

# 정상 근육의 항진(facilitation)과 억제(inhibition)

# 견관절의 신전근 검사

견관절 신전근 검사가 정상적으로 억제

혹은 항진

견관절의 굴곡근이 정상적으로 항진

# 응용근신경학을 임상에 적용하기 위한 준비

- 근육검사를 정확하게 해야 한다.
  - 근육의 해부학적인 위치
  - 하는 방법을 처음에 정확하게
  - 미세한 힘의 변화를 느껴야 한다.
- 몸의 상태에 따라 근육이 역동적으로 변한다는 것을 이해해야 한다.
- 촉진을 잘 하고 surface anatomy에 관심을 가져야
- 근육에 대한 해부학적인 지식

- 인체에 대한 신경생리학적인 개념
- 인체를 전체로 보고 치료하는 습관 (구조, 화학, 정신)
- 환자의 증상을 쫓지는 않지만 절대로 무시하지 않는다. 환자가 말하는 것과 신체언어의 의미를 읽을 수 있어야 한다.

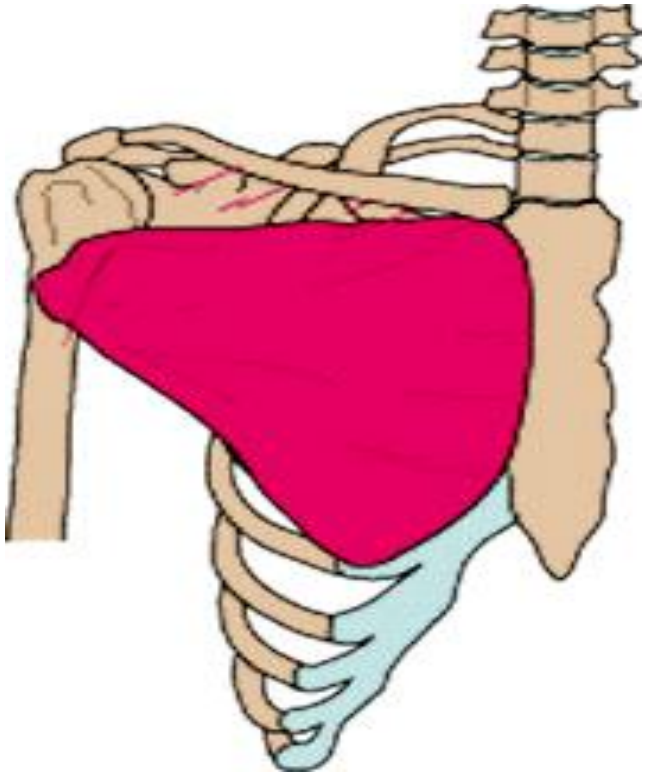
# 근육

- 큰가슴근 복장뼈분지(대흉근흉골지Pectoralis major sternum, PMC)
- 궁둥구멍근(이상근,Piriformis)

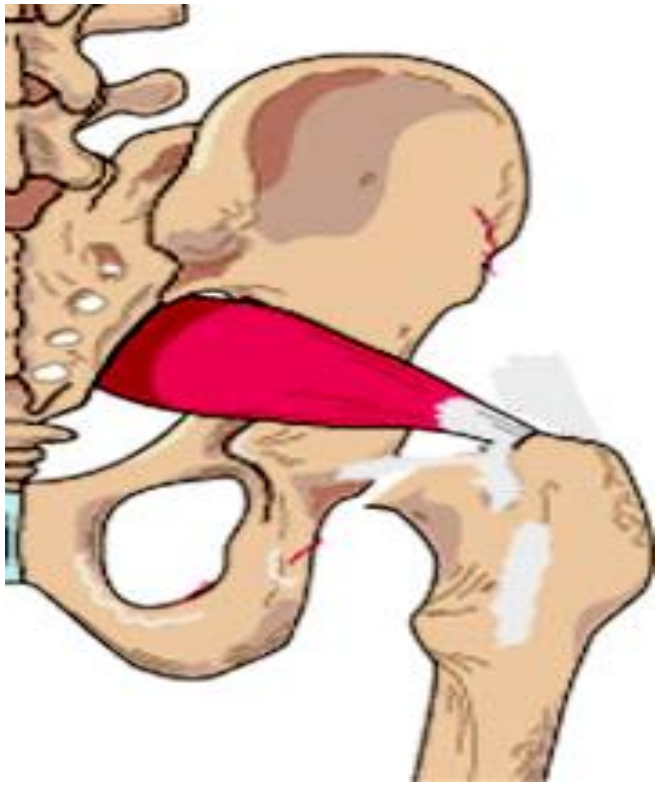
# 큰가슴근 복장뼈분지, 대흉근 흉골지의 기능
# PMS (Pectoralis Major Sternal Division)

- 상완골의 굴곡

- 약할 때 능형근의 긴장
  - 물건을 던질 때 문제가 생길 수 있다
- 전신의 독소, 해독의 문제



# 궁둥구멍근, 이상근의 기능
# Piriformis

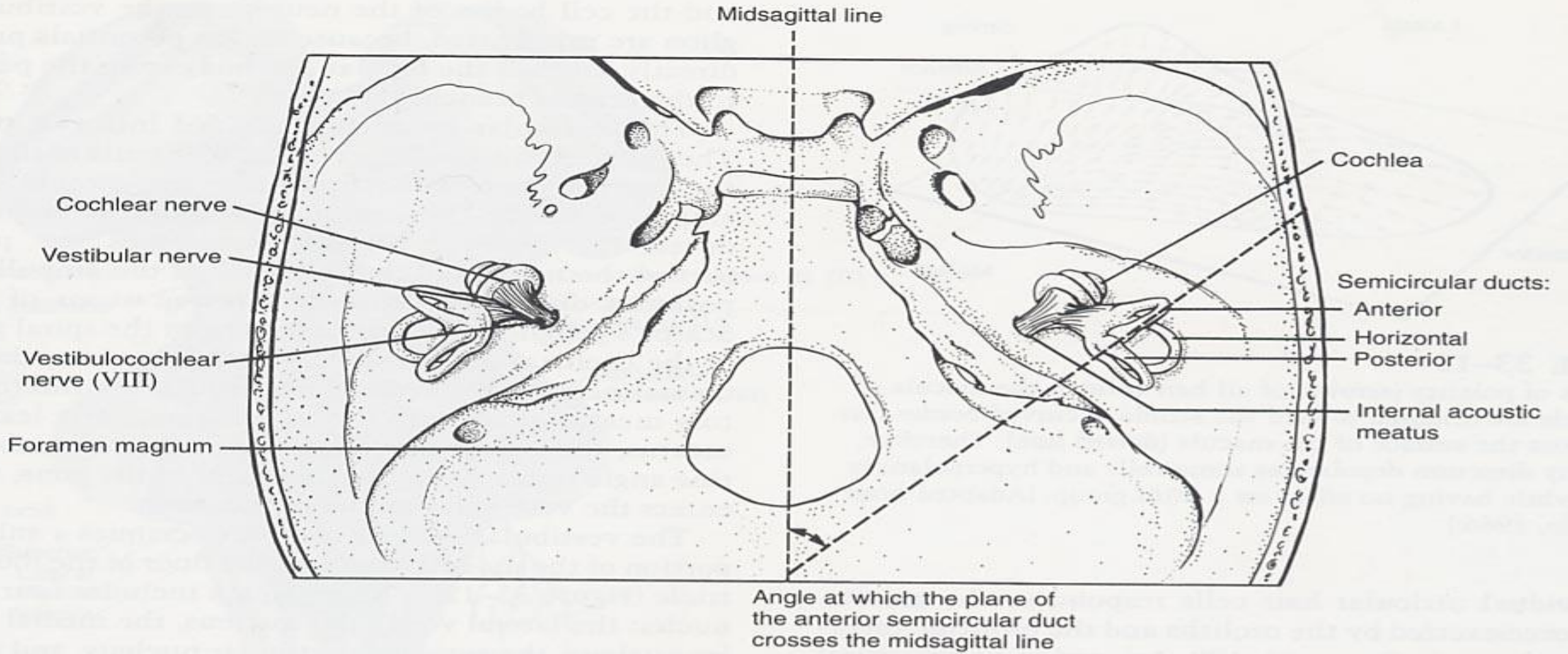


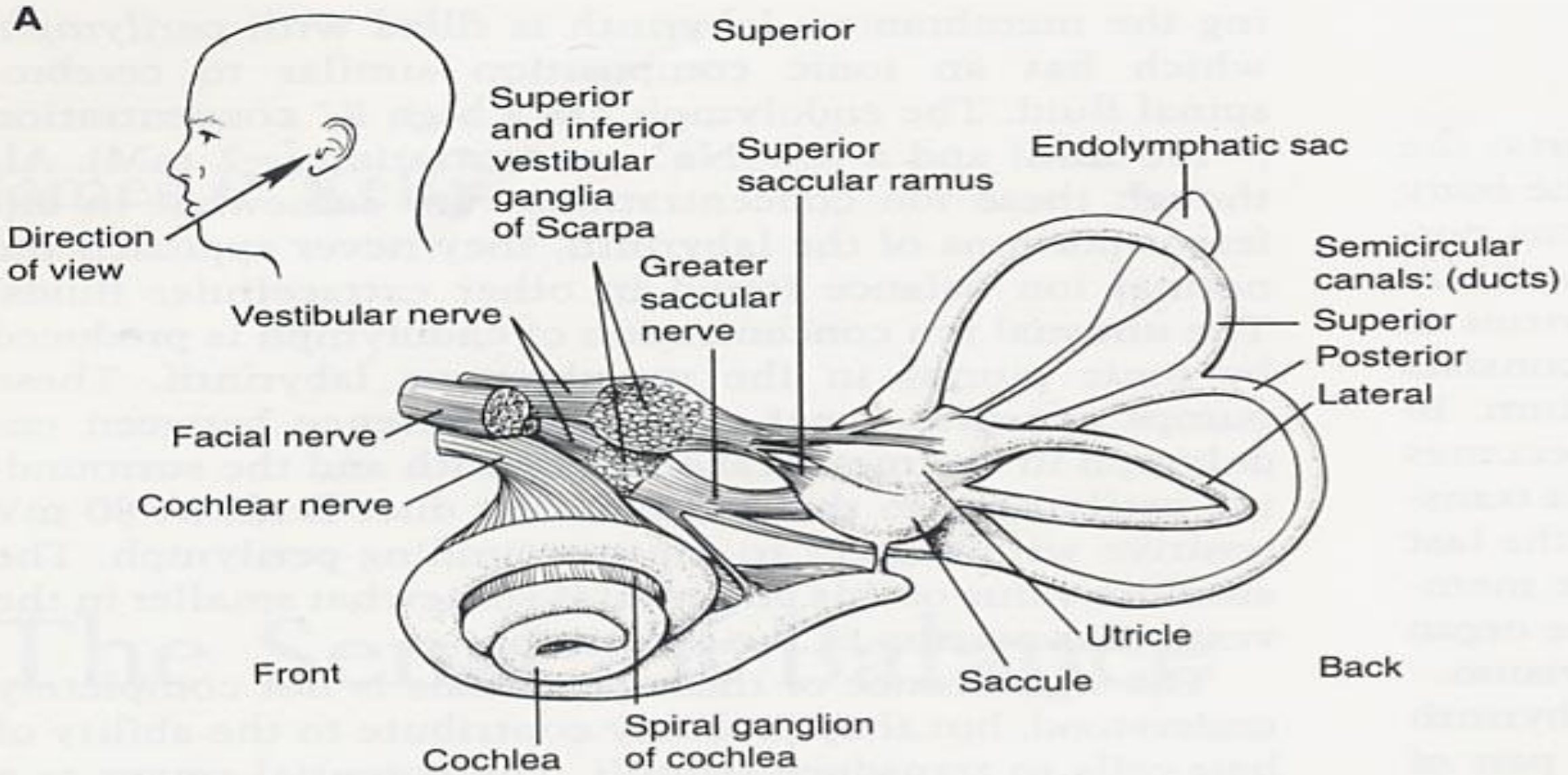
- 고관절 외회전근

- 약할 때 임상적인 의의
  - 천골의 아탈구
  - 목의 통증과 관련
  - 대전자 주위의 통증

# 지속성 미로반사(Tonic labyrinthine reflex)

- 태어나면서부터 가지고 있는 강력한 자세조절 기능
- inborn reflex –protective effect
- 중력에 따른 머리의 위치와 관련
- Utricles
- More dominant for lower extremities


Midsagittal line
Cochlear nerve
Vestibular nerve
Vestibulocochlear nerve (VIII)
Foramen magnum
Cochlea
Semicircular ducts:
Anterior
Horizontal
Posterior
Internal acoustic meatus
Angle at which the plane of the anterior semicircular duct crosses the midsagittal line


A
Superior
Superior and inferior vestibular ganglia of Scarpa
Superior saccular ramus
Endolymphatic sac
Direction of view
Semicircular canals: (ducts)
Superior
Posterior
Lateral
Vestibular nerve
Greater saccular nerve
Facial nerve
Cochlear nerve
Utricle
Front
Saccule
Back
Spiral ganglion of cochlea
Cochlea

# 지속성 미로반사의 4가지 패턴(4TLR basic patterns )

face up

face down

right ear up

left ear up

Protective response from falling

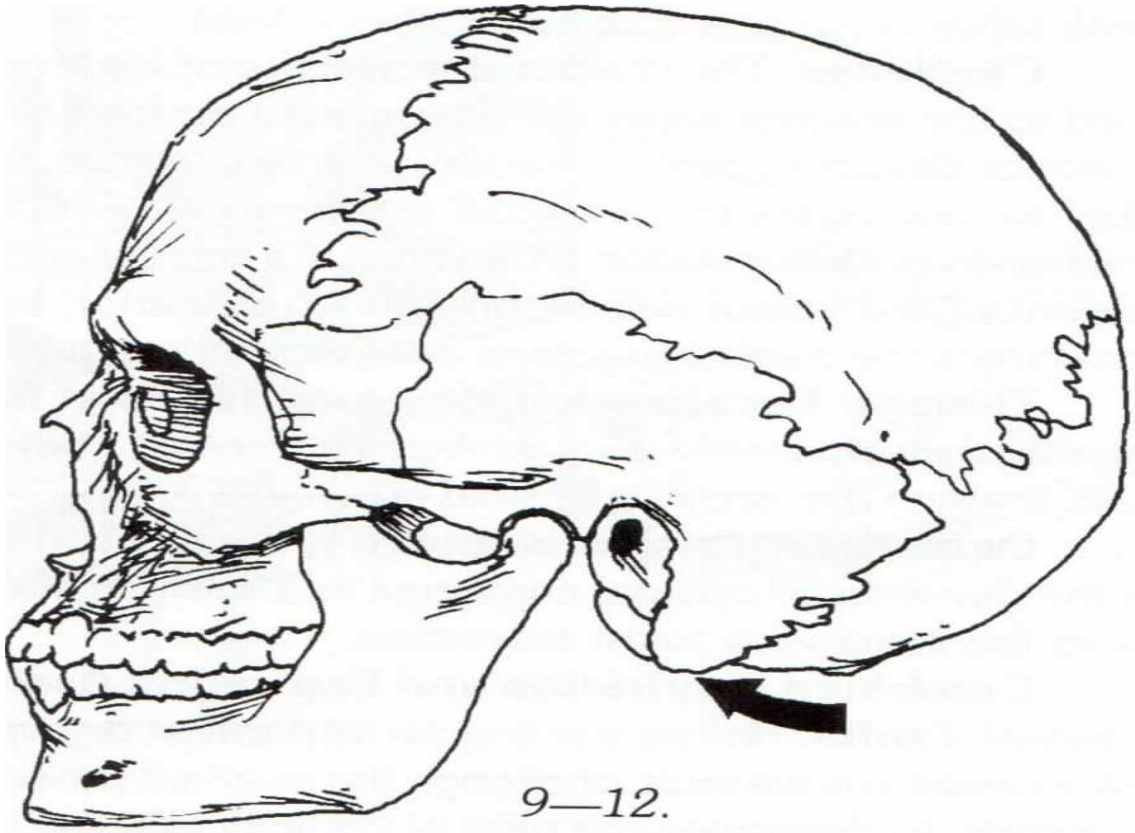
- **얼굴을 위로 하면**
- 신전근이 항진되고 굴곡근은 억제된다(사지에서)

- **얼굴을 아래로 하면**
- 굴곡근이 항진되고 신전근은 억제된다

- **환자가 누운 상태에서 머리를 약한 굴곡근의 반대로 돌리면 약한 근육이 강해진다.**

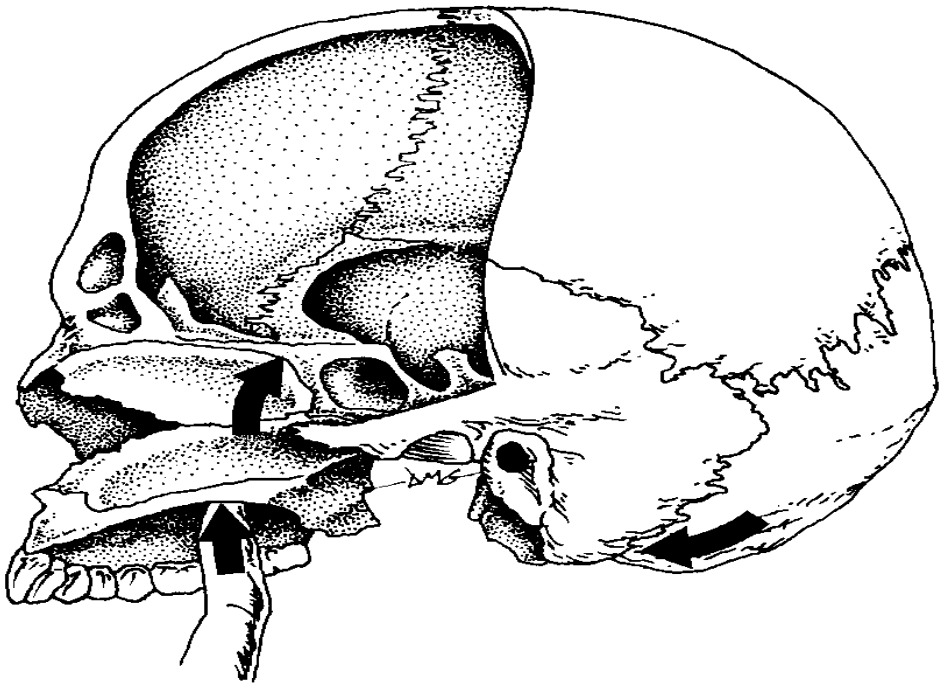
- 누웠을 때 신전근을 검사하려면 잇발을 약하게 물면 약한 근육은 약하게 검사됨
- 서있을 때도 마찬가지.
- 혹은 머리를 앞으로 숙이면 굴곡근이 수축시작 약한 근육은 약하게 검사됨.

# Major Cranial Fault
# 접촉검사, 유발검사

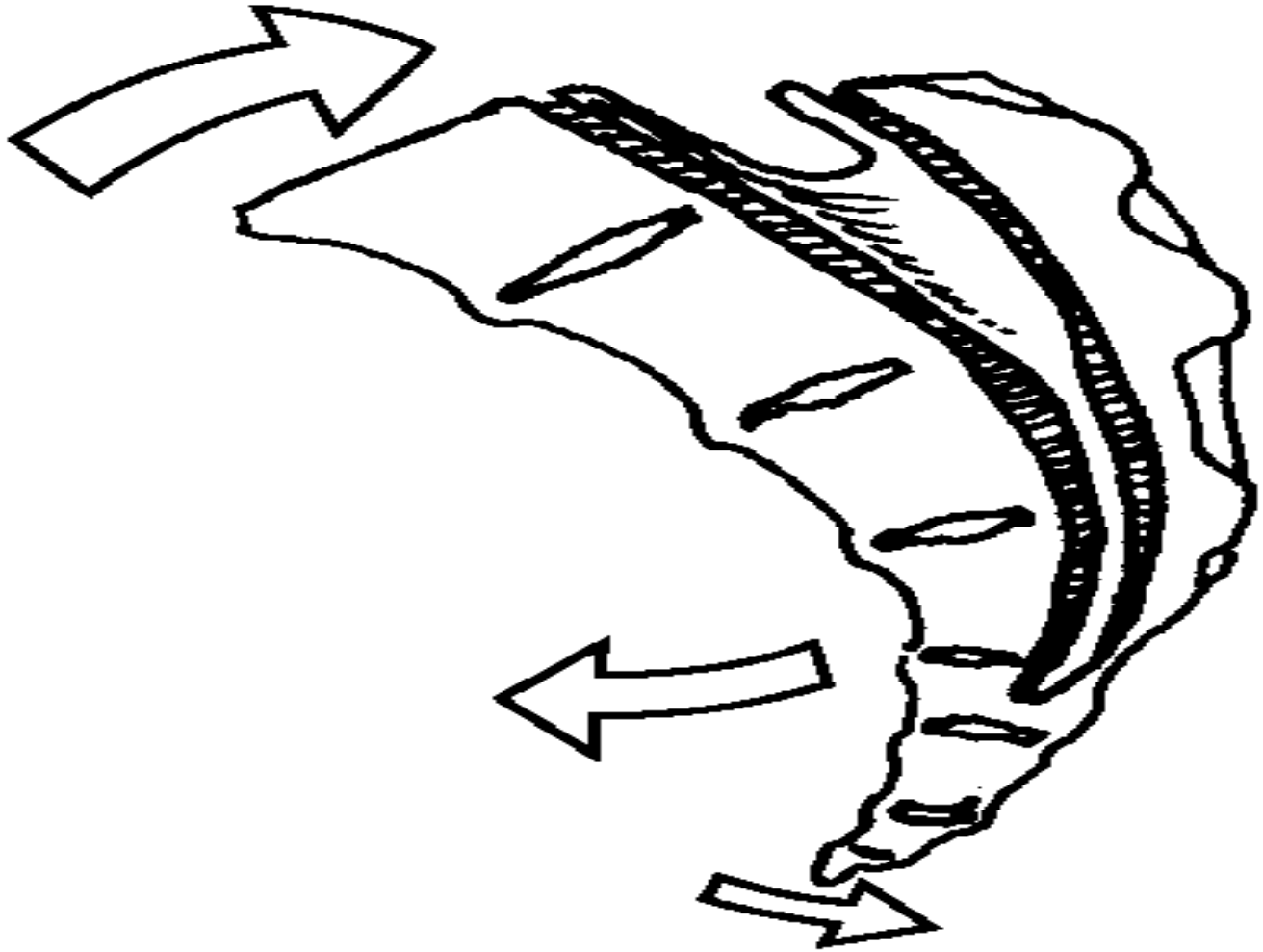


9—12.

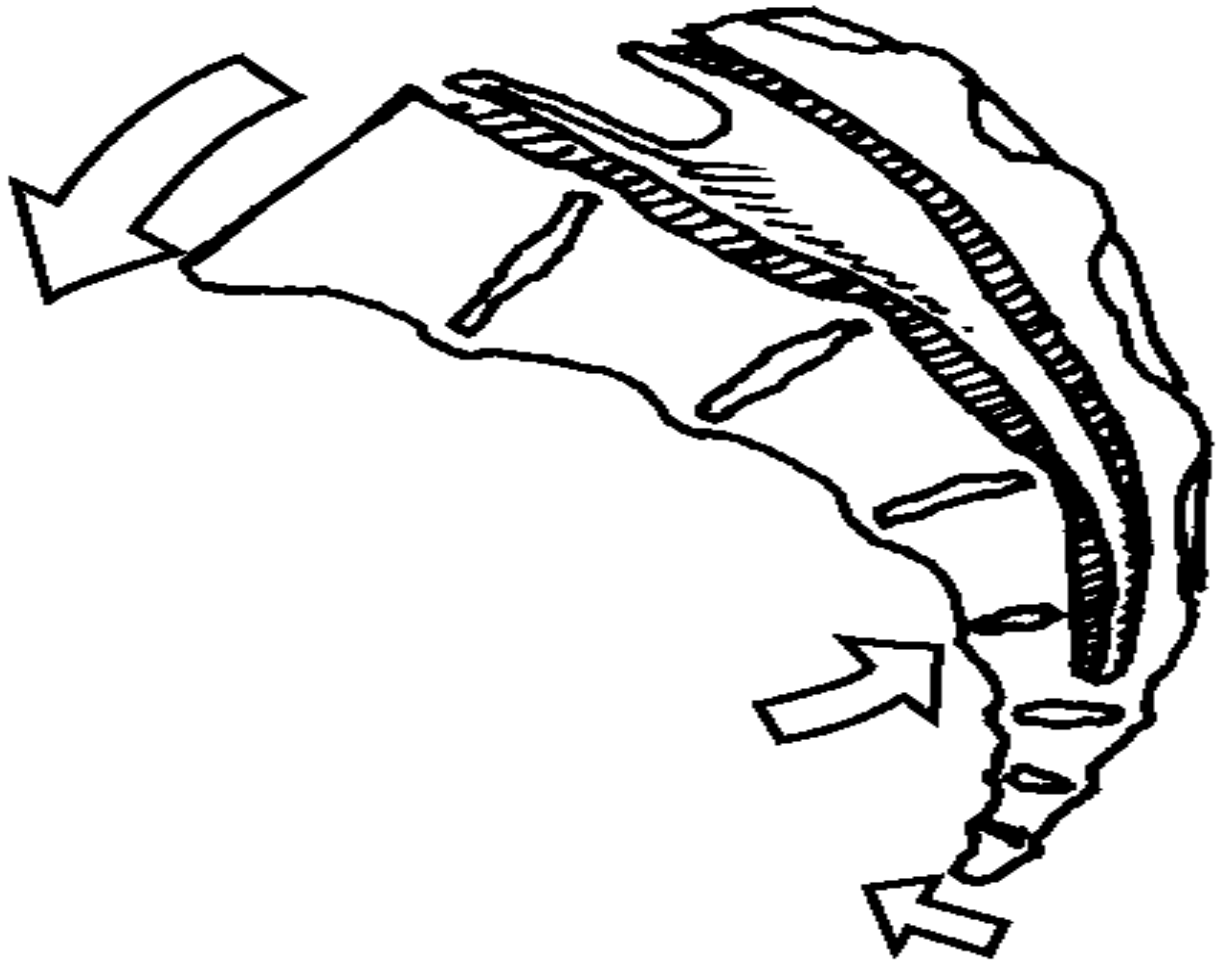
# Sphenobasilar fault
# 접촉검사, 유발검사



# 흡기시의 천골의 움직임(sacral extension, counternutation)



# 호기시 천골의 움직임
# (sacral flexion, nutation)



- 턱관절과 척추와의 관계
- 턱관절과 두개골
- 발과 턱관절

# 턱관절의 이상 진단

- 증상: 통증, 잡음.
- 증상이 없이 여러 곳에 기능이상:  두통, 이명, 경추통, 요통, .. 신경계 기능이상, 척추변형
- AK 진단
- 치과적인 진단

# AK 진단

- 잡음, jaw deviation, 교합
- 근육검사: 접촉검사 하지 않고, 접촉검사 하고
- 턱관절의 이상은 스트레스, 부신, toxic, GI, 등 다양한 기능이상과 관계하고 동반되는 경우가 많아서 같이 진단하고 치료

# 치료

- 턱관절에 직접하는 치료 muscle release, IRT, repositioning, prolo, manipulation
- Cranial fault
- Cervical 교정
- Posture head forward, hidden cervical disc
- 족부와 관련—excessive pronation 이 있으면 이것을 먼저 교정

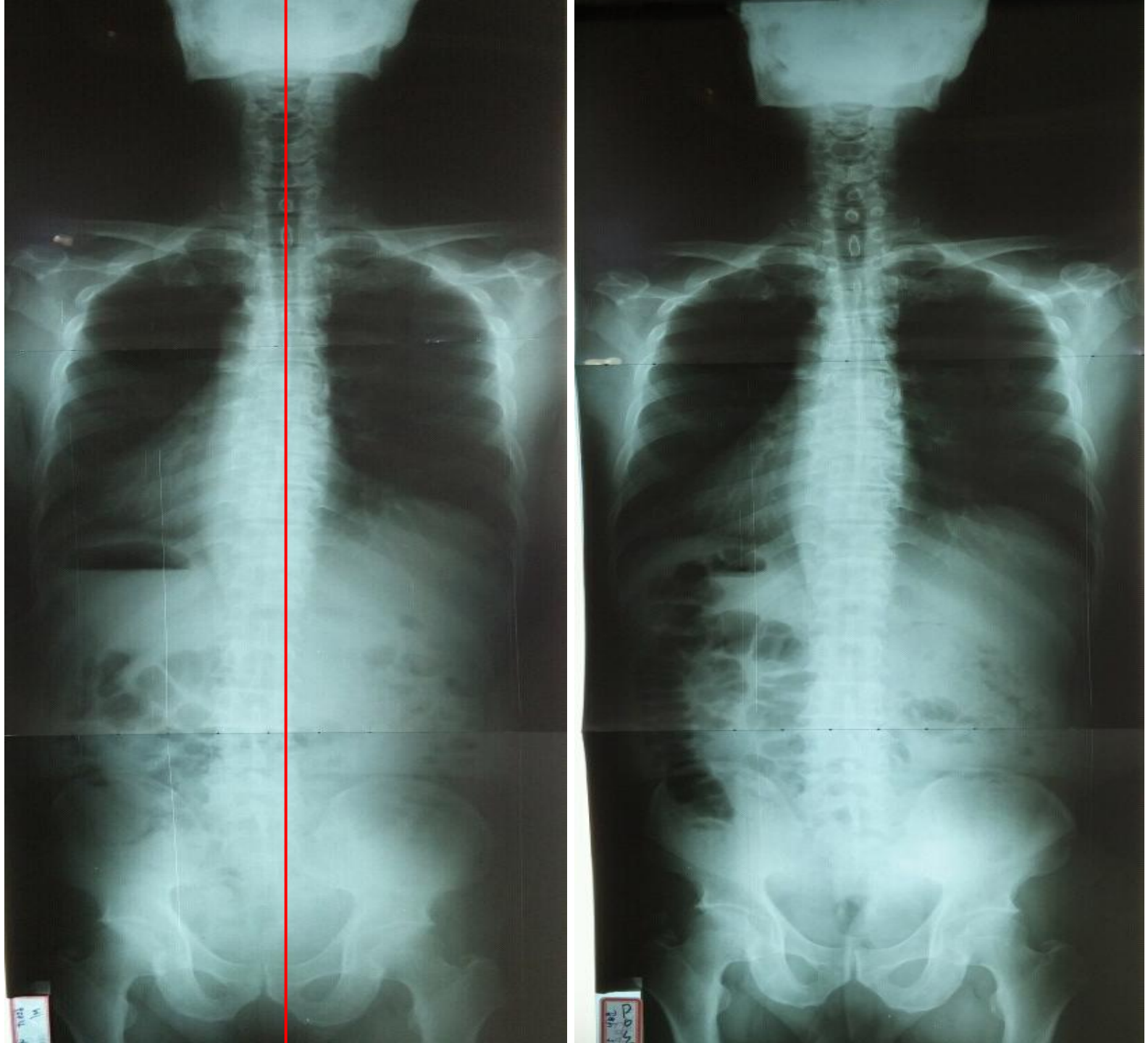
# TMJ Balancing Appliance

- TBA 표준형장치
- CBA 맞춤형장치

하고 난 후의 전신 XRAY의 변화

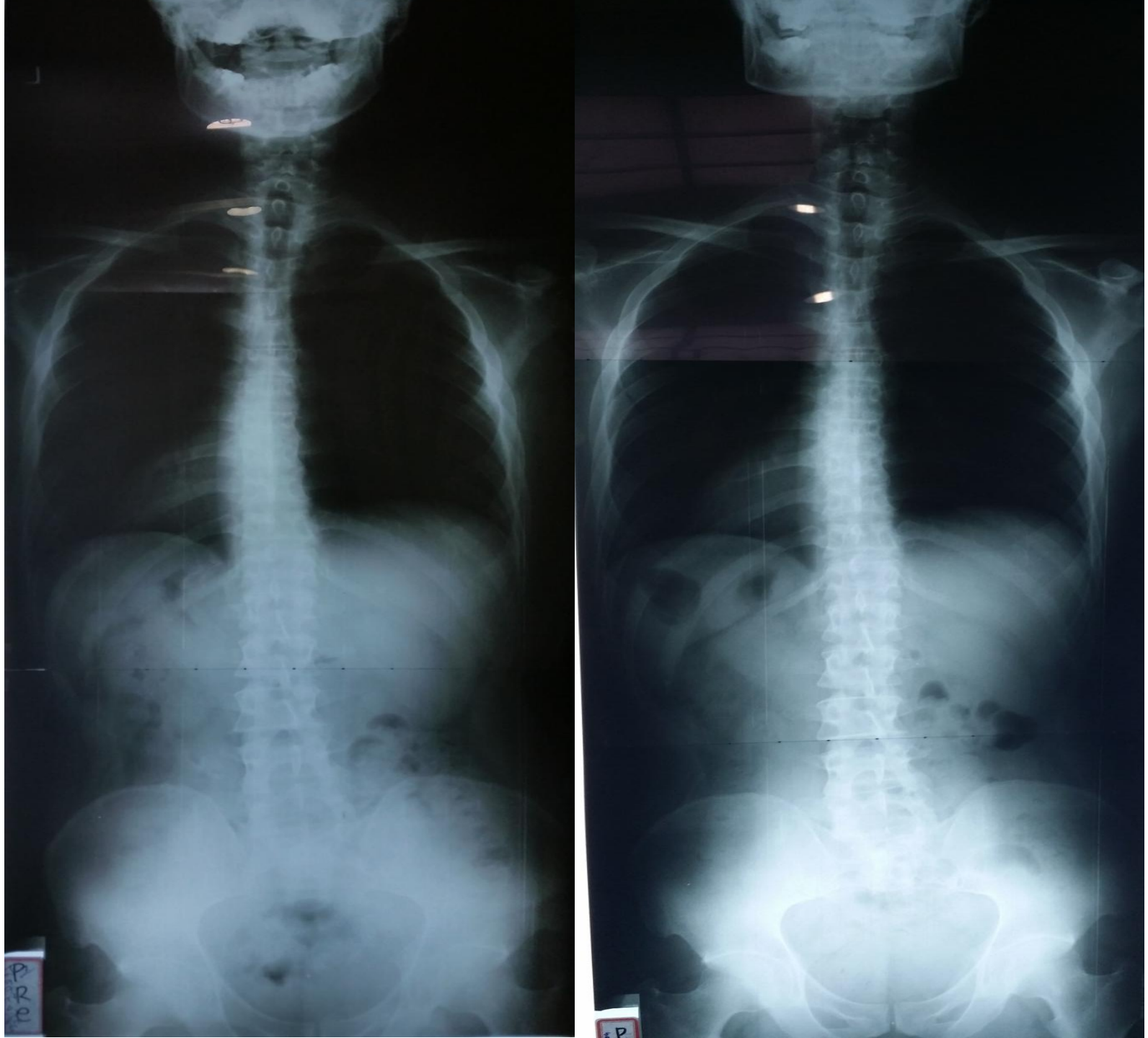
# 나00 57세 남

- 10년 넘게 뒷목이 뻐근하고 어깨가 아프다.
- 피곤하다. 특히 오후에 힘이 없다. 아침에 잘 못일어남
- 운동하면 어지저기 아프다.
- 집중력 떨어지고 건망증, 현기증, 눈 침침
- 코막힘, 콧물, 눈건조, 무릎, 어깨 통증
- 변비 설사 교차
- 우울하고 감정기복
- Left supraspinatus –calcific tendinitis
- TBA하고 즉시 척추의 변화



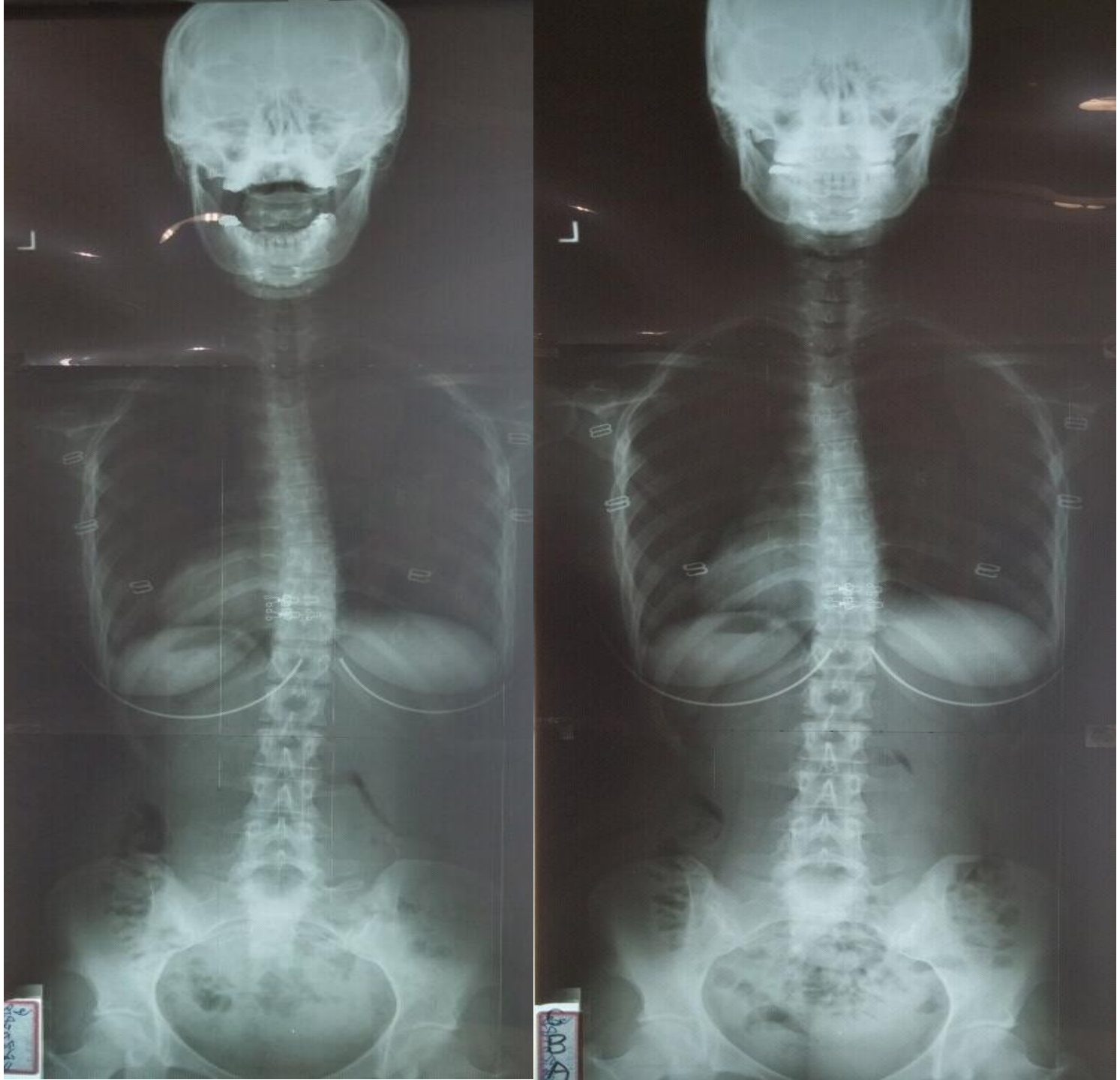
# 민00 31세 남

- 2014-12-8 내원
- L4-5 L5-S1 extrusion
- 2009년 1월에 L45 수술
- 2014년 11월 L5S1 수술함
- 수술 후에도 왼쪽 종아리가 저리고 아픔.
- SLR 30 with sciatica
- TBA 표준형장치하고 60도로 증가
- 턱관절에 잡음
- 턱이 지그재그로 움직인다.
- 코막힘, 비염



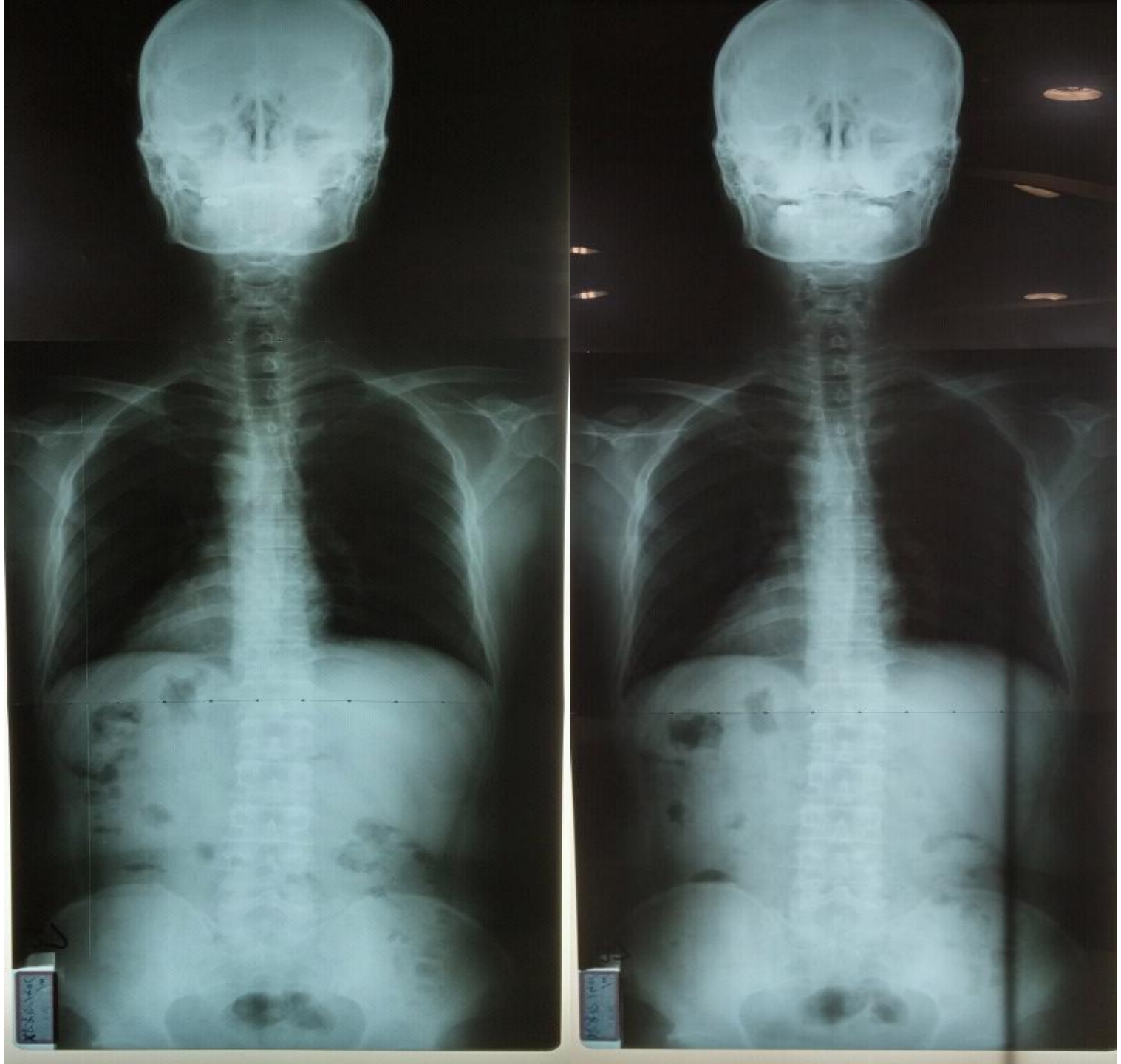
# 김00 여자 27세

- MRI L45 disc right  로 신경성 형술하고 나서 오른쪽 다리의 방사통은 좋아졌다.
- 시간이 지나면서 왼쪽 엉덩이와 다리가 아프고, 허리가 아파서 10분 앉아 있기 힘들었다.
- Class Ⅲ 부정교합
- Craniosacral fault
- 카이로프랙틱 치료를 받으러 와서 턱관절치료를 안 하려고 함.
- CBA 하고 사진상 scoliosis 줄었다.
- 30분 지하철 타고 와도 괜찮음.



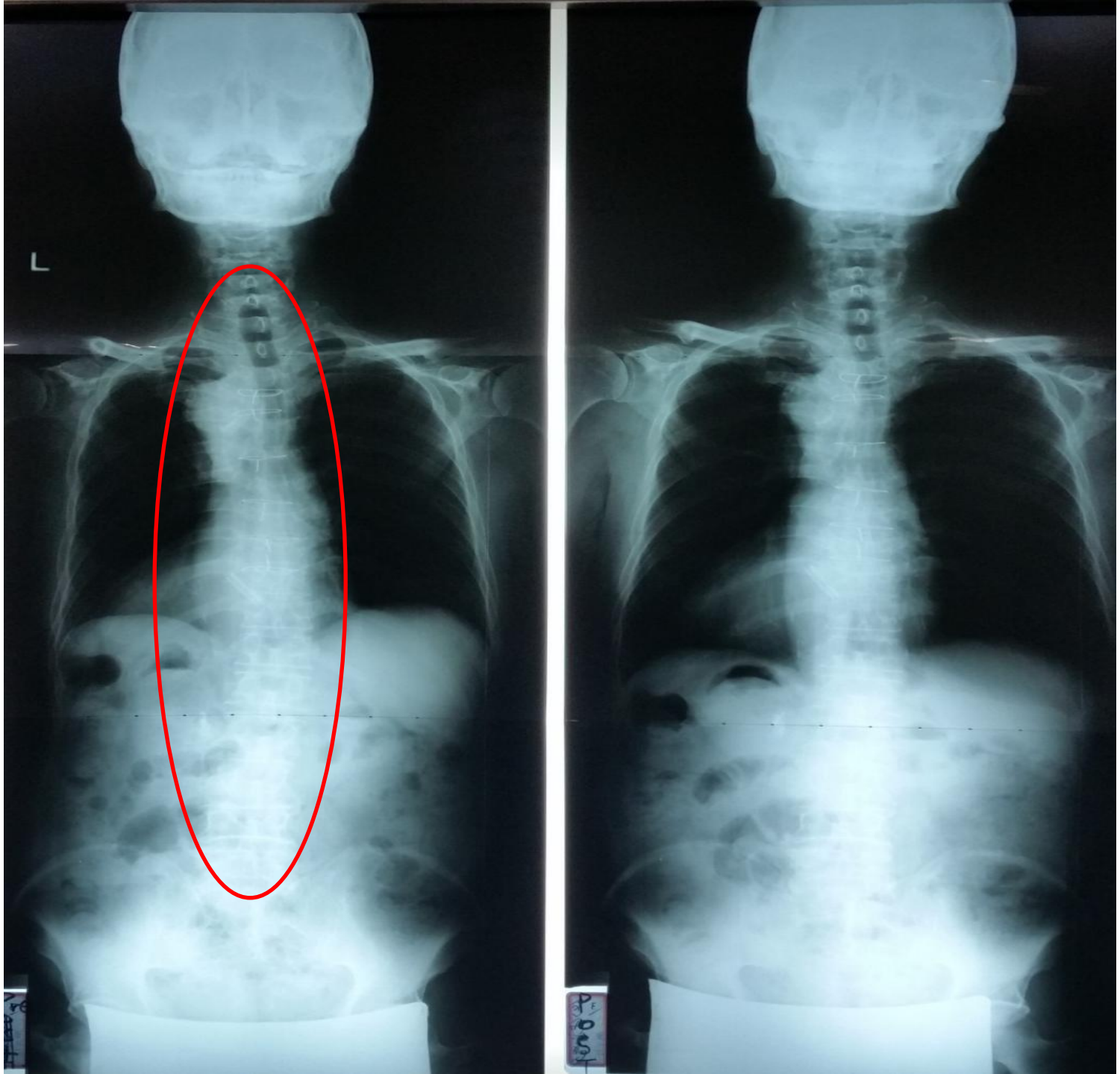
# 김00 50세 남

- 오른쪽 경추통
- 교합 midline 안 맞음.
- TBA하고 변화



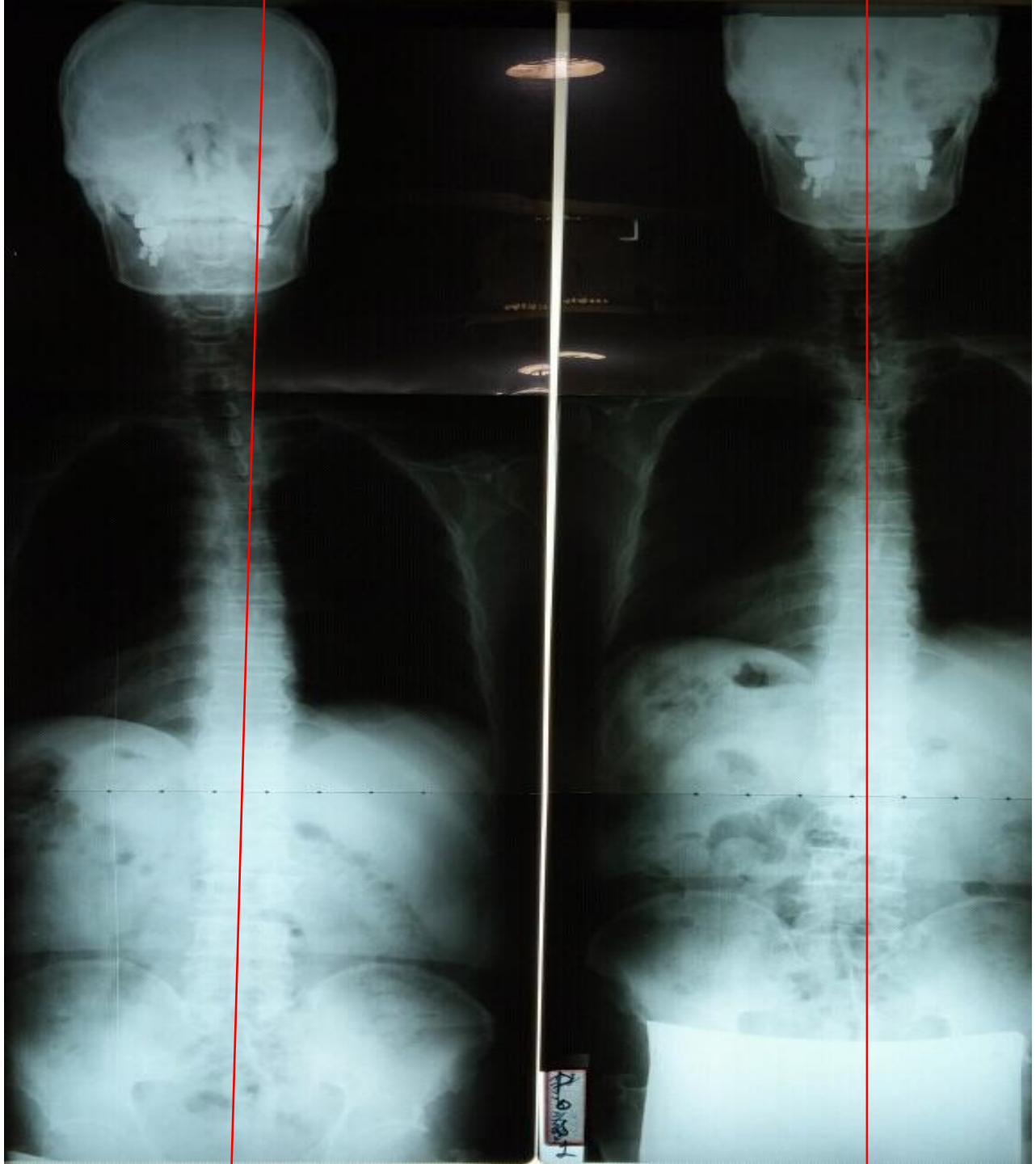
# 김00 78세 남

- 어지럼증 5년
- 앉아서 일어서면 평형잡기 힘들다.
- 서울대학교병원 이비인후과 2년 동안 다니면서 전정재활운동
- 2002년 심장판막교체
- Craniosacral fault
- TMJ
- TBA 하고 나서 spinal distortion 좋아짐.


L

# 박0재 73세 남자

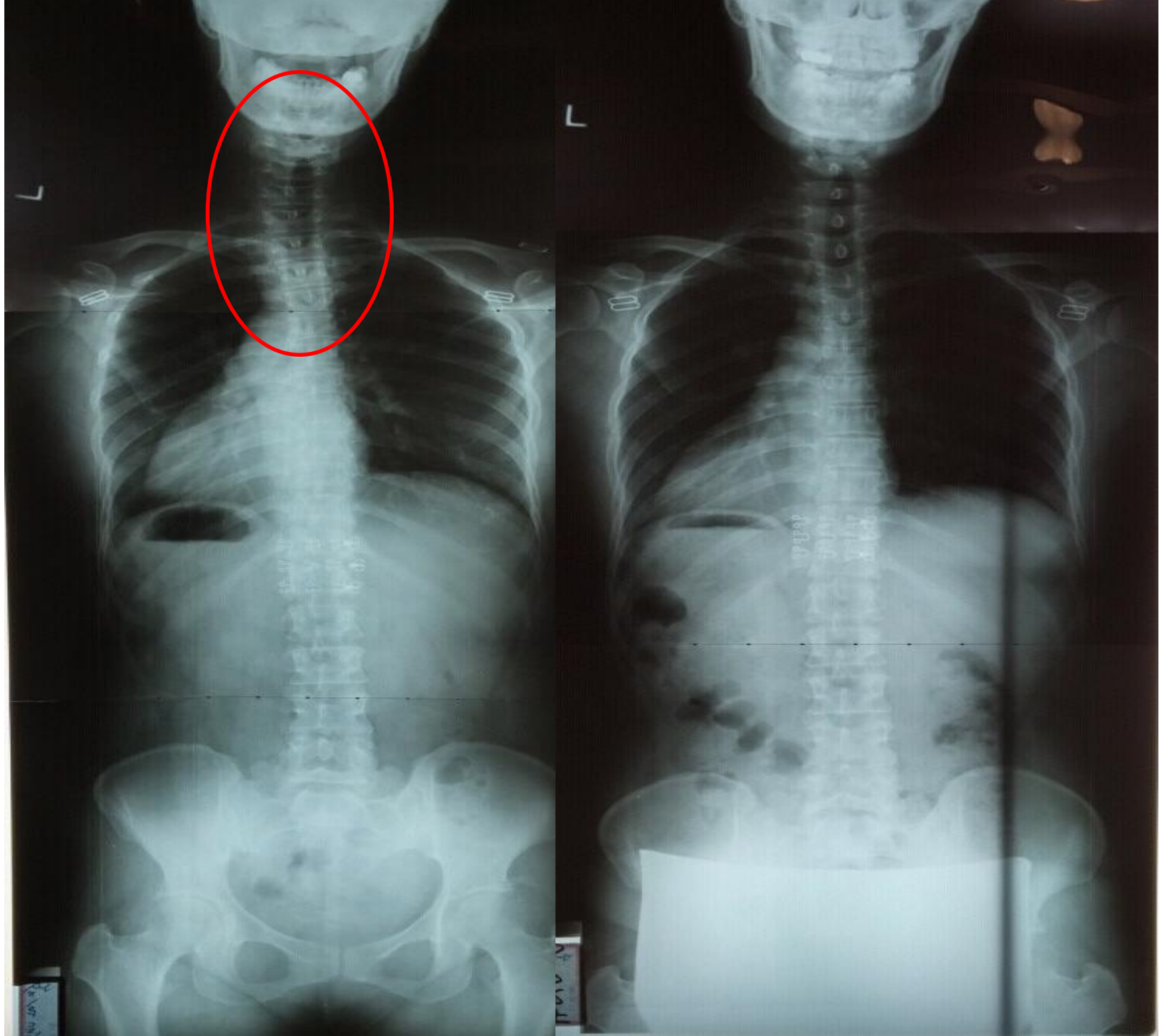
- 2년 전부터 왼쪽 팔이 차고 저린다.
- Intention tremor 왼쪽이 뚜렷함.
- 부정교합 midline 이 안맞음.
- TBA, CBA
- Left afferentation
- 왼팔이 차고 저린 증상은 좀 좋아졌지만 tremor는 아직 있음.
- Posture는 좀 좋아짐.



# 배0덕 43세 여자

- 어지러움
- 허리 통증

- TBA 하고 나서
  cervicaothoracic curve 좋아짐.



# Spine & Craniomandibular alignment 가 뇌를 비롯한 신경계에 미치는 효과

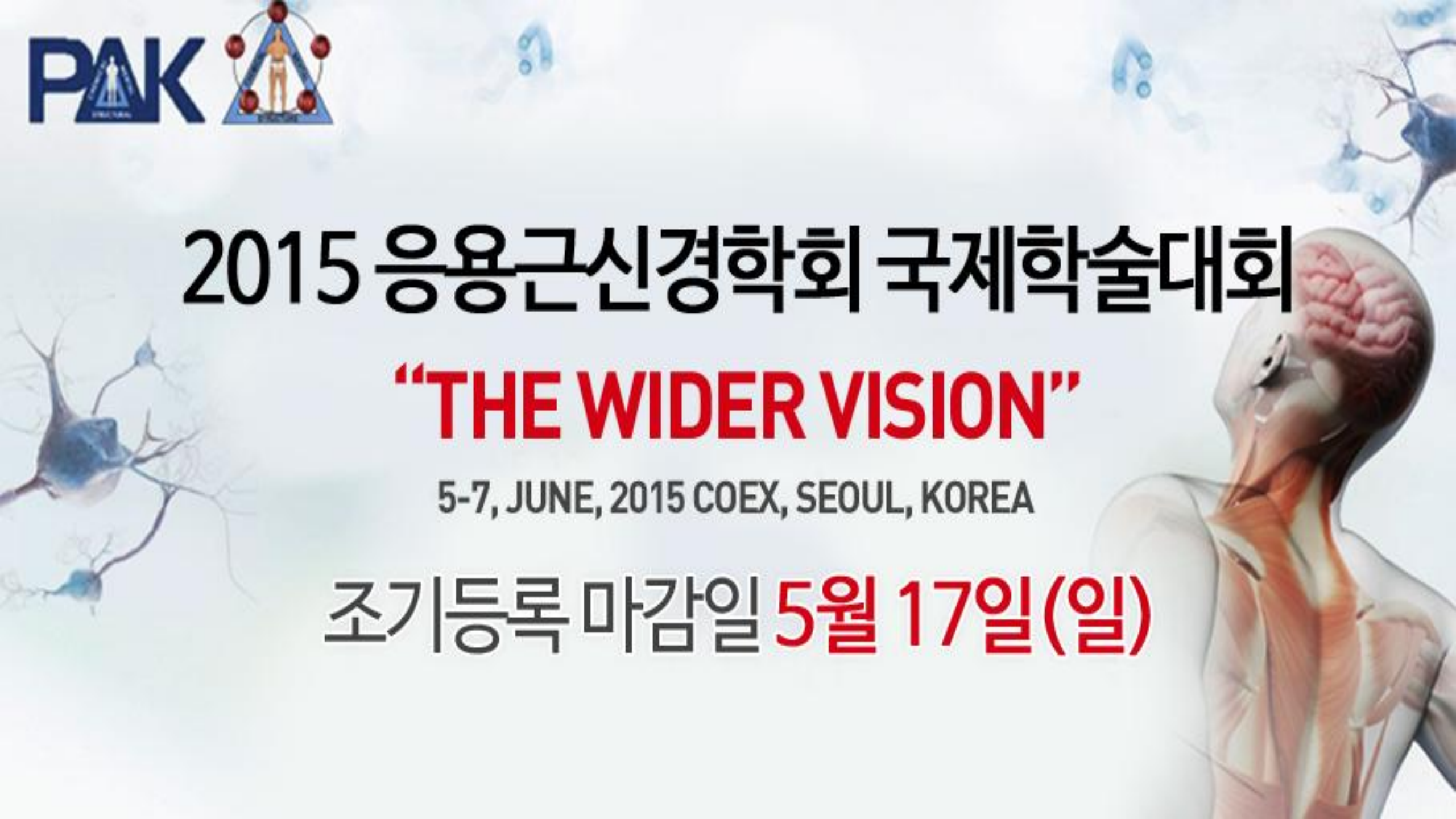
- Receptor(감각수용체)의 작용에 의한 afferentation(들신경의 작용)
- Craniosacral movement, dural tension
- Minimal misalignment correction 으로 인한 Decompression의 효과
- Oxygenation
- 뇌의 기능적인 변화 functional neurology를 이해하는 바탕에서 도수치료나 턱관절 치료를 하면 좀 더 효과적

# 2015 응용근신경학회 국제학술대회

## "THE WIDER VISION"

5-7, JUNE, 2015 COEX, SEOUL, KOREA

조기등록 마감일 5월 17일(일)



# 6월 6일(토)

| | Grand Ballroom 102+103 | |
|---|---|---|
| | **발표제목** | **연자** |
| 08:00-08:10 | **Opening Remarks** | Dr. Seung Won Lee (Korea ) |
| 08:10-08:30 | Dr. Goodheart and History of Applied Kinesiology | Dr. John Wittle (USA) |
| 08:30-10:30 | **The strategy for treatments of the locomotor system in any case, which has been unresolved / 어려운 근골격계 문제 쉽게 치료하기** | Dr. Hans Garten (Germany) |
| 10:30-11:00 | **Coffee Break** | |
| 11:00-13:00 | **Basic concepts of interlink and TMJ evaluation and treatment using interlink / Interlink의 창시자의 강의-턱관절과 전신의 상관관계** | Dr. Joseph Shafer (UK) |
| 13:00-14:30 | **Lunch Break** | |

# 6월 6일(토)

| | Grand Ballroom 102 | | Grand Ballroom 103 | |
|---|---|---|---|---|
| | **발표제목** | **연자** | **발표제목** | **연자** |
| 14:30-15:00 | One more unknown mechanism of restoration and rejuvenation of the body based on the correction of the radio nuclide content in the bone tissue | Dr. Tatiana Chernysherva (Russia) | **Approach to difficult neurological cases such as cervical dystonia and Tic disorder - with balancing TMJ**<br>**TMJ 균형 치료를 통한 신경계 난치 질환의 치료적 접근** | Dr. Young Jun Lee (Korea) |
| 15:00-16:00 | Visceral Biomechanics<br>내장도수치료의 세계 최고의 대가 | Dr. Victor Portelli (Australia) | | |
| 16:00-16:30 | **Coffee Break** | | | |
| 16:30-17:30 | **TMD/Cervical inter-relationships and co-management, as well as on arch development orthopaedic orthodontics, and any other aspects of craniofacial pain**<br>**턱관절과 경추, 안면두개통증에 대한 치료** | Dr. Nischal Singh (Australia) | Photons, Biophotons and Applied Kinesiology<br>신경 생리학적 치료의 대가 | Dr. Christ Astill-Smith (UK) |
| 17:30-18:00 | | | Correction of postural distortion by balancing TMJ<br>턱관절의 균형을 통한 척추측만증의 변화 및 교정 | Dr. Seung Won Lee (Korea) |
| 18:30-22:00 | Gala Dinner at InterContinental seoul COEX (B1, Allegro Room) | | | |

# 6월 7일(일)

| | Grand Ballroom 102 | | Grand Ballroom 103 | |
|---|---|---|---|---|
| | 발표제목 | 연자 | 발표제목 | 연자 |
| 08:00-08:30 | Introducing BTR Method for Treating Tinnitus by Incorporating AK Muscle-Testing and Sound-Therapy<br>AK를 이용한 이명의 치료 | Dr. Seung Il Youn (Korea) | **Systemic Odontology consists of seeing the human being as a whole**<br>**치의학은 인체 전반과 관련이 있다.** | Dr. Agné Cervo Peres (Brasil) |
| 08:30-09:00 | Practice of BTR method<br>이명 소리 재활 치료의 실습 | Dr. Eun Sang Ko (Korea) | **The interconnection of the Trigeminal System with the musculature and the three first cervical segments**<br>**삼차신경과 경추신경 및 근육관계** | Dr. Roseli Luppino Peres (Brasil) |
| 09:00-09:30 | Sugar and its substitutes on cognitive and motor function – how much is it affecting our patients and our treatment?<br>당대사의 인지와 운동기능에 영향 | Dr. Tracy S. Gates (UK) | **The pubic symphysis and palatine suture connection to low back and pelvic pain**<br>**치골과 구개봉합선이 요통과 골반통에 미치는 영향** | Dr. Eric Pierotti (Australia) |
| 09:30-10:00 | The relationship between oxygenation and cerebellum<br>소뇌의 기능과 산소 그리고 헴과의 관계 | Dr. Anne-Eugénie Simard (Canada) | | |
| 10:00-10:30 | The Deep Spinal Muscles, an overlooked cause of chronic low back pain, examined and treated in 5 minutes<br>만성요통에서 간과하기 쉬운 척추내재근, 요방형근, 복횡근이상을 5분내로 검사치료 | Dr. Donald McDowall (Australia) | **Improving neurodynamics by activating three dimensional proprioceptive interlinks of the dura mater.**<br>**INTERLINK를 이용한 통증과 신경학적인 이상의 치료** | Dr. Olegs Suhorukovs (Latvia) |
| 10:30-11:00 | **Coffee Break** | | | |

# 6월 7일(일)

| | Grand Ballroom 102 | | Grand Ballroom 103 | |
|---|---|---|---|---|
| | 발표 제목 | 연자 | 발표제목 | 연자 |
| 11:00-11:30 | Helping Children with Learning Difficulties:<br>With the Sunflower Trust, An A.K. based Approach<br>AK를 이용한 학습장애의 성공적인 치료 | Dr. Clive Lindley-Jones (UK) | **The treatment and therapeutic management of difficult clinical cases such as inflammatory disease, atopic dermatitis, OSA, CVS disorders, snoring, etc by stabilizing the stomatognathic system and Pneumopedics**<br>**턱관절을 이용한 난치병의 치료** | Dr. Soo Chang Jung (Korea) |
| 11:30-12:00 | | | Customized IV nutritional therapy by AK<br>AK를 이용한 개인 맞춤형 수액 요법 | Dr. Jai Won Jung (Korea) |
| 12:00-12:30 | Electrodynamic Instability of metal alloys and how it interfere with the body<br>금속에 의한 전자기적 불안정성 | Dr. Gianluca Rossetti (UK) | Neurological Application of Adrenal gland dysfunction<br>부신 기능이상의 신경학적 치료 | Dr. Richard Belli (USA) |
| 12:30-13:00 | Study with surface EMG to determine which test best isolates the muscle in question<br>AK 근육검사의 과학적 검증 | Dr. Katharine M. Conable (USA) | | |
| 13:00-14:30 | **Lunch Break** | | | |
| 14:30-16:00 | **Assisting Hemispheric Function: Two Retained Neonatal Reflex corrections to "use on Monday" / 바로 쓸 수 있는 원시반사를 이용한 좌우뇌의 기능평가** | | | Dr. Keith Keen (Australia) |
| 16:00-16:30 | **Coffee Break** | | | |
| 16:30-17:50 | **Primitive Reflex Concepts Every Doctor Should Know**<br>**꼭 알아야 할 원시반사를 이용한 신경학적 치료** | | | Dr. Michael Allen (USA) |
| 17:50-18:00 | **Closing Remarks** | | | Drs. Wittle and Lee |

# TMJ 관련된 연자 review

- AK practitioner 중에 최고의 권위자들이 발표

# Hans Garten, M.D. DIBAK, DACNB

- Differential approach to systemic disorders: foci, areas of disturbance and injury areas

# 전신의 이상에 대한 세분화된 치료접근
Hans Garten, M.D. DIBAK, DACNB

- 운동계의 치료전략(몇 주 이상 혹은 2번 이상 치료를 해도 반응이 없는 케이스에 해당하는)은 그 국소 부위를 떠나서 suprasegmental을 고려해야 하고 전신의 스트레스 인자를 찾아야 한다. 이번 강의는 문제가 있는 부위, 외상과 관련이 있는 곳을 포함한 인체전반뿐만 아니라 치과적인 영역에 까지 감별진단을 하고 치료하는 실제적인 내용에 대한 것이다.

# 접촉검사와 진단용지표근육검사를 넘어선 높은 차원의 두개-하악 -경추 진단

- Joseph Shafer, DC DIBAK

- AK에서 접촉검사와 지표근육을 이용해서 두개-하악-경추 복합체를 평가하기 시작한 것은 아주 유용한 것이었다.
- TMJ complex를 완전하게 평가하려고 하면 1. 턱관절과 하악 2. 턱관절과 관련된 모든 연부조직과 골의 구조 3. 두개천골 메커니즘 4. 후두하부와 경추부 5. 뇌신경 특히 5, 10, 11, 12 번 뇌신경 6. 교합 7. 전신과의 상관관계 8. 대사성 영향 에 대한 것을 다루어야 한다.
- 전통적인 AK의 방식은 위의 1번부터 6번까지를 주로 다루고 7, 8번은 크게 다루지는 않는다.
- 이번 강의에서는 전통적인 AK TMJ 진단을 더 잘 할 수 있는 방법을 소개하고, 새로운 치료법을 소개하려고 한다.

# Visceral Biomechanics
# 내장도수치료의 세계 최고의 대가

- Dr Victor Portelli has been researching visceral function and how it is affected by motion. He continues to amass extensive knowledge and skills in visceral procedures. He has presented his techniques to the Applied Kinesiology, chiropractic and medical professions for over the last 30 years.

# Dr. Nischal Singh, BDSc, MS(Tufts), DABOP, FAACP

- TMD/Cervical inter-relationships and co-management, as well as on arch development orthopaedic orthodontics, and any other aspects of craniofacial pain.
- 턱관절과 경추, 안면두개통증에 대한 치료

# PHOTONS AND BIOPHOTONS광자와 생체광자 – Using specific wavelengths of visible and invisible light in diagnosis and therapy:

- Dr. Christ Astill-Smith

- PHOTONS AND BIOPHOTONS광자와 생체광자 – Using specific wavelengths of visible and invisible light in diagnosis and therapy: 이런 광자들이 내는 특정한 가시광선과 비가시광선의 특정한 파장의 빛을 이용해서 진단과 치료에 이용한다. (모든 생물체는 고유의 생체광자를 발생시킨다. )

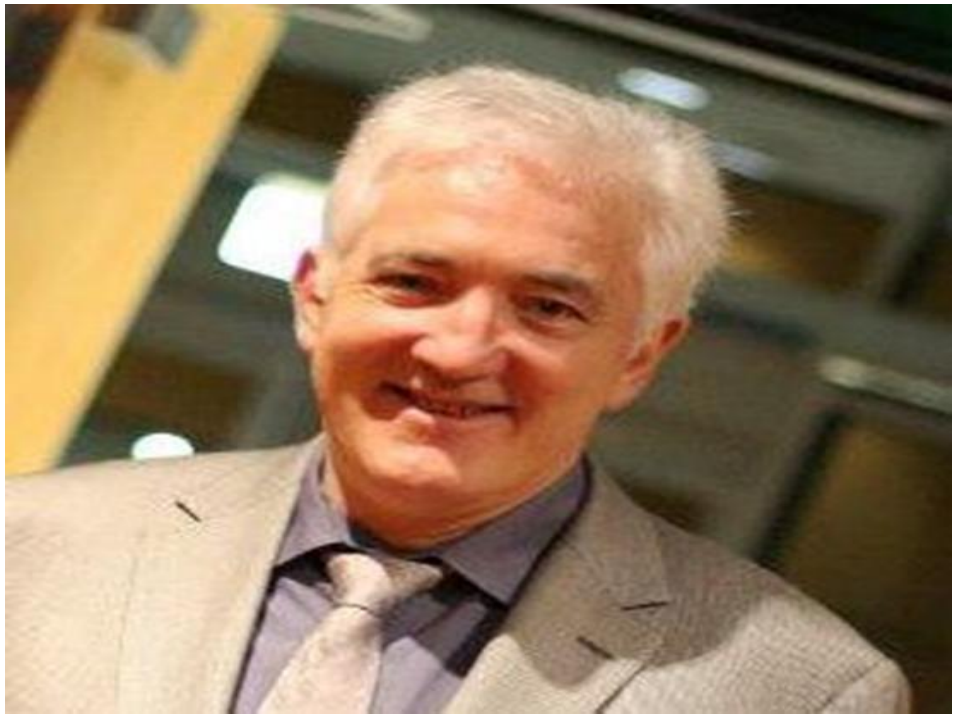
- Systemic Odontology and AK
- Dr. Agné Cervo Peres - Dentist,
- Specialist in Functional Orthopedy of the Maxillary,
- Vice president of the Systemic Odontology Society,
- President of the ICAK – BRAZIL
- Lectures and international courses since 1988

- Systemic Odontology 인체 전체를 보고 치료하는 학문이다.
- 구강의 이상은 인체전체에 영향을 주고 기능이상을 초래할 수 있다. 균형을 변회시키고 질병과 구조적인 변형을 유발시킬 수 있다.
- 이런 치료를 할 때 AK에 대한 지식이 근본 바탕이 되어야 한다. 왜냐 하면 음식, 중금속, 장의 곰팡이 등 다양한 문제들이 systemic odontology과 관련이 있고 근육검사를 해보면 지표근육이 약해지는 것으로 진단을 한다. 이런 구강이상은 근육의 문제와 구강호흡을 초래한다. 안면과 부비동의 발달이 잘 안 되고 결국은 인체 전반의 신경근육발달에 문제를 일으킬 수 있다.

# Eric Periotti, DC, DIBAK

- Dr. Eric Pierotti brings 40 years of clinical experience in private practice. After undertaking further studies in Applied Kinesiology, SOT, Nutrition and clinical biochemistry
- the immediate past Chairman of the International College of Applied Kinesiology a position he held for 9 years
- He teaches Applied Kinesiology courses and other postgraduate seminars both nationally and internationally.

# Donald McDowall, DC, MAppSc, DIBAK, FACC



- 만성 요통을 5분내에 검사하고 치료한다.
- 새로운 간단한 근육검사로 척추의 중요한 심부근육을 검사한다. 심부근육은: multifidus, 요방형근, 복횡근 등이다. 이들 근육은 허리의 안정화시키는 근육으로 서로 보완적인 움직임을 하고 있으며, 문제가 생기면 요통을 일으킨다. 이들 근육에 이상이 있다는 것을 진단하는 방법은 근육검사와 척추의 움직임, 치료는 도수치료.

# Dr. Olegs Suhorukovs, MD, DIBAK, spine surgeon.

- Improving neurodynamics by activating three dimensional proprioceptive interlinks of the dura mater.
- INTERLINK를 이용한 통증과 신경학적인 이상의 치료

# Dr. Richard Belli


- Neurological Application of Adrenal gland dysfunction

  부신 기능이상의 신경학적 치료

# Keith Keen, DO,DC, DIBAK

- Assisting Hemispheric Function: Two Retained Neonatal Reflex corrections to "use on Monday"
- 바로 쓸 수 있는 원시반사를 이용한 좌우뇌의 기능평가

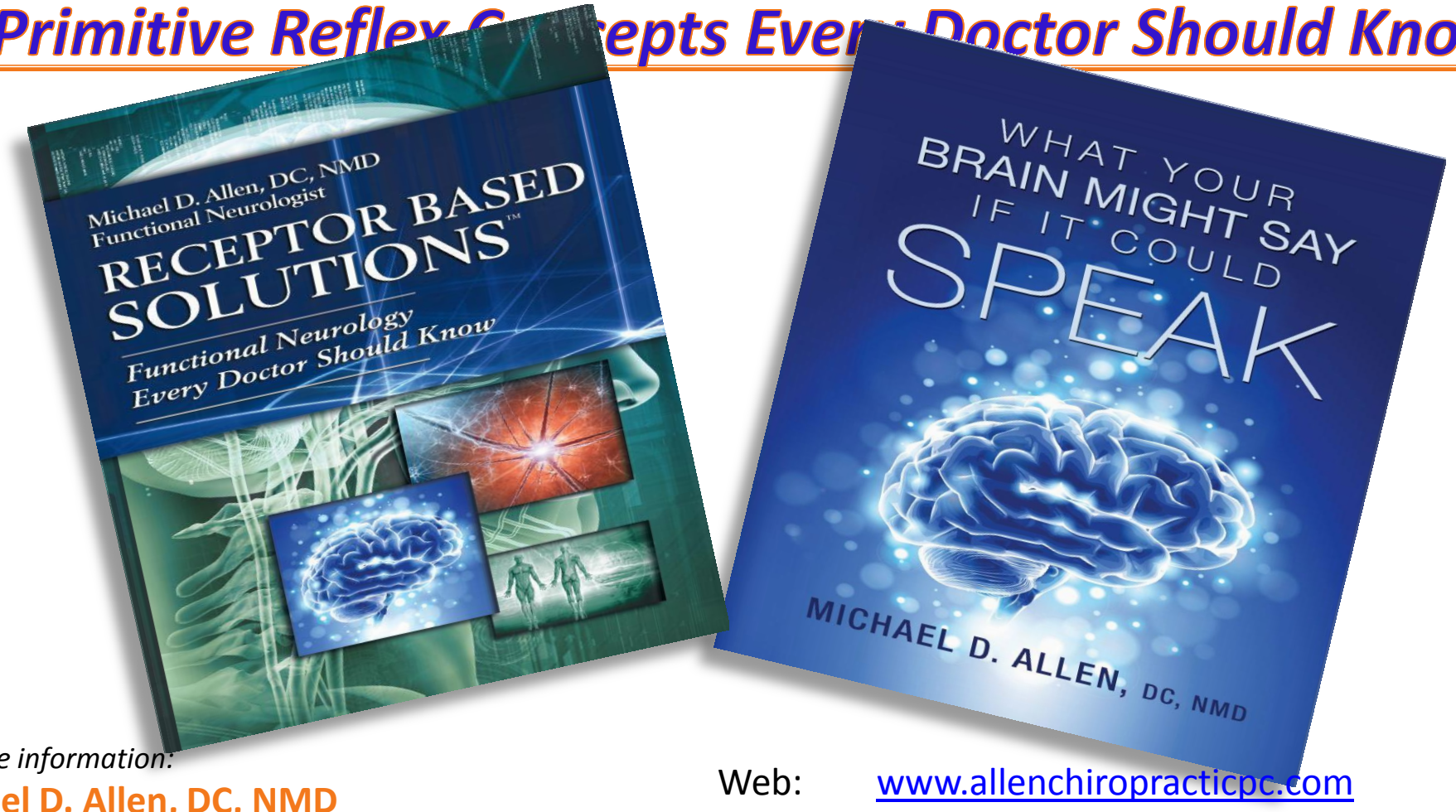
- 의사들은 원시반사에 대해서 알고 있다. 이들 뇌간의 반사들은 태생에서부터 생겨서 해부학적으로 신경학적으로 일생동안 남아 있다. 그러나 신생아 때 있던 반사는 1살정도 되면 대뇌에 의해서 억제되어 보이지 않는다.
- 신생아에서는 정상에서도 원시반사가 나타난다. Startle reflex.
- 원시반사는 자동, 복잡한 움직임, 호흡, 자율신경반응, 내분비샘의 반응이 대뇌의 활동과 관계없이 생긴다. 대뇌가 발달되면 이런 반사는 더 이상 필요없게 된다. 이런 반사가 없어야 되는 나이인데도 나타나면 부적절하고, 위험하기도 한다.

- 원시반사가 없어야 되는데도 나타나면,
- gross motor coordination fine motor coordination
- vestibular integration
- auditory perception and integration
- visual function
- cognition and expression
- lateral integration
- social and individual behaviour
- the development of succeeding primitive and postural reflexes 이런 문제가 생길 수 있다.
- 근본적으로 우리 몸의 내적, 외적 환경을 느끼는 것과 그것에 대한 우리의 반응이 장애가 생기게 된다.
- 원시반사가 남아 있는 것으로 인한 증상과 증후에 대해서 언급하고, 뇌기능을 좋게 해서 이런 반사가 나타나지 않게 하려면 어떻게 하나에 대한 치료과정을 보여줄 예정이다.

# Dr. Michael Allen, DC, NMD, DIBAK, DACNB


- Primitive Reflex Concepts Every Doctor Should Know
- 꼭 알아야 할 원시반사를 이용한 치료

# Clinical Applications of Functional Neurology;
## *Primitive Reflex Concepts Every Doctor Should Know*




*For more information:*

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ALLEN CHIROPRACTIC PC
Functional Neurology
"Brain-Based Solutions with You in Mind!"™

- 성인의 뇌도 새로운 신경세포를 만들수 있나? 움직임이 열쇠
- Michael D. Allen, DC, NMD
- Functional Neurologist
- 학습과 기억은 새로운 신경세포의 성장과 관련이 있다고 한다. 최근의 연구는 해마의 dentate gyrus에서 이것과 관련된 신경세포가 기억의 형성에 특별한 역할을 한다고 밝히고 있다.
- 이들 연구는 유전자 조작해서 쥐의 dentate gyrus의 새로운 신경세포의 생성을 방해하거나 촉진하는 방법을 이용했다. 새로운 신경세포가 생기면 인지 능력이 향상될 뿐만 아니라 내적인 정서상태도 좋아졌다.
- 더 나아가서 이 연구를 통해서 우울증환자도 dentate gyrus에 이상이 있다는 것을 입증하였다. 해마에 새로운 신경세포를 생성함에 의해서 우울증에 빠진 사람의 내적인 정서상태를 향상시키고 전반적인 증상을 개선할 수 있는 희망을 주게 되었다.
- 이 연구를 임상적으로 연결하였다. 이번 강의에 인체의 생리적인 반사 패턴을 응용해서 정상적인 reciprocal movement의 효과를 증가시킴으로 인해서 인지능력을 향상시킬 수 있다는 가설을 보여줄 것이다.

경청해주셔서 감사합니다.

# 보행 반사를 이용한 턱관절 평가

고은상

# 보행 반사

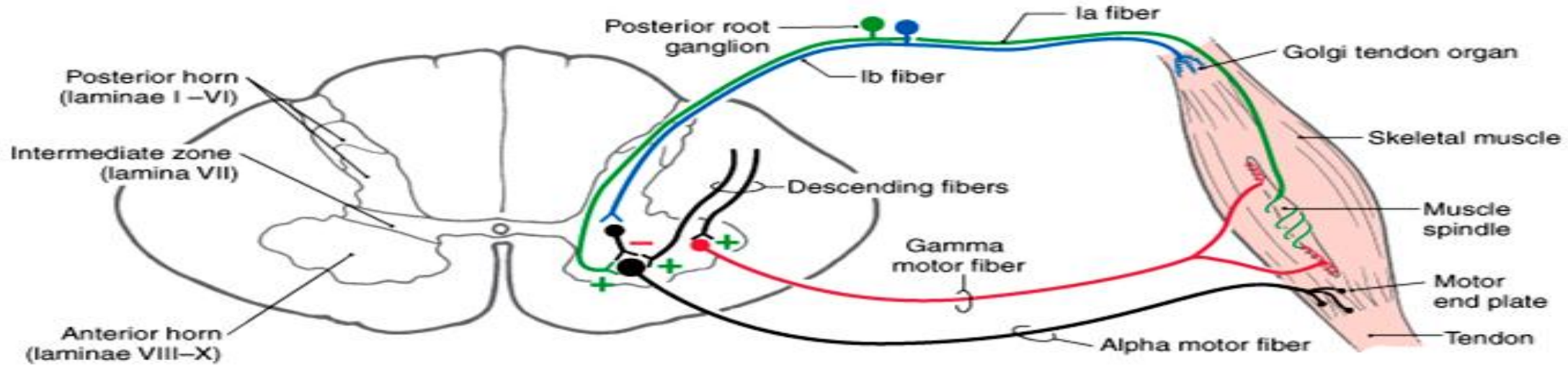
# Gait inhibition

**Muscles Inhibited**

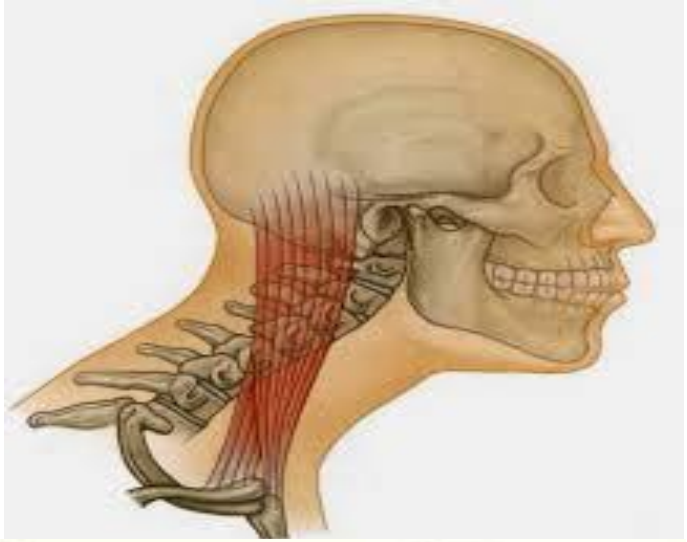
| Forward Arm | Forward Leg |
|---|---|
| Sternocleidomastoid | Upper Trapezius |
| Latissimus<br>Posterior Deltoid<br>Triceps | Anterior Deltoid<br>Pectoralis<br>Biceps |
| Psoas<br>Rectus Femoris | Gluteus Maximus<br>Hamstrings |
| Tibialis Anterior | Gastrocnemius |

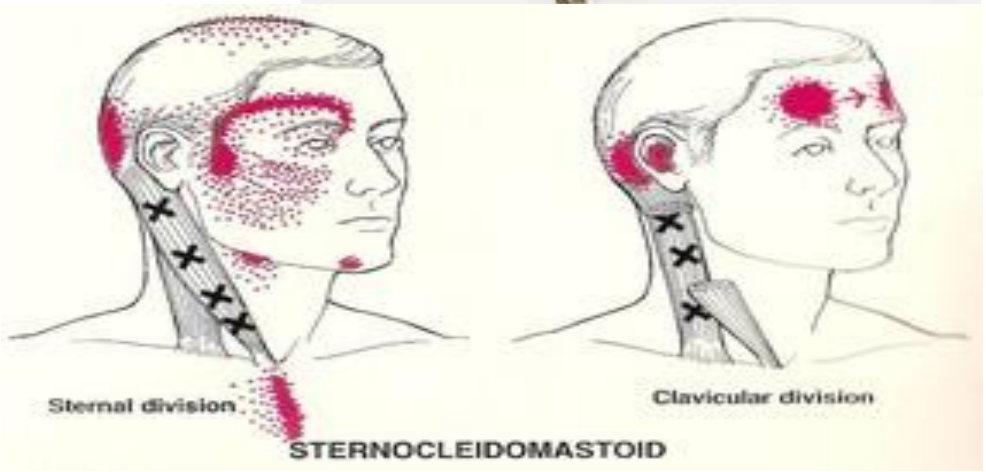
# Injury (손상)

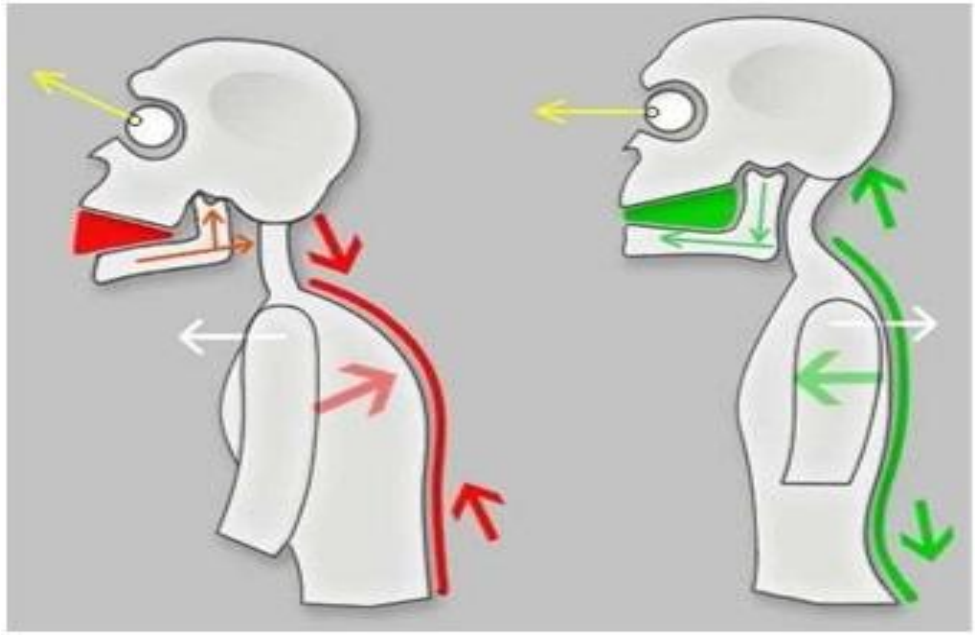
- 외상에 의해 손상된 조직의 복구가 이루어지고도(통증이 관해되고도) 손상의 영향은 지속될 수 있다.
- Cerebellar-cortical-cerebellar loop는 손상에 대한 근육과 자세의 적응 상태를 지속적으로 유지시킬 수 있다.
- 가장 강력한 반사 기전인 근방추 되먹임 회로(Muscle spindle feedback loop)가 추가적인 억제 요소(대개는 손상에 대한 적응으로서의 하행성 경로)에 의해 저해될 수 있다.



# 흉쇄유돌근과 TMJ




Sternal division
Clavicular division
STERNOCLEIDOMASTOID



# SCM 검사