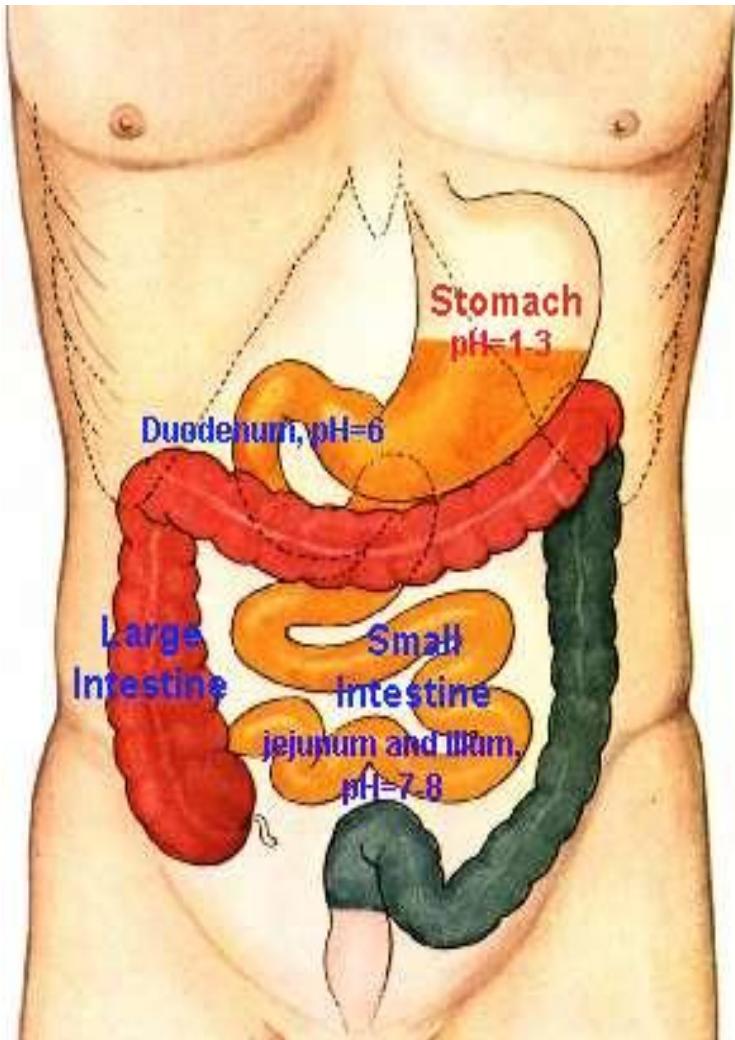
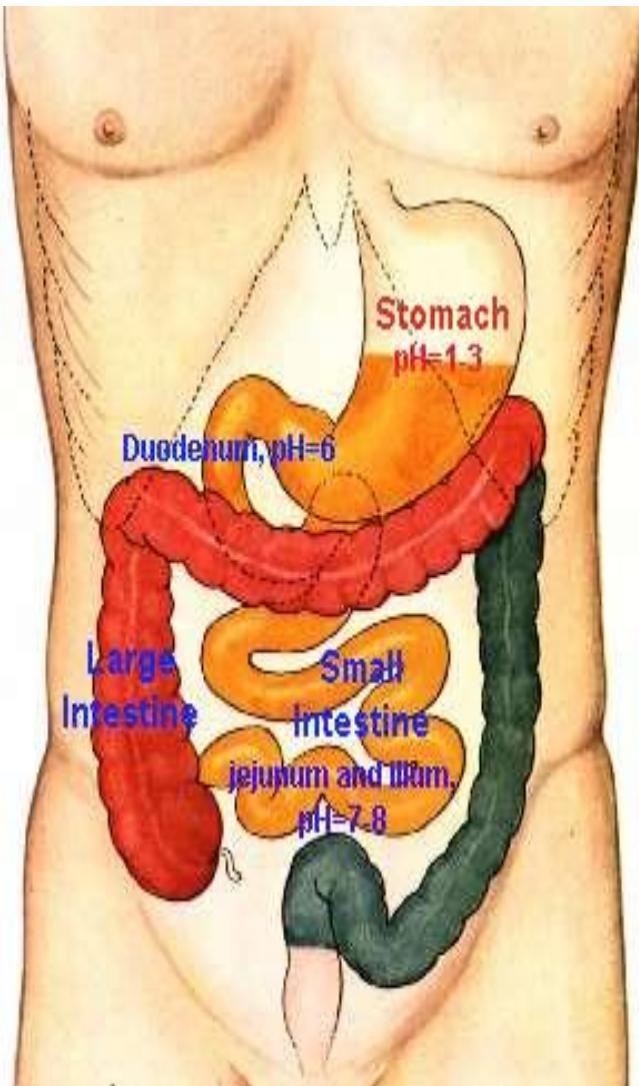


AK기능의학-GI&allergy



Colonization begins with birth and breast-feeding and continuing through life, leading to:

- 100 trillion bacteria
- 70% of human immune system localized in digestive tract
- accounts for half of the volume of contents in the colon



- At birth - digestive tract of humans is sterile.
- Colonised by microbes within the first few days of life
- At first, predominantly bifidobacteria (breast fed infants).
- With the introduction of other foods, a diverse microbial population develops in the gastrointestinal tract.
- By now, of all the cells in a human body, the overwhelming majority are non-human.

Mechanisms of Action of GUT Bacteria

Inhibit Pathogenic Bacteria	Improve Epithelial Function	↑ Immunoregulation
↓ Luminal pH	↑ SCFA (butyrate)	↑ IL-10, TGFβ
Bacteriocidal proteins	↑ Healing	↓ TNF, IL-12
Colonization resistance	↑ Mucus	↓ T cell proliferation
↓ Epithelial binding	↓ Apoptosis	↑ Apoptosis TH1 cells
↓ Epithelial invasion	↑ Barrier integrity	↑ sIgA
↑ β defensins	↑ HSP 25, 72	↓ NFκB

GI Sx and Diseases Associated with Dysbiosis

- Abdominal pain
- Abdominal distention
- Celiac disease
- Crohn's disease
- Diarrhea
- Excess flatus
- Infectious enterocolitis
- Irritable bowel syndrome
- Ulcerative colitis
- Constipation

Extra-Intestinal Sx associated with Dysbiosis and Leaky Gut

- Arthralgias
- Anxiety
- “Brain Fog” (toxic encephelopathy)
- Cognitive and memory deficit
- Depression
- Fatigue
- Fever of unknown origin
- Frequent urination
- Malaise
- Myalgias
- Palpitations
- Phlebitis
- Pruritis
- Skin rashes
- Seizures
- Vasculitis

Physical – 좋은 박테리아

- Prevent adhesion of bad bacteria (displacement)
- Alter local microenvironment (organic acids)
- Produce antibiotics (not toxic to probiotics)
- Detoxify (anti-carcinogenic effects)

Physical – 위장관 해독기능

“Eighteen human intestinal microbial strains were tested for the presence of cytochrome P450, an enzyme involved in detoxifying and toxifying various xenobiotics. **The presence of cytochrome P450 in human intestinal flora may influence the expression of hepatic cytochrome P450s.**”

John, GH et al. John, GH et al. *Microbial Ecology in Health & Disease* *Microbial Ecology in Health & Disease* 13:3 13:3-8 (2001)

Physical – Mucins

- Semi-permeable secretion
- Prevents adhesion of foreign microbes
- Prevents absorption of macromolecules

Physical – Epithelial Cells

- Selective absorption
- Desmosomes(tight junction) between cell prevent paracellular absorption

Chemical – Glandular Secretions

- Salivary Enzymes, Amylase, Lysozyme
- Gastric HCL, Pepsin
- Pancreatic Enzymes
- Bile Acids, Saponification
- Intestinal Brush Border Enzymes

Immunological – Friend vs. Foe

- Probiotics as immune modulators
- Secretory IgA from Mucosa Associated Lymphoid Tissue (**MALT**)
- Gut Associated Lymphoid Tissue (**GALT**)
 - » Largest lymph organ in the body; 50-70% of system
 - » If antigens escape the physical and chemical barriers, and manage to be missed by MALT IgA, the GALT helps prevent penetration to the systemic circulation.

Immunological – 글루텐free

“Using ELISA, we estimated serum IgG and IgA antigliadin antibodies in 147 neurological patients who were divided into two groups. Our data suggest that gluten sensitivity is common in patients with neurological disease of unknown cause and may have aetiological significance. Many neurological manifestations are associated with coeliac disease, including ataxia, peripheral neuropathy, myelopathy, myopathy, and dementia. It is possible (though unproven) that strict adherence to gluten-free diet, with elimination of antigliadin antibodies, may result in stabilization or even improvement of neurological dysfunction. Antigliadin antibody estimation should be part of the routine investigation of any patient with neurological dysfunction of unknown cause.”

Hadjivassiliou, M et al. *Lancet.* 347:369-371 (1996)

Dysbiosis 결과

- Loss of good bacteria
- Loss of vitamin production
- Loss of detoxification function
- Loss of displacement, chemical and antibiotic protection
- Overgrowth with harmful species
 - » Anti metabolite, i.e., β -ketoglutaric acid
 - » Production of Casomorphins or Glutomorphins

점막보호기능 상실의 결과

- MALT and GALT
- Immunological mediated inflammation
- Circulating immune complexes
- Portal circulation flooded with antigen, macromolecules results in **detoxification pathway stress.**
- **Chronic inflammation may lead to adrenal stress.**

Food Allergy

- An individualized, immunologically mediated reaction to a generally nontoxic food substance.

Food Intolerance

An individualized, non-immunologically mediated reaction to a generally nontoxic food substance.

GI 문제의 원인

Invaders, Overstayers and Unwelcome In laws –
Pathogens and Potential Pathogens:

- Bacteria
 - Helicobacter, Salmonella, Shigella,
 - Campylobacter, Yersinia, Proteus, Klebsiella, etc.
- Protozoa and helminths
 - Giardia, Blastocystis, worms, etc.
- Yeast
 - Candida
- Viruses

GI 문제의 원인

Insufficiencies caused by diet, medications, surgery, disease, aging and genetic predisposition:

- Nutrient and/or phytonutrient insufficiencies
- Hydrochloric acid insufficiency
- Pancreatic enzyme insufficiency
- Bile acid insufficiency

4R's *If Necessary*

1

Remove

Oil of Oregano, Allicillin, aloe
GI microb X. morinda supreme

2

Replace

Digestzymes : 2-3 caps with each major meal.
allergyme

3

Re-innoculate

Probiotic
Synergy/supreme:

4

Repair

GI revive

GI-Revive

Gastro-Renew (powder)	Amounts per serving
Serving size	1 tsp. (6 g.)
Number of servings per container	40
L-Glutamine	1500 mg.
N-Acetyl Glucosamine	1000 mg.
Deglycyrrhizinated Licorice (DGL) (Glycyrrhiza glabra)	400 mg.
Aloe vera (Aloe barbadensis)	300 mg
Slippery Elm (Ulmus fulva)	200 mg
Marshmallow (Althea officinalis)	100 mg
Chamomile (Matricaria chamomilus)	100 mg.
Okra	100 mg
Cat's Claw (TOA free)	100 mg
Mucin	200 mg.
MSM	100 mg.
Quercitin	100 mg
Prunus (concentrate)	100 mg
Citrus pectin	1 gm
D-Xylitol	900 mg
D-Mannose	200 mg
Suggested Dose: Take 1/2-1 tsp., one to two times daily or as directed by your health care practitioner.	

Food Allergies/Intolerances 증상:

- 신경학적: depression, brain fog, hyperactivity, headaches (migraines)
- 점액과다: sinus, respiratory, digestive
- 만성 염증: sinus, ear, or throat
- 일체 피부질환
- 만성피로 관절통
- GI 증상

VISCERAL CHALLENGE TECHNIQUES

- 강한 지표근육을 검사한다.
- 의심되는 OFFENDER를 환자의 입에 넣는다(피부에도 가능).
- 양성반응은 다음의 두가지와 같다：
 - 1. 모든 근육이 다 약해진다
 - 2. 관련된 신경 림프반사점에 치료적 접촉검사를 할 때만 강한 지표근육이 약해진다.

VISCERAL CHALLENGE TECHNIQUES

- **OFFENDER** 자극과 함께 IRT를 통해 치료한다 (미각 혹은 후각반응):
 - 1. 만일 **OFFENDER**가 전체 근육을 다 약하게 한다면 –약한 지표근육을 강하게 해주는 신경 림프반사 점을 치료한다.
 - 2. 만일 **OFFENDER**가 해당되는 신경 림프반사점에 접촉검사를 했을 때만 약하게 한다면 – 그러한 반사점들을 치료한다
 - 3. 검사상 양성으로 나온 반사점들을 고려한다. 환자가 호소하는 주소증을 고려한다.

VCT

- Visceral NLs TL with:
 - Dietary stressors
 - Chemicals
 - Neurotransmitters
 - Medications
 - Hormones

VCT dietary stressors

- Food allergens
- Bad fats
 - transfats
 - saturated fat(Lard)
- Caffeine
- Sugar

VISCERAL CHALLENGE TECHNIQUES

- 흔히 해치는 물질들
 - 1. 음식 allergen
 - 2. 카페인
 - 3. PARTIALLY HYDROGENATED FAT (TRANS FAT)
 - 4. 동물 지방 (LARD)
 - 5. 정제된 설탕
 - 6. 화학제
 - 7. 신경전달물질
 - 8. 호르몬
 - 9. 약물

Iliocecal valve

Sx of iliocecal valve synd

- 급성 요통(SI pain) 견비통 심흉통
- 감기 몸살 축농증 알러지비염
- 다크써클
- 오심 구역 구갈증 위산부족
- 과민성대장증세
- 어지럼증 편두통

Control of valve function

- Open ICV-colon contents가 소장으로 역류하여 문제를 일으킨다
- Closed ICV-회장에서 대장으로 분변이 이동하기 힘들어진다

neurolymphatic

- Open ICV-우측 ASIS아래, 우측 bicipital groove(3인치),우측 C3 lamina
- Closed ICV-neurolymphatic for rectus abd, quadriceps femoris

nutrition

- Open ICV-chlorophyll
- Closed ICV-칼슘, 비타민 D, HCL

자율신경과 ICV

- Autonomic balance
 - Parasympathetic dominant-open ICV-need adrenal
 - Sympathetic dominant-closed ICV-need choline

ILEOCECAL VALVE SYNDROMES – CAUSES:

1. Sympathetic – Parasympathetic Imbalances
2. Local GI Tract Environment
 - a. Maldigestion – HCl, Pancreatic Enzymes, Bile Salts
 - b. Poor Diet – Bad Fats, Excess Carbohydrate, Spicy Foods
 - c. Allergy / immune (GALT) Depletion
 - d. Dysbiosis
3. Enteric Nervous System

Open ICV – Traditional Approach

1. Challenge for open ICV by pushing down and toward right hip causes weakness.
2. If positive, rub Chapman's reflexes for open ICV
3. Check for fat soluble chlorophyll complex
4. Check for L-1 subluxation

Open ICV – Systemic GI Tract Approach

1. Challenge for open ICV by pushing down and toward right hip causes weakness.
2. If positive, rub and pinch digestive organ VRP areas to find which one(s) negates the challenge.
3. Treat this organ by rubbing Chapman's reflex (rubbing VRP strengthens) or with IRT to Chapman's reflex (pinching VRP strengthens)

Open ICV – Enteric Nervous System Approach

1. Challenge for open ICV is negative.
2. If negative, place sugar (carbohydrate) in the mouth and re-challenge
3. If open ICV present with sugar in the mouth, TL to Chapman's reflex for the small intestine (quadriceps and abdominals)
4. With sugar in the mouth, rub the active small intestine Chapman's reflexes

OPEN ILEOCECAL VALVE CHALLENGE WITH SUGAR:

1. Correct any ICV problems.
2. Place sugar (or other carbohydrate) in the mouth and see if this creates a positive iliocecal valve open challenge.
3. if the challenge is positive, have the patient TL to the Chapman's NL reflexes for the small intestine (quadriceps NLs, and occasionally abdominal NLs)
4. Treat by rubbing the positive NLs.
5. Decrease carbohydrate in the diet.

Closed ICV – Tradition Approach

1. Challenge for closed ICV by pushing up and toward the left shoulder causes weakness.
2. If positive, check for and rub Chapman's reflexes for the small intestine (quadriceps)
3. Check for ionizable calcium (e.g., lactate, citrate, gluconate)
4. Check for L-3 anterior subluxation

Closed ICV – Enteric Nervous System Approach

1. Challenge for closed ICV is negative
2. If negative, place a source of a good fat or oil in the mouth
3. If closed ICV now present, TL to Chapman's reflexes for the pancreas, liver and gall bladder.
4. With the fat or oil in the mouth, rub the active Chapman's reflexes

Notes from *The Second Brain* by Michael D. Gershon, M.D.

Dr. Gershon 은 “neurogastroenterology의 아버지.”

인체에서는 복부로 들어가는 부위에
약 200개 정도의 미주신경의 preganglionic
parasympathetic nerve fibers가 존재한다.

소장 자체내의 enteric nervous system 속엔 수
억 이상의 신경세포가 존재한다.

장내 신경계가 원하지 않으면 장 신경은 교감신
경계의 메시지를 차단시킬 수 있다.

- Sphincter of Oddi에 대한 호르몬과 신경계의 신호는 문을 열어 담즙을 소장으로 보내게 한다. 소화되지 않은 지방은 박테리아에 의해 발효되어 가스를 만든다. 감소된 담즙은 대변색깔을 엷게 만들고 진흙 색으로 만든다(담즙은 대변을 갈색으로 만들어준다). 대변은 양이 많아지고(지방과 박테리아의 많아져서), 기름기가 있고 악취가 나며 물에 변이 뜨게 된다.

Ileal brake

- 장내(intestinal lumen) 어디든지 지방산이 있으면 장내 감각신경계를 자극하여 ileal brake반사를 일으킨다.
- 이것은 ileal부위(닫힌 회맹판 패턴)에서 장의 연동 운동을 감소시킨다.
- 이 반사는 아마도 소화되지 않은 지방이 대장으로 들어가지 못하게 막는 것 같다(그렇지 않으면 대장에서 unfriendly flora가 기승하게 만들기 때문)
- 지방이 심지어 duodenum에 있을 때도 ileum을 차단하는 자극제가 되기도 한다. 지방의 마지막 남은 부분까지 다 소화, 흡수가 될 때야 비로소 ileal brake는 풀어진다

ILEAL BRAKE CHALLENGE:

1. Correct any ICV problems
2. Place some good fat (e.g., olive oil) in the mouth and see if this creates a positive challenge for a closed ileocecal valve.
3. If the challenge is positive, have the patient TL to the Chapman's NL reflexes for the pancreas, liver, and gall bladder to identify which one(s) negate the fat-induced ICV closed challenge

4. Identify which substances, if any, negate the positive challenge:
 - a. Pancreatic enzymes, Pancreas tissue, zinc
 - b. Bile salts, magnesium, other liver detoxifying substances
5. Treat by rubbing each of these Chapman's reflexes.
6. Supplement as indicated.
7. Decrease fat in diet if excessive.

Yeast Syndrome 증상

General: chronic fatigue or malaise, sweet cravings

Gastrointestinal system: thrush, bloating, gas, intestinal cramps, rectal itching, alternating diarrhea and constipation

Genitourinary system: vaginal yeast infections frequent bladder infections

Hormonal system: menstrual irregularities, decreased libido

Nervous system: depression, irritability, trouble concentrating

Immune system: allergies, chemical sensitivities, lowered resistance to infections

곰팡이 증가 원인들

항생제와 스테로이드

만성 스트레스

탄수화물 중독증

술

피임제

당뇨병

갑상선 저하증

면역력 저하

곰팡이균 Dysregulation

- The release of phospholipase may split cell membrane lipids, resulting in free radical generation, inflammation and hyperpermeability.
- Acetaldehyde from yeast may inhibit Delta- 6-desaturase, causing a functional essential fatty acid deficiency.

Dysregulation – Yeast

- Antimetabolites – Just as bread mold produces penicillin to protect itself from other organisms, intestinal yeast also produce toxic agents. These agents can inhibit normal human biochemical processes. An example is the yeast metabolite **Beta-ketoglutaric acid**. This organic acid can inhibit the Krebs cycle at the conversion of **succinate to Alphaketogluterate** via competitive inhibition.

A vegan diet free of gluten improves the signs and symptoms of **rheumatoid arthritis**: the effects on arthritis correlate with a reduction in antibodies to food antigens.

Rheumatology 2001 Oct;40 (10):1175-9

- 40.5% in the vegan group fulfilled the ACR20 improvement criteria compared with 4% in the non-vegan group over 1 year. (n=66)

Dietary treatment of gluten ataxia. J

Neurol Neurosurg Psychiatry 2003
Sep;74(9):1221-4.

- » Ataxia has a variety of underlying etiologies. It is estimated that **gluten intolerance accounts for up to 40% of cases of idiopathic sporadic ataxia.**
- » After one year of a gluten free diet in patients diagnosed with **celiac sprue and concurrent ataxia**, there was improvement in ataxia reflected in all of the ataxia tests
- » This was significant when compared with the control group (made up of patients with ataxia and celiac sprue who refused a gluten free diet.)
- » The diet associated improvement was apparent irrespective of the presence of an enteropathy.

Metal toxicity

- 가능하면 모든 사람들에게 vial로 검사
- Hair analysis/urine porphyrin test와 일치하지 않을 수도 있다.
- Metal out or chelation시 증상이 생길 수 있다
 - 피부발진
 - 만성피로
 - 시력침침
 - 방광염

수은

TOXIC METALS

- **Detoxification support packet**
 - aminoDtox-아미노산phase 2 해독대사
 - LV-GB-간담 이담작용
 - Detox Antiox-항산화
 - Ultimate antiox full spectrum-항산화
- **Paleocleanse powder-간해독영양파우더**
- **Chelation**
 - DMSA
 - EDTA

Chelators

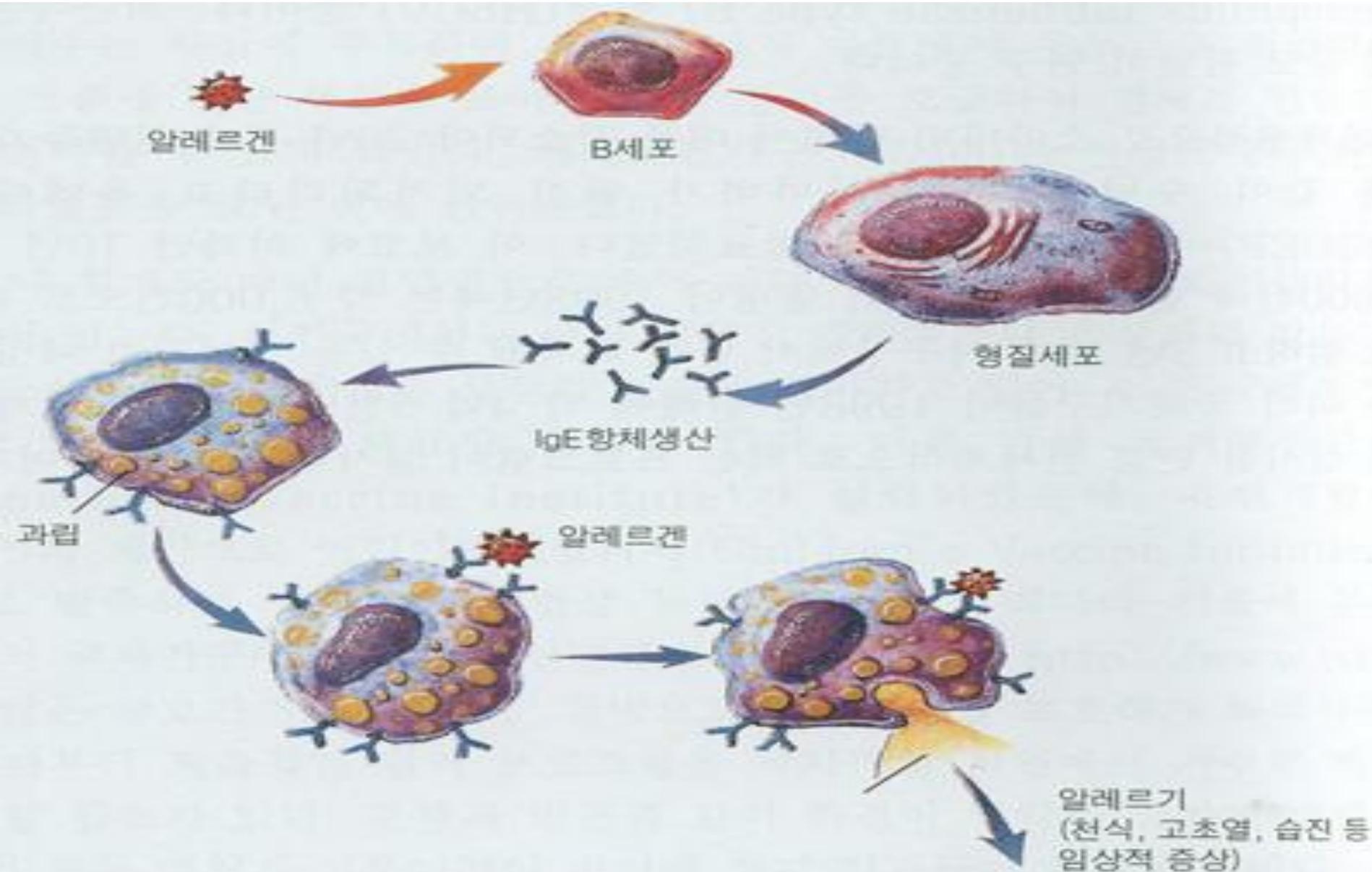
- Captomer 250mg(DMSA): cross BBB
- Lipoic acid
- Glutathione
- DMPS
- DTPA
- EDTA: mercury에는 효과가 없다.

Allergy

Allergy

- 식품, 흡입 항원을 찾는다. History, Blood test, muscle test
- elimination 회피요법
- desensitization: injection or alternative way
- antihistamine, steroid
- 면역요법

면역



B-lymphocytes

- Called plasma cells when activated
- Secrete antibody=immunoglobulins(Ig)
- IgM,IgG,IgA,IgE,IgD

B cell이 생산하는 항체의 종류

- IgM:
 - Virus 감염 초기에 생성
 - 1개가 10개의 virus 상대
 - 수명이 짧다.
 - Complement activation
- IgA: 모유, 점막
- IgG:
 - IgM이 virus를 다 퇴치하지 못하고 사라지면 IgG가 생산된다.
 - 1개로 2개의 virus를 리침
 - 양이 많고 생명력이 길다.
 - 태반통과, 혈액중 80% 차지
- IgE 점막, 피부
 - 음식이나 환경물질이 지나가는 통로
- IgE 정체불명

T-lymphocytes

- Cytotoxic T cells(Tc)
 - Secrete lymphokines which act to:
 - Disrupt cell membranes of targets
 - Attract and activate macrophages
 - Trigger inflammation
 - Activate other lymphocytes
- Helper T-cells(Th)
 - Help both B and T lymphocytes to differentiate and divide after binding with antigen
 - Secrete lymphokines

유해한 물질이 몸에 들어오면 B-lymphocyte가 Ab 형성

- IgM, A, G, E, D
- 이 중에서 Allergy와 관련된 것 IgE: 코, 입, 기도, 기관지, 장의 점막
- IgE는 mast cell에 붙어 있다가 면역학적 불균형이 생기면 해로운 물질이 아닌 음식이 들어와도 mast cell을 자극하여 histamine을 유리

Lymphocyte: B, T, NK

- cytokine이라는 물질을 만들어낸다.
- 2조개
- 무게는 1kg
- 혈액, 임파액, 임파절에서 항원(이 물질을 구성하는 단백)을 만나서 면역반응을 보인다

Macrophages and dendritic cells

- Identify foreign substances and carry them over to lymphocytes
- Clean up afterwards

Mast cells(in tissue), basophils(in blood)

- Bind with constant region of IgE Ab
- Then, when IgE variable region binds with antigen, the mast cells and basophils release contents—mediate inflammation:
 - Histamine
 - Leukotrienes
 - Prostaglandin

항체의 기능

- IgG and IgM Ab bind to Ag
 - Ag/Ab complexes attract neutrophils and macrophages
 - 항체가 항원에 부착될 때, complement가 항체의 constant 부위에 부착된다
 - Complement가 염증반응을 일으키고 항원을 lyse시킨다
- IgE는 mast cell과 basophils에 ..

Cell mediated response (T cell response)

- Cytotoxic T cell의 주요 타겟은
 - Cells infected by viruses, bacteria
 - Tumor cells
 - Cells infected by Tuberculosis
- Cytotoxic T cell bind Ag directly to destroy it
- Cytotoxic T cells secrete lymphokines
 - Puncture antigenic cell membrane
 - Attract and activate macrophages
 - Vasodilation
 - Block viral spread

Types of immune reactions

- Type1: immediate hypersensitivity-IgE
- Type 2: cytotoxic reactions-IgG,IgM
- Type 3:immune-complex
- Type 4:T-cell dependent

Hypersensitivity

- Type 1
 - Urticaria, atopy, food allergy, allergic rhinitis, allergic conjunctivitis
 - IgE와 관련
 - Immediate hypersensitivity
 - 호흡기, 피부, 위장 점막에 존재하고 있다가 감시하고 있는 이물질이 들어오면 기도의 근육을 수축시켜 호흡곤란, 장과 피부의 부종을 일으킨다.
- Type II
 - IgM, G, 관여 cytotoxic reaction
 - 수혈시 반응, 면역성 혈액질환, 혈소판 감소증, 갑상선 질환

Hypersensitivity

- Type III
 - IgM,G, complement
 - Serum sickness
 - Drug allergy, angiitis
- Type IV
 - Ig는 관여하지 않음
 - T cell hypersensitivity
 - Atopy, contact dermatitis
 - 화학성분은 너무 작아서 혼자 면역반응을 유발하지 못하고 몸의 단백과 결합 (Hapten)해서 T cell activation, cytokine등의 염증 물질을 만들어냄
 - 48 시간 이후에 나타나는 delayed hypersensitivity

1st Line of Defense

Inflammation

Cell-mediated Immunity – TH1 Activation
– Delayed HyperSensitivity
–
Macrophage/Phagocytosis

Humoral Immunity – TH2 Activation
– Allergic Response
– Antibody Formation

Mucosal Immunity

How does it all fit?

- Commensal flora cultivated over 1st 2 years of life provides the baseline environment for immune development
- Early introduction of solid foods, esp. grains and sugar alters commensal flora
- Role of early vaccination stimulates TLRs (innate immune system) and exacerbates TH₁/TH₂ imbalance!

면역유발, 면역획득

Th1, 2, 3

- Th1:
 - bacteria, virus 같은 우리 세포보다 작은 이물질을 공격, 파괴
 - Macrophage를 활성화해서 IgG ab를 증가시켜서 우리 몸을 보호
- Th2:
 - parasite와 같은 거대 이물질에 대한 반응
 - IgE를 많이 만들어내도록 B-cell에 지시
- Th1 vs Th2:
 - Th1이 만드는 cytokine은 Th2 cytokine을 억제
 - Th2이 만드는 cytokine은 Th1을 억제

면역유발, 면역획득

Th1, 2, 3

- Th3: 우리가 섭취하는 음식과 같이 우리에게 해가 없고 필수적인 이물질에 대해서 내성을 갖도록 면역반응을 억제
- Th1 Th2의 균형이 깨어져서 면역학적 불균형이 생기면 알레르기 성향이 강해진다.
 - 이것은 유전적 성향, 식생활, 환경, 부신 등에 영향을 받는다.
 - 이 때 반복해서 특정 식품을 섭취하거나 환경에 노출되면 알레르기 유발

Mast cell

- Cell 내에 chemical mediator가 가득 차 있어서 뚱뚱하게 보인다-비만세포
- Histamine이 많다 -기생충공격
- Eosinophil에도 기생충을 직접 파괴하는 물질을 분비

Allergen

- 먼지: 집진드기, 집먼지 진드기(dust mite)
- 꽃가루, 나뭇잎
- 동물의 털, 분비물
- 곰팡이
- 음식물
- 화학물질

Common food that may cause reaction:

- 1. coffee, colas, chocolate, and black tea
- 2. nightshade family of foods-tomatoes, green peppers, eggplant, white potatoes, tobacco, and paprika(관절통과 관절염을 자주 야기시킨다)
- 3. dairy products-cheese, milk, and eggs. 환자는 유지방 중 어떤 것에만 과민반응이 있을 수도 있다.
- 4. spices, salt

Common food that may cause reaction

- 5. 마요네즈(종류에 따라 다르다)
- 6. 고기. 여러가지 고기에 따라 반응이 다
를 수 있다.
- 7. 여러 종류의 빵과 곡식
- 8. 모든 종류의 설탕류

- MSG 같은 식품첨가물
 - Allergy 증가
 - T-lymphocyte가 allergic reaction을 유도하는 방향으로 작용 .
- 환경오염물질
 - Th2에게 이것을 치우도록 하면 IgE, mast cell 에 의해서 asthma, rhinitis, atopy가 생긴다

Gut-Allergy

- 장에는 면역반응을 하지 못하도록 억제세포가 장점막하에 있다.
- HCL, digestive enzyme, IgA-bacteria, virus 파괴
- 장점막의 villi운동 –bacteria, virus가 불지 못하게.
- 장에 문제가 있으면 소화장애로 인해서 거대분자, submucosal lymphoid tissue damage –allergy

Allergy는 면역학적인 불균형에서 시작된다

- Th2>Th1
- Interferon-r가 절대적 혹은 상대적으로 부족하다.
- Interferon-r투여: 소아의 단순한 면역체계에 효과
- 면역제제의 투여는 알레르기 유발의 제일 마지막 단계에 있는 가려움이나 피부 발진을 치료하기 위하여 항히스타민제나 스테로이드제를 투여하는 것보다는 한 단계 전에 알레르기 유발물질이 반응을 하지 않도록 하는 것.
- 이 제제를 투여하는 중에도 알레르기를 유발하는 음식을 먹으면 증상이 악화된다.
- 우유, 달걀, 콩, 밀가루
- 이것 중에도 70% 이상의 아토피환자에서 최소 한 개 이상의 알레르기 유발음식
- 식이요법, 환경요인이 면역제제 투여보다도 중요하다.

Allergy

- HCL
 - PMC weak-위산 장애와 관련
 - Temporal bulge
- Dysbiosis
- Leaky gut
- Adrenal stress disorder

치료

- Elimination
- Rotation Diet
- Desensitization Procedures
 - 전통적 방법
 - 대체요법
- Visceral Challenge Technique (gustatory or olfactory challenge as indicated)

냄새나 향에 대한 민감도

- Molybdenum
- Selenium
- Vitamin E (mixed tocopherols) and other antioxidants
- Visceral Challenge Technique (olfactory challenge)
- Add 3 ICs location

위산부족

박테리아

BACTERIA-GI microb-X

- Echinacea , SF734 (↑ gut infections),
- *Berbcap, Oregano*
- *Probiotics*

Natural Anti-bacterials (treatment time 4-12 weeks):

- Garlic (*Allium sativum*) standardized to 5000 mcg allicin potential. TID
- Goldenseal (*Hydrastis canadensis*) standardized to contain berberine 200-400 mg. TID
- Artemesia/Chinese Wormwood (*Artemesia annua*) 1-3 grams TID

바이러스

Virus-GI microb-X

- Olive leaf, Elderberry caps.
- Echinacea tincture
- Astragalus
- Arabinex
- probiotics

PARASITES-GI microb-X

- Black walnut
- *Wormwood caps, Oregano*
- Probiotics

곰팡이

Natural Anti-fungals (treatment time 4-12 weeks):

- Oregano (*Origanum vulgare*) encapsulated oil. 200 mg TID
- Thyme (*Thymus vulgaris*) standardized to thymol. 100-200 mg TID
- Garlic (*Allium sativum*) standardized to 5000 mc allicin potential. TID
- Goldenseal (*Hydrastis canadensis*) standardized To contain berberine 200-400 mg. TID

FUNGUS-GI microb-X

- Zinc and no sucrose
- AF support caps, Castor bean oil caps (undecylenic acid), Undecyne caps, AC support caps, C8 (Caprylic) caps, C9 (Nonanoic) caps, C10 (Capric) caps, C11 (Undecanoic) caps, C12 (Lauric) caps, C14 (Myristic) caps, Nettle root caps, Pau D'arco caps and tincture.
- Morinda supreme
- Probiotics

GI microb X

- Tribulus 400 mg
- Sweet Wormwood (Artemisia) 300 mg
- Magnesium Caprylate (yielding 267 mg Caprylic Acid; 23 mg Magnesium) 300 mg
- Berberine 200 mg
- Grapefruit Seed Extract 200 mg
- Barberry (*Berberis vulgaris*) 100 mg
- Bearberry (*Arctostaphylos uva ursi*) 100 mg
- Black Walnut 100 mg.
- 아침 식사전 2알, 취침전 2알

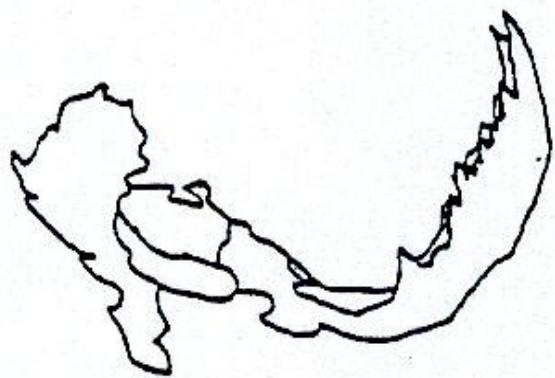
Helicobacter

**GastroMend HP-DFH
SF734-Thorne**

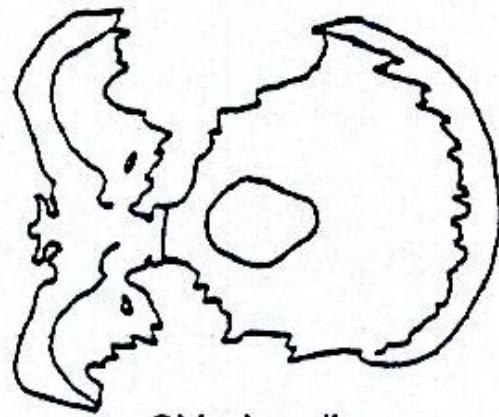
Gastromend HP

- 위궤양, 위염, mucosal lining 보호
- Vitamin C 500 mg
- DGL(Glycyrrhiza glabra) (root) (8:1) 1500mg
- Mastic Gum 1000 mg
- Methylmethioninesulfonium ("Vitamin U") 200 mg
- Zinc-Carnosine 75 mg.
- 공복 아침 저녁 두알

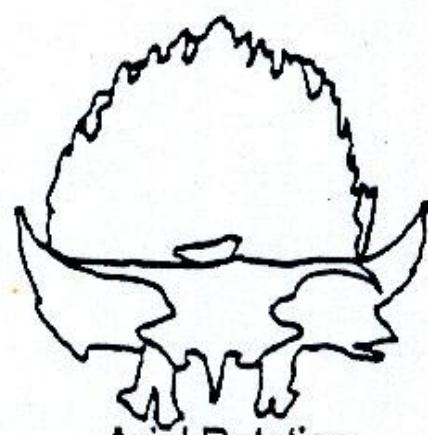
Possible Three-Dimensional Distortion of Cranium



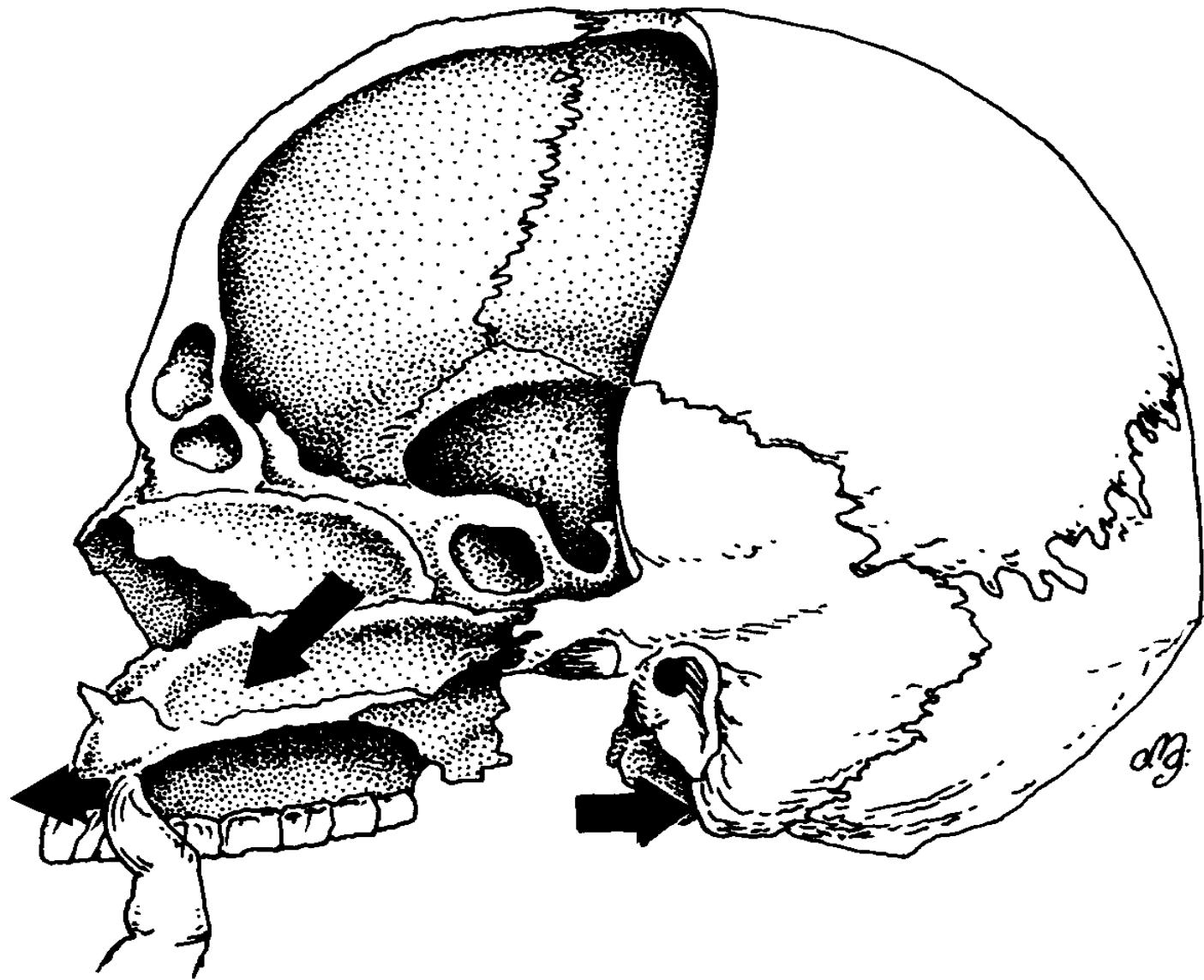
Flexion-Extension

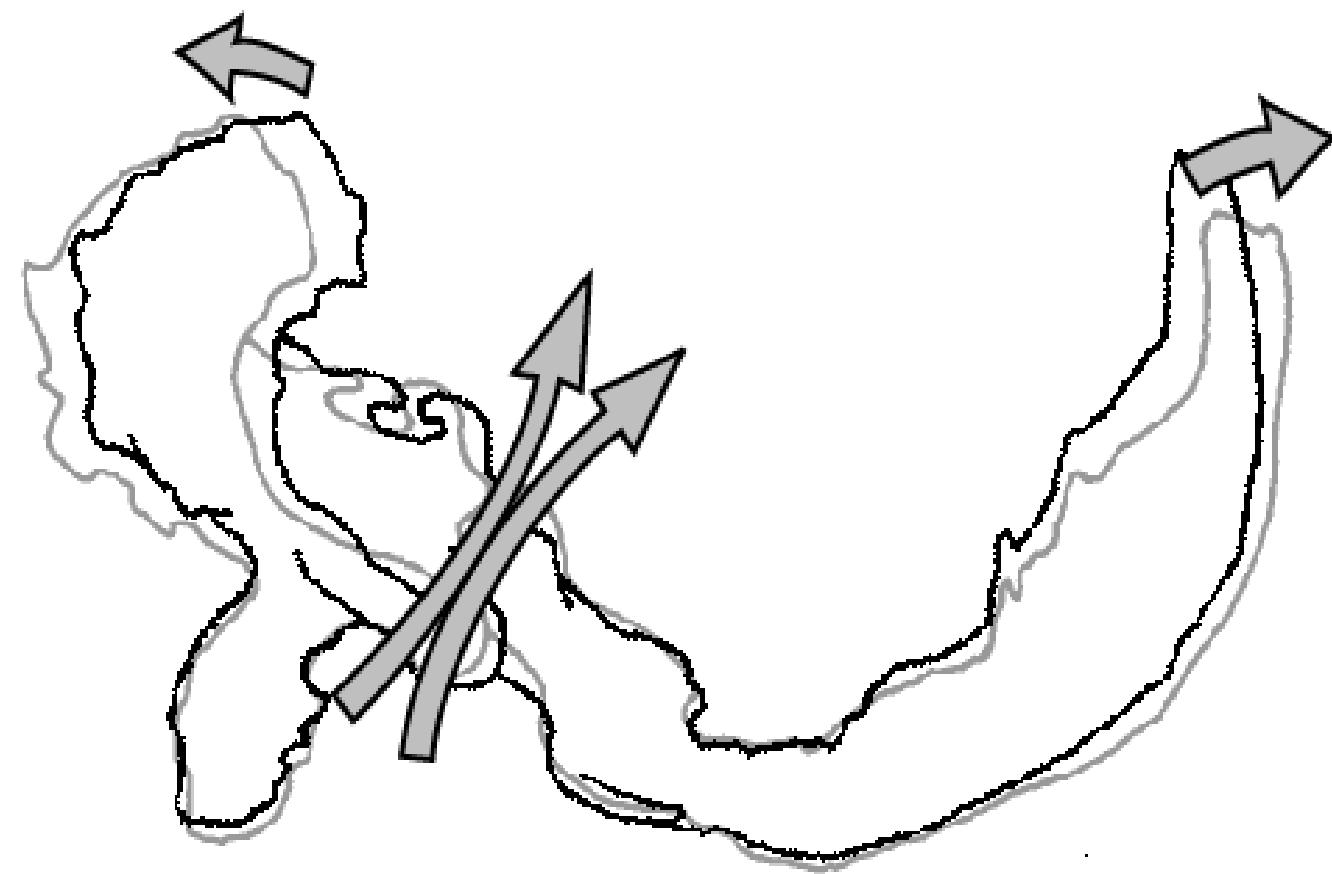


Side-bending



Axial Rotation





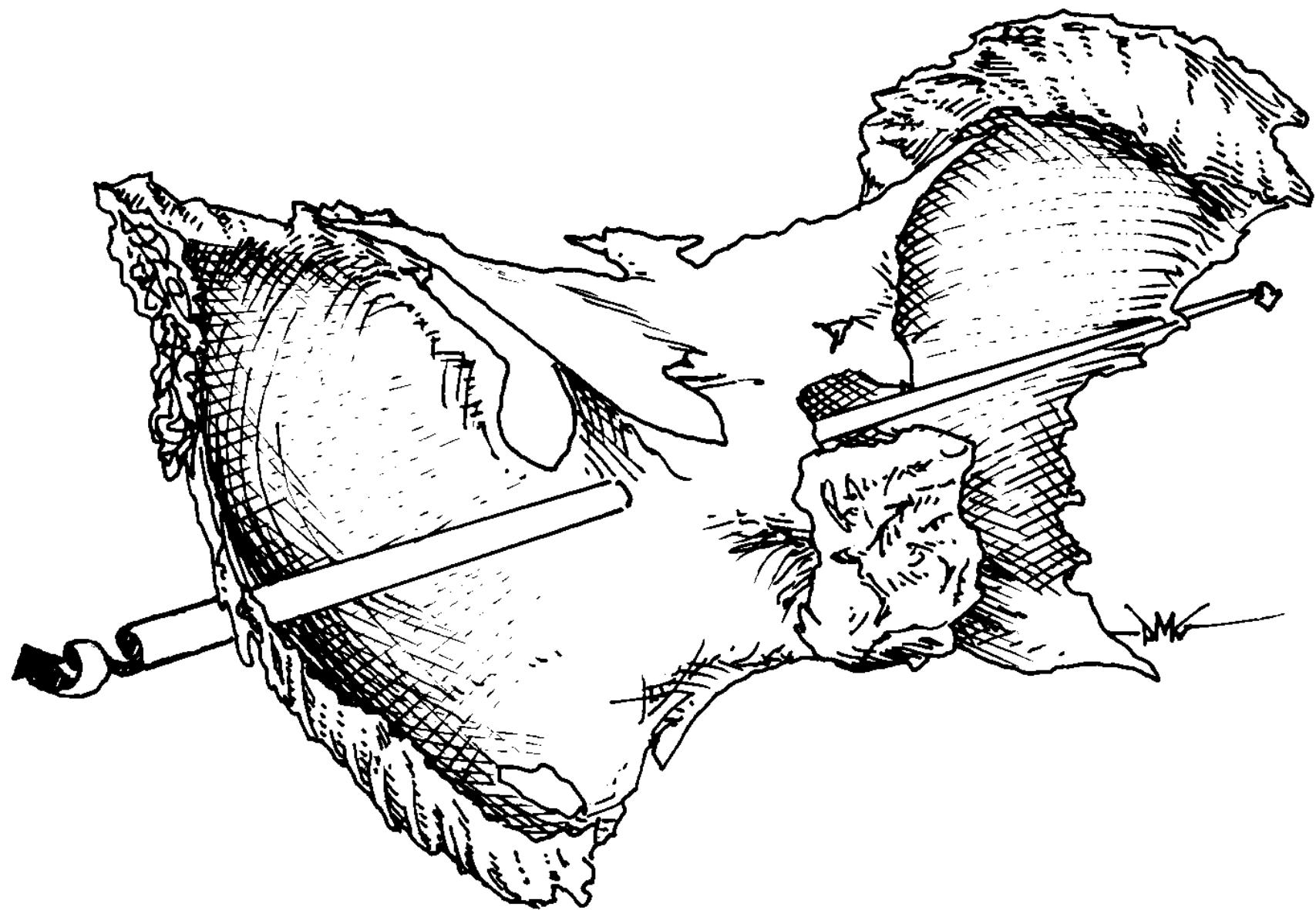


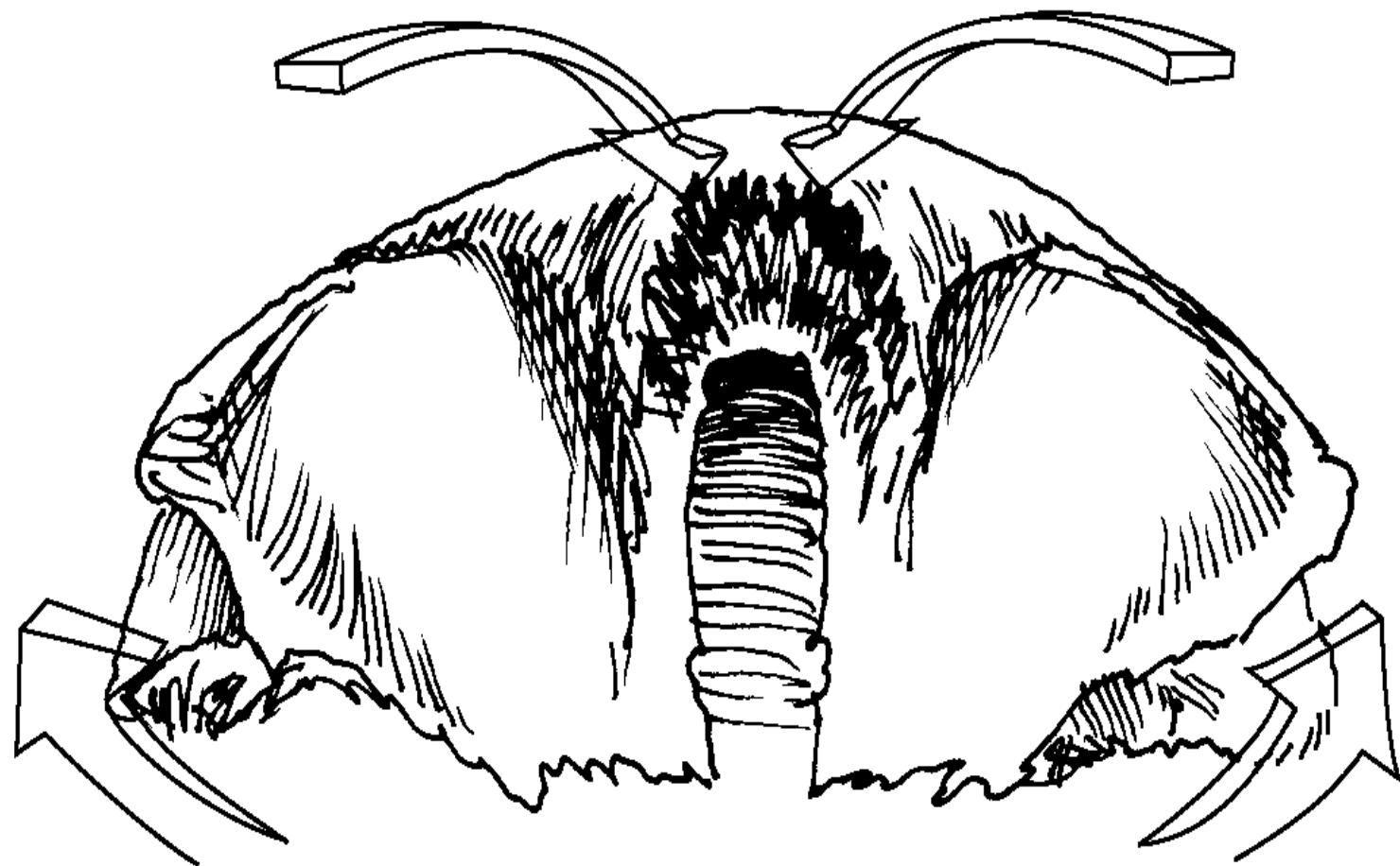
측두골의 회전축 흡기시의 측두골의 움직임

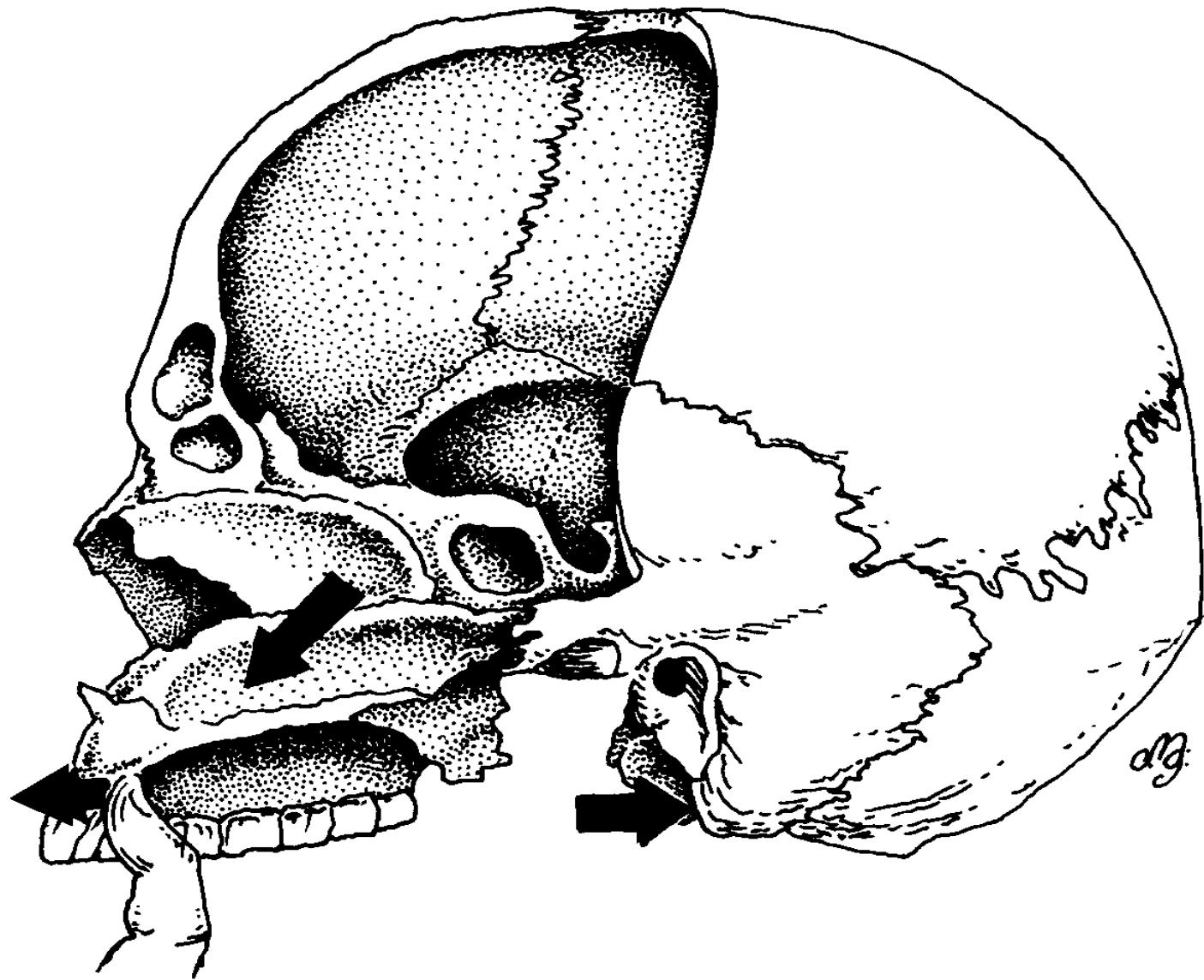


Temporal bone의 회전축 흡기시의 temporal bone의 움직임









inspiration assisted cranial fault
expiration assisted cranial fault



Mastoid TL 동영상



Inspiration assisted cranial fault expiration assisted cranial fault



Sphenobasilar inspiration
assisted cranial fault

TL

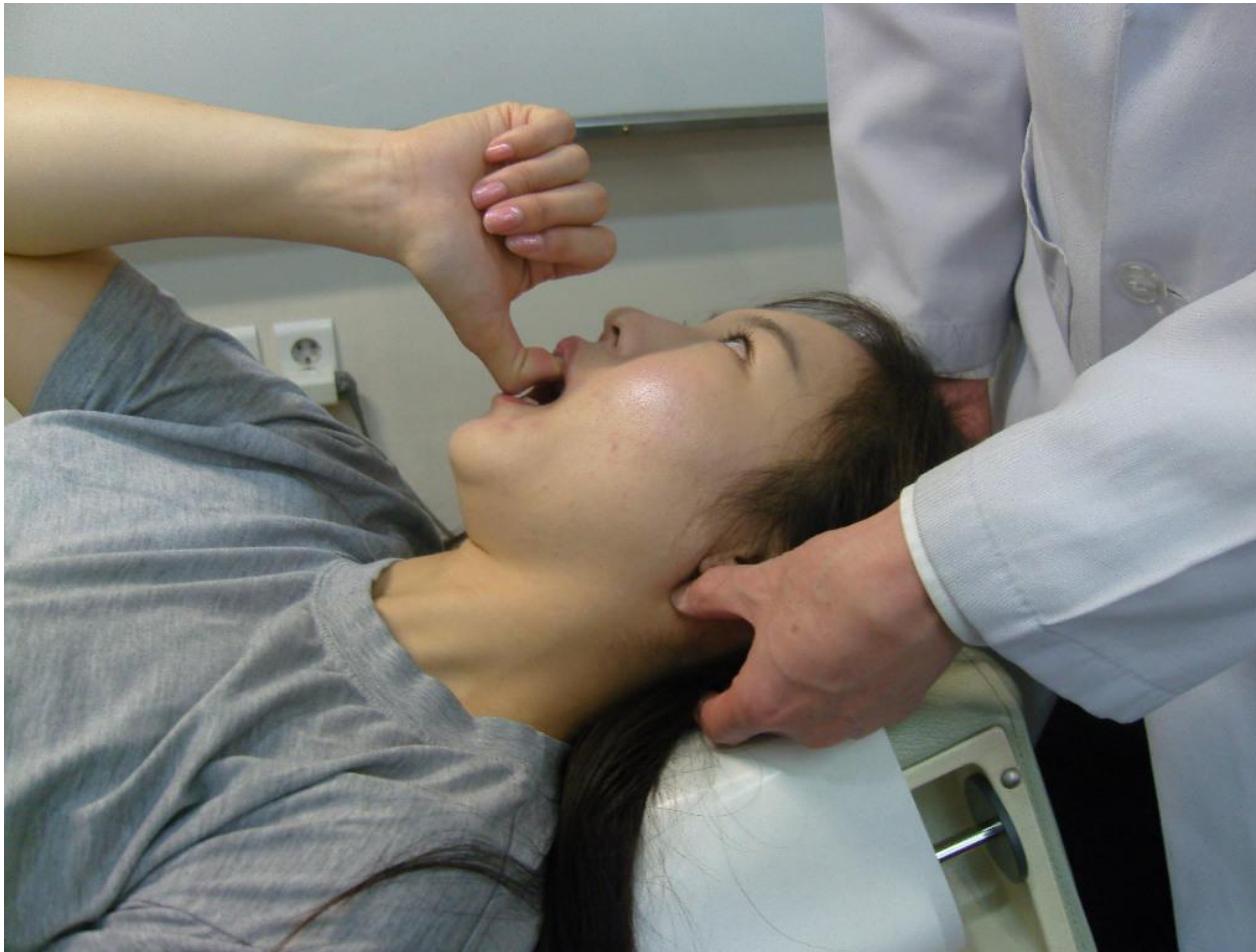
Sphenobasilar fault

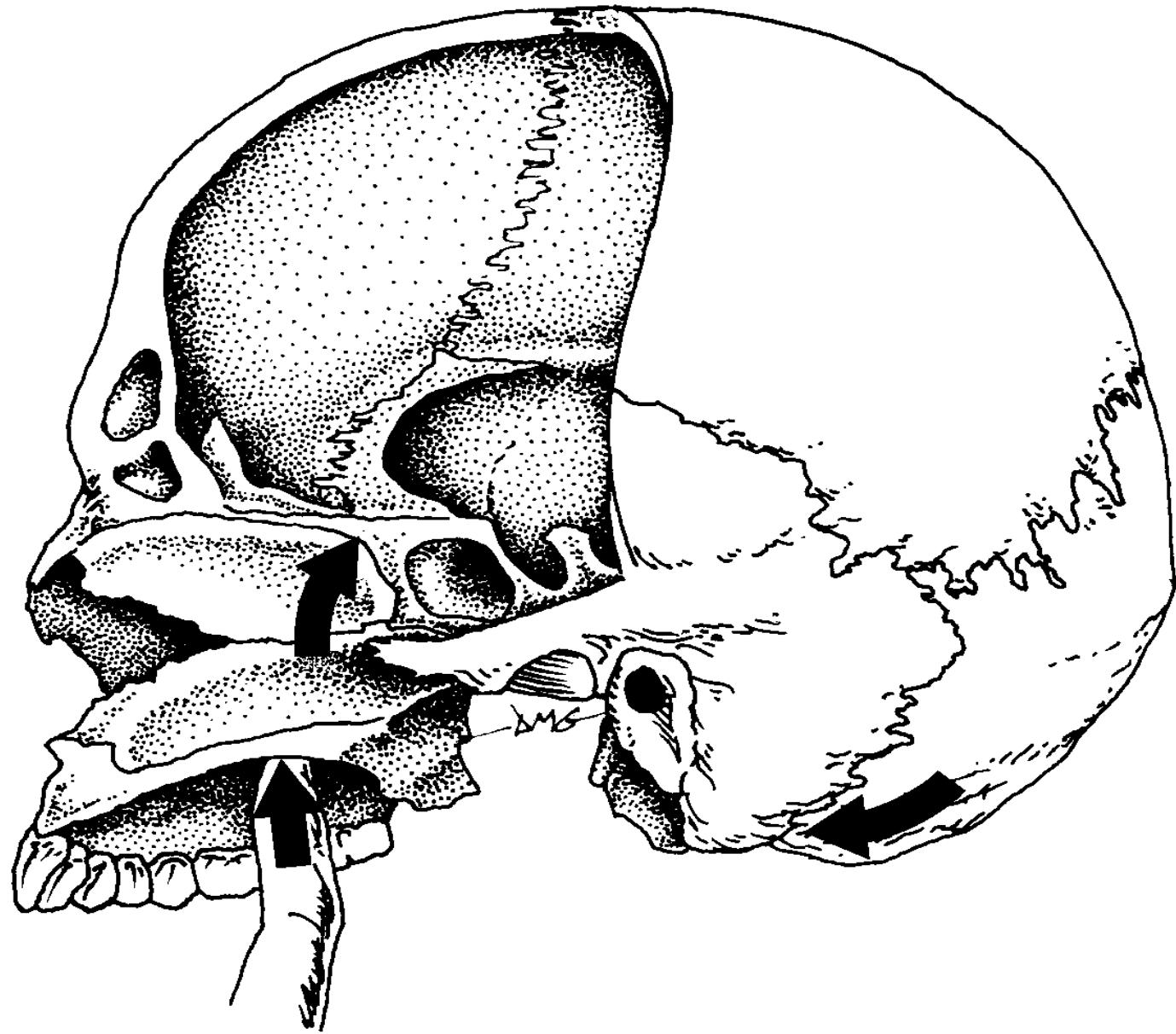


Challenge and correction

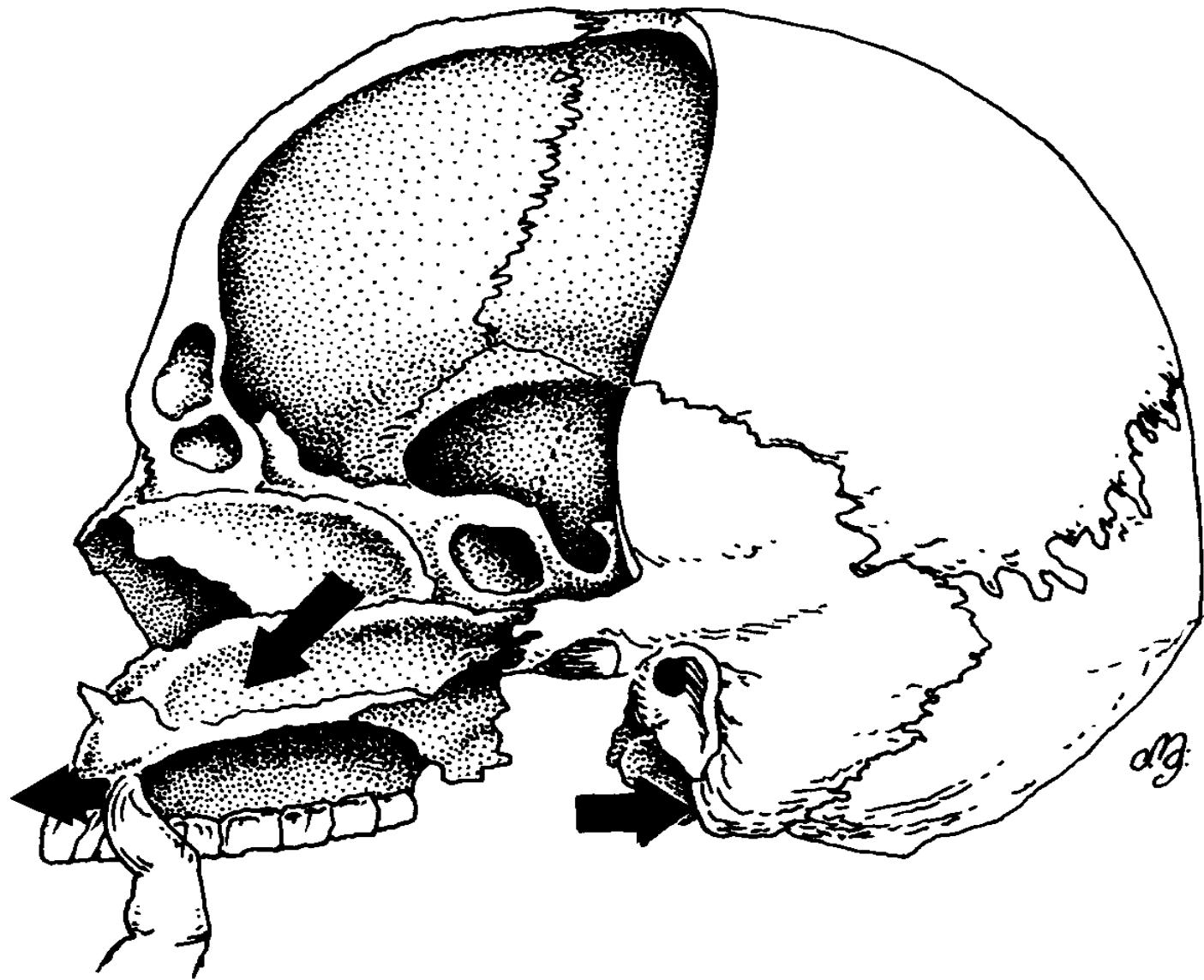


Sphenobasilar exp assist fault challenge and correction





Sphenobasilar expiration
assisted cranial fault



Cruciate fault

- Temporomandibular joint involvement
- Failure to swallow with the mouth partially open.
- The patient may complain of decreased mouth opening or of constant neck tightness

Cruciate fault

- 진단
- 치료

재발성 두개골 기능이상(recurrent cranial fault)

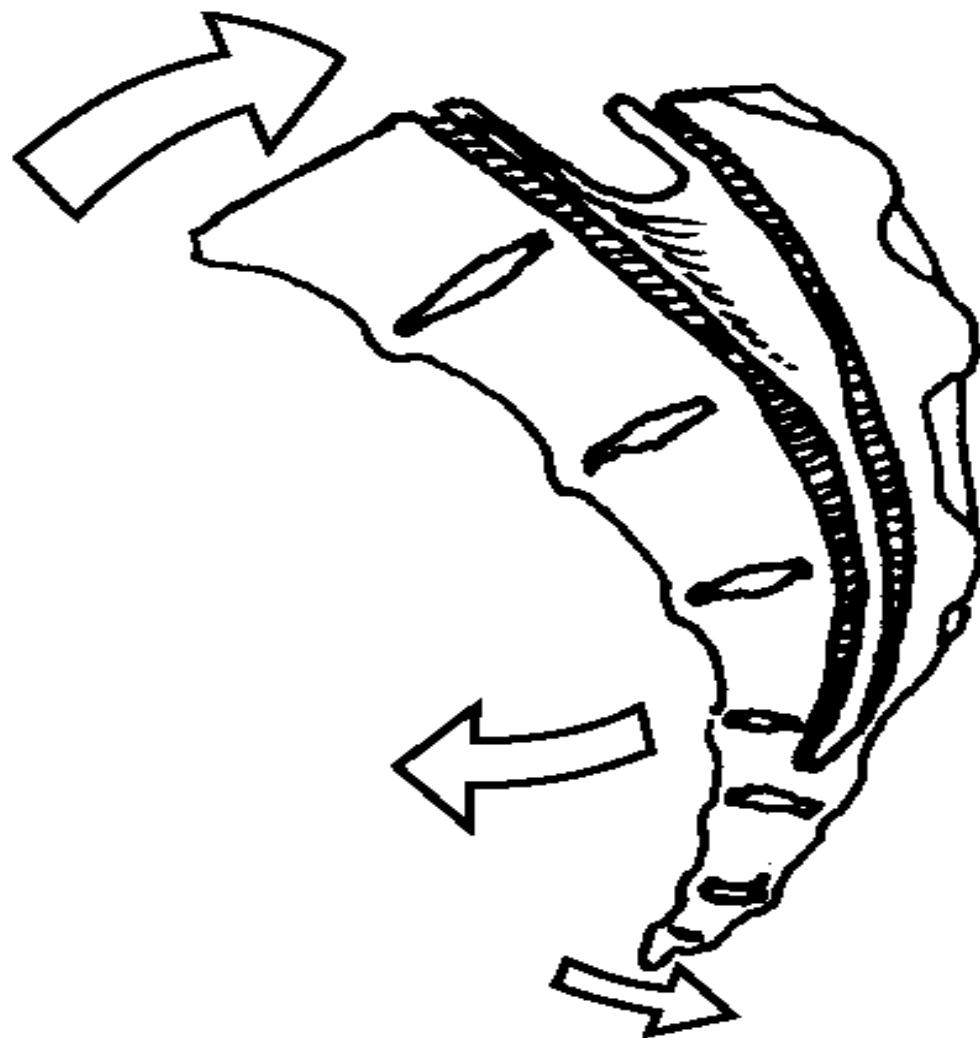
- Dysbiosis
- Toxicity
- Check GI and LV
- TMJ
- Foot
- Diaphragm

Sacral inspiration-expiration assist faults

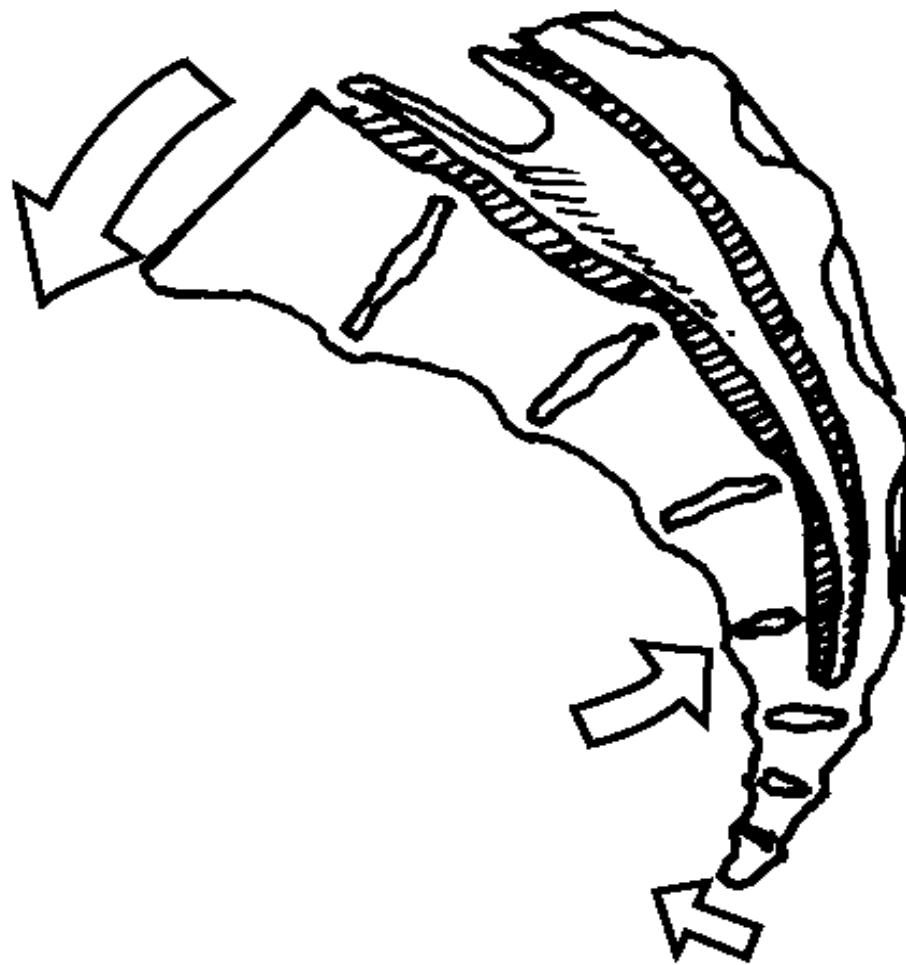
- 경막(dura): cranium-sacrum의 연결
- Piriformis, hamstring에 영향
- Inspiration: apex forward, base backward
- Expiration: base forward, apex backward



Sacral movement in inspiration



Sacral movement in expiration



Correction of sacral inspiration-expiration assist faults





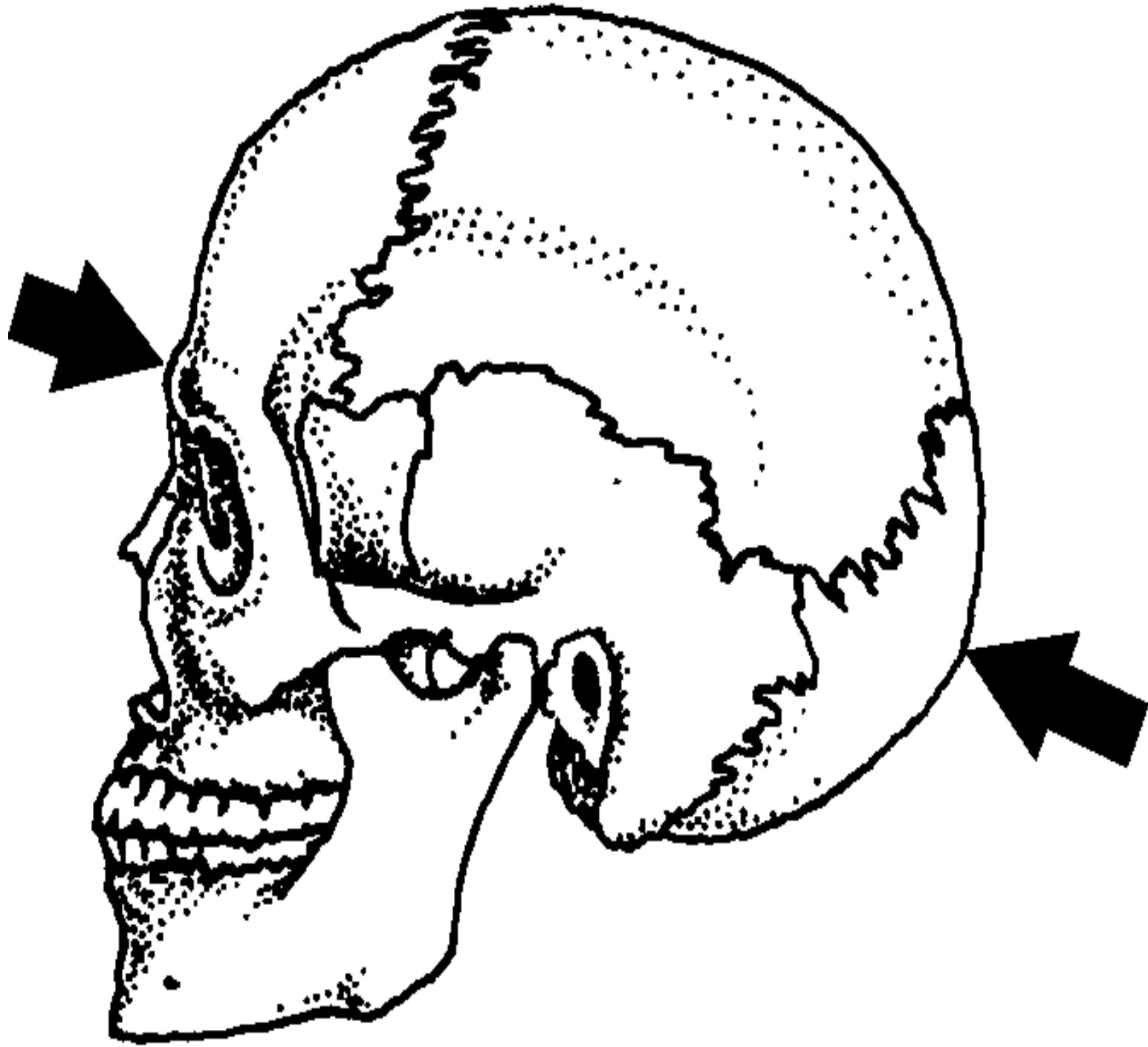


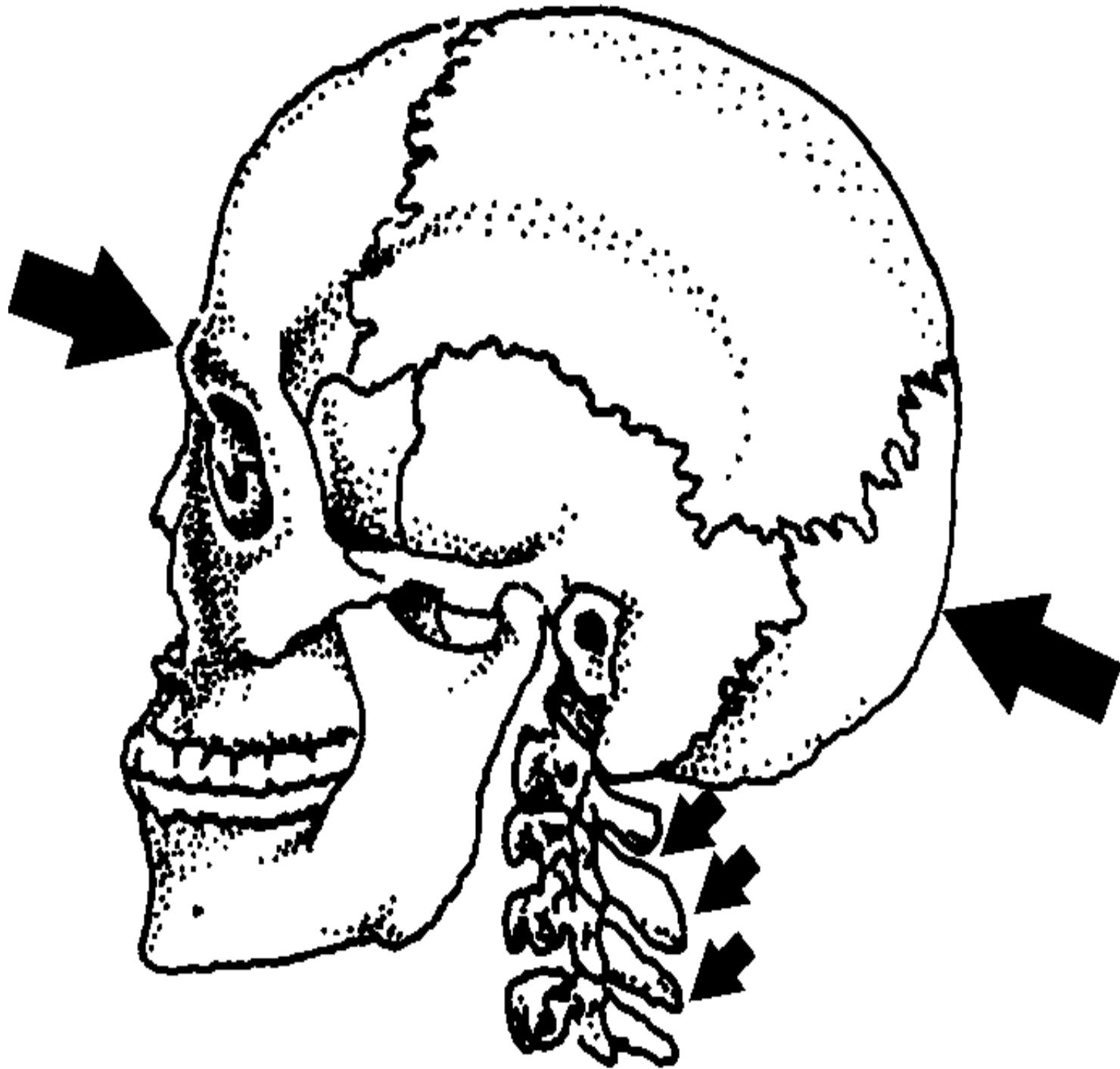
Glabellar fault

- Breathing pattern
- Muscle role
- Probable dural role
- High blood pressure
- Therapy localization
- Challenge
- Correction
- Sacral fault correction

Breathing pattern

- The difference between oral and nasal respiration
- Breathing mouth or nose: weaken the indicator muscle.





Rotational fault

- Temporal bulge
- Parietal descent
- Internal frontal
- External frontal
- Universal

Temporal bulge

Banana head

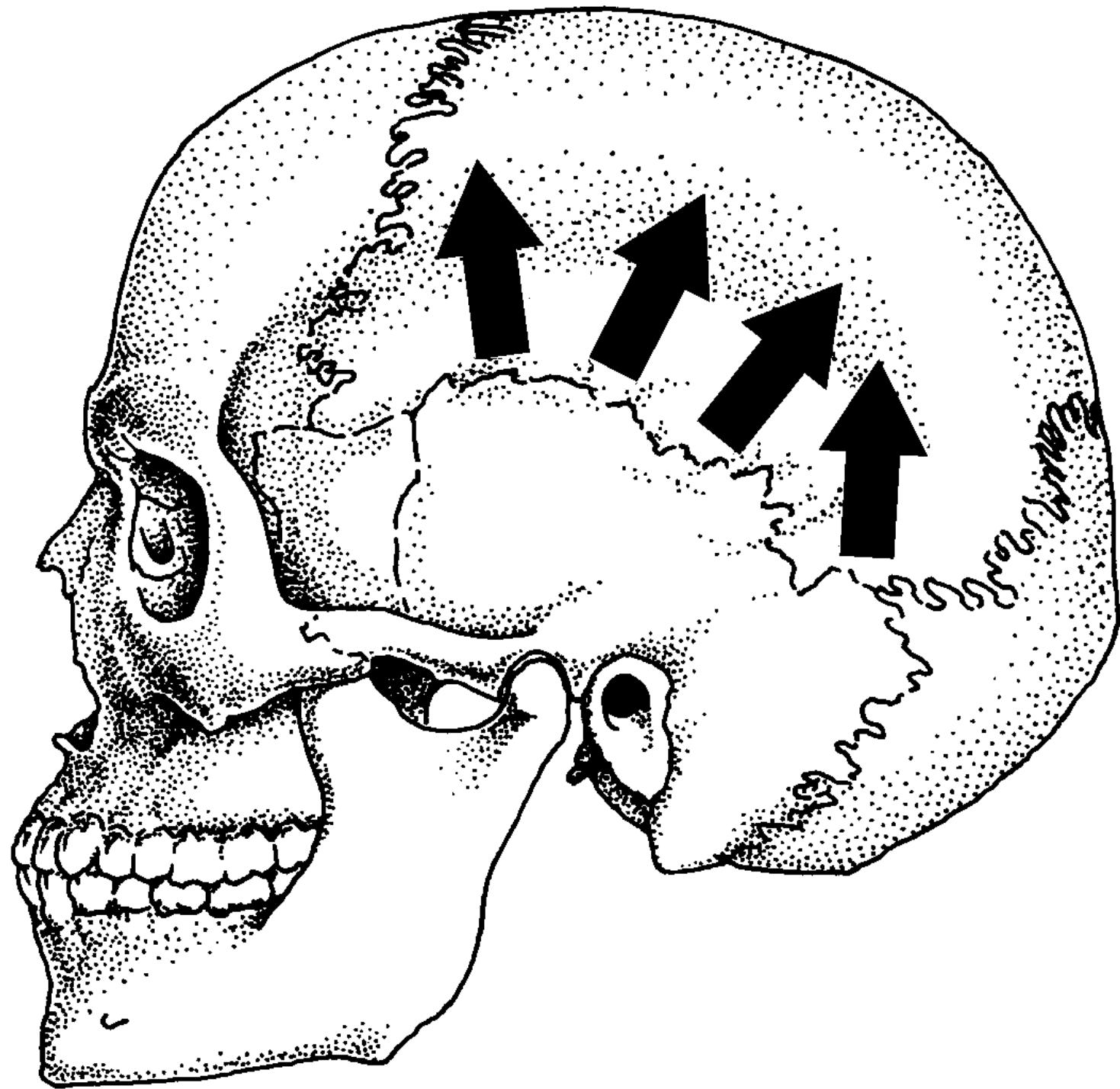
Temporal bulge cranial fault

- Breathing pattern
- Correlation to inspiration assist
- Bilateral pectoralis major clavicular weakness
- 3-dimensional factor
- therapy localization
- correction
- chemical role



Parietal descent cranial fault

- Breathing pattern
- Correlation to expiration assist
- Deep neck flexor weakness
- Correlation to temporal bulge
- Therapy localization
- Challenge
- Correction
- Prevent sagittal suture jam



Internal and external frontal cranial faults

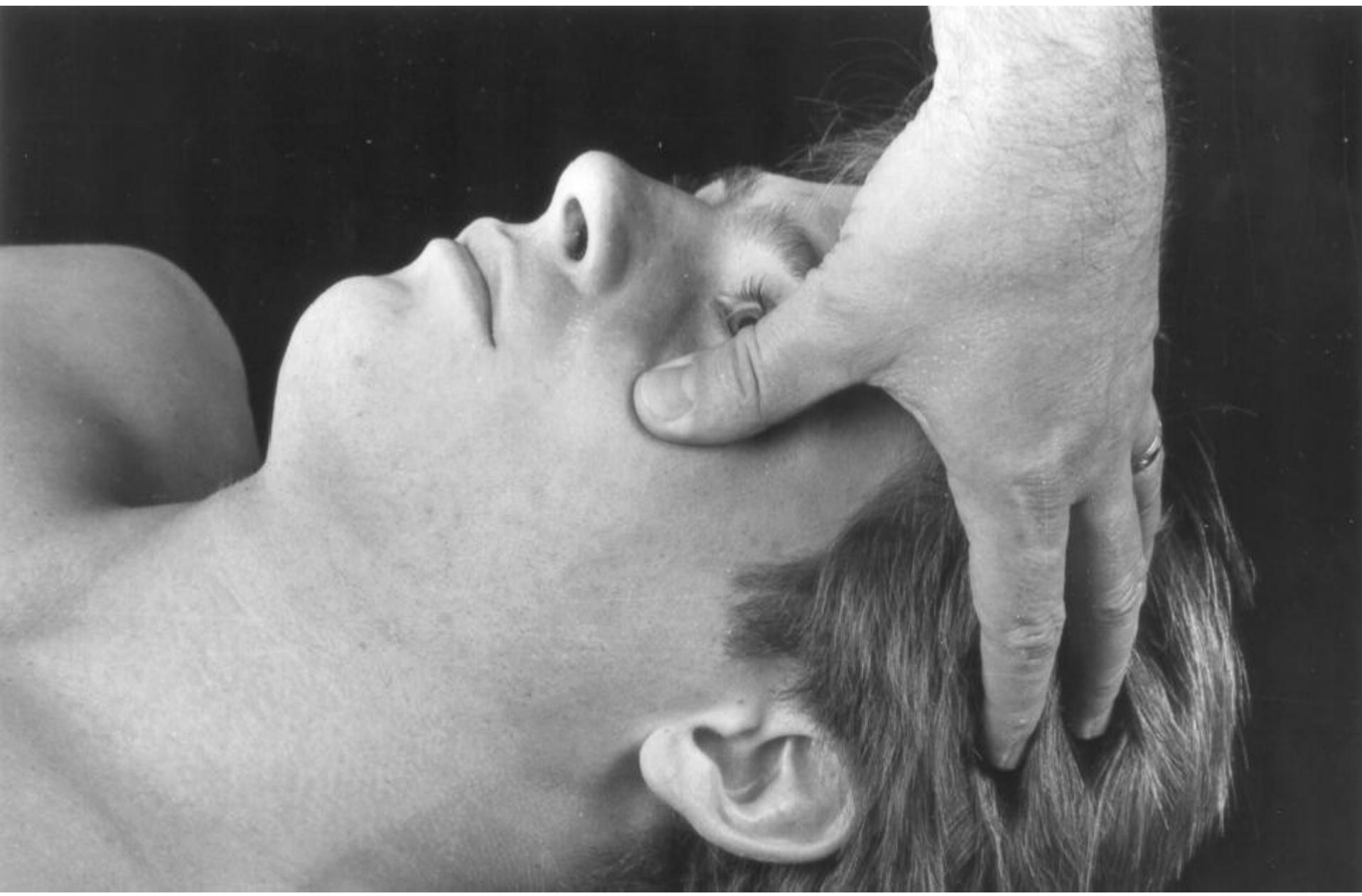
Body language

- Remaining patterns of cranial faults
- Weak neck flexors
- Eye pain-headache behind eye
- Visual disturbance
- Neurological disorganization
- Sinus problems
- Frontal objectives

Internal and external objectives

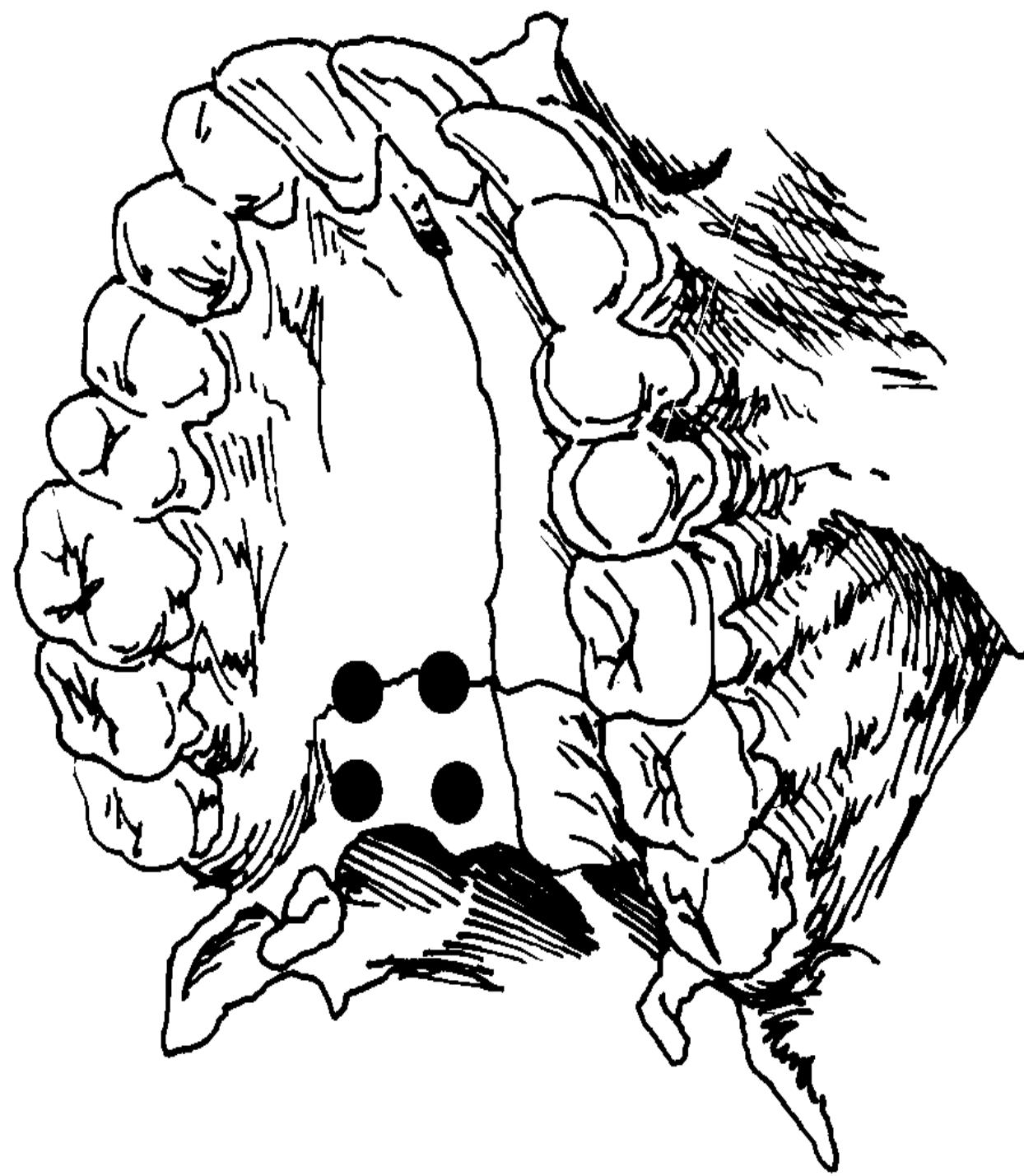
- frontal bone movement
- sphenoid bone role
- challenge and TL
- correction
- bony orbit
- orbicularis oculi muscle
- extraocular muscle
- influence on vision and switching

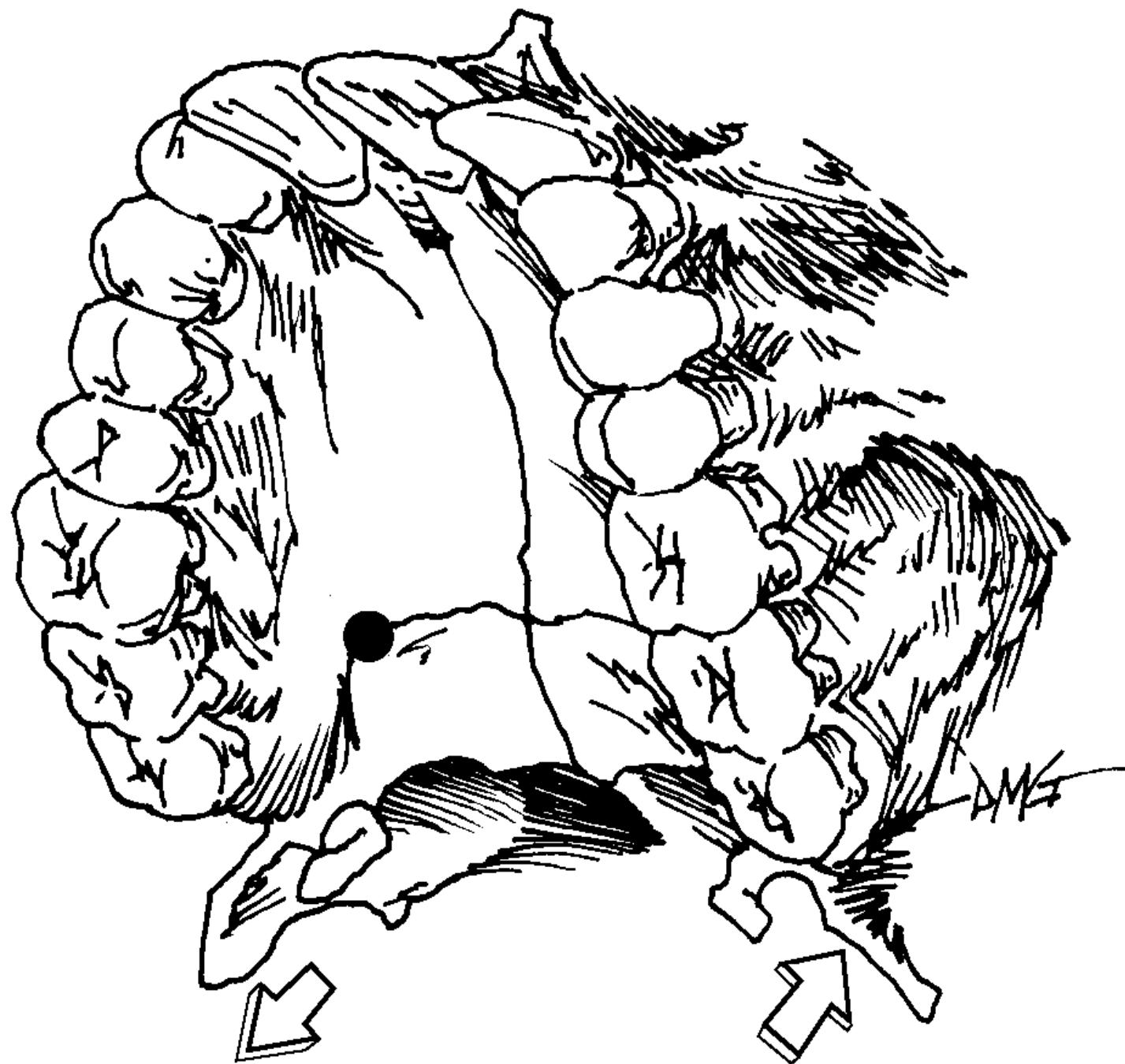




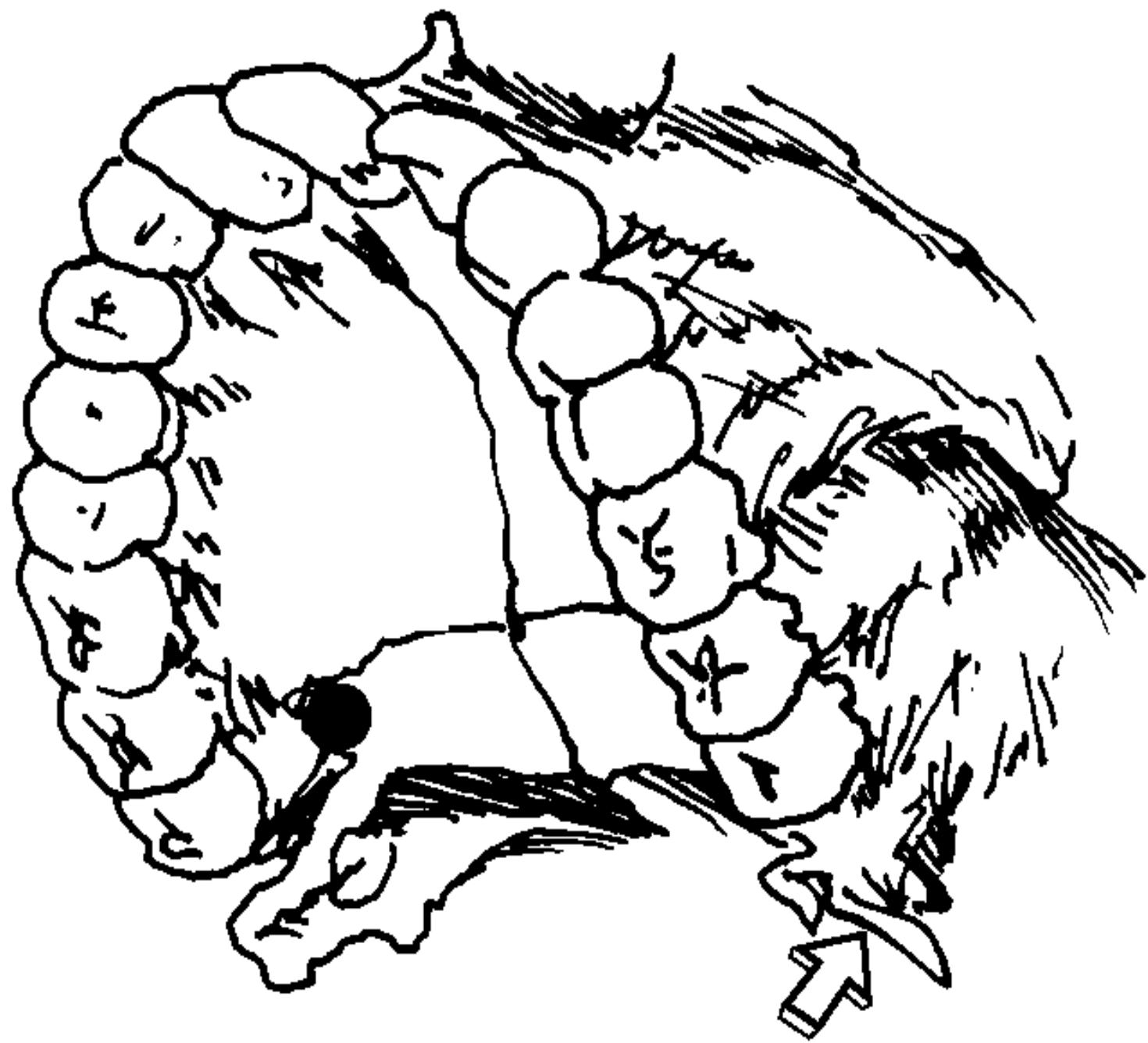
3 steps to correction

- Laterally and slightly inferiorly 20-40초간
–통증이 좋아지지 않으면 방향을 전방 혹은 후방으로 바꿀 것
- Gum in post molar: 10-20초
- Push on the opposite side of pterygoid process: 10-20초



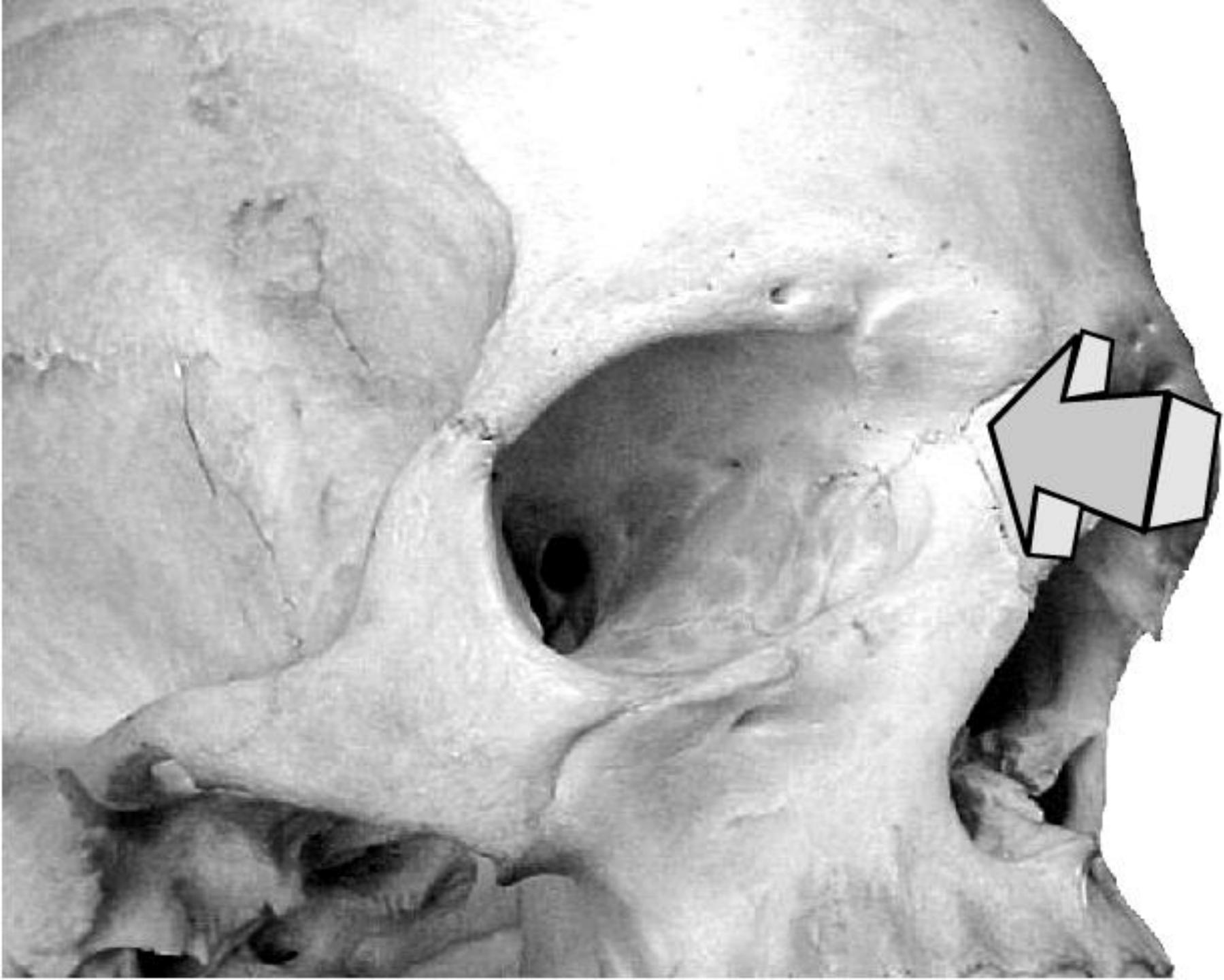


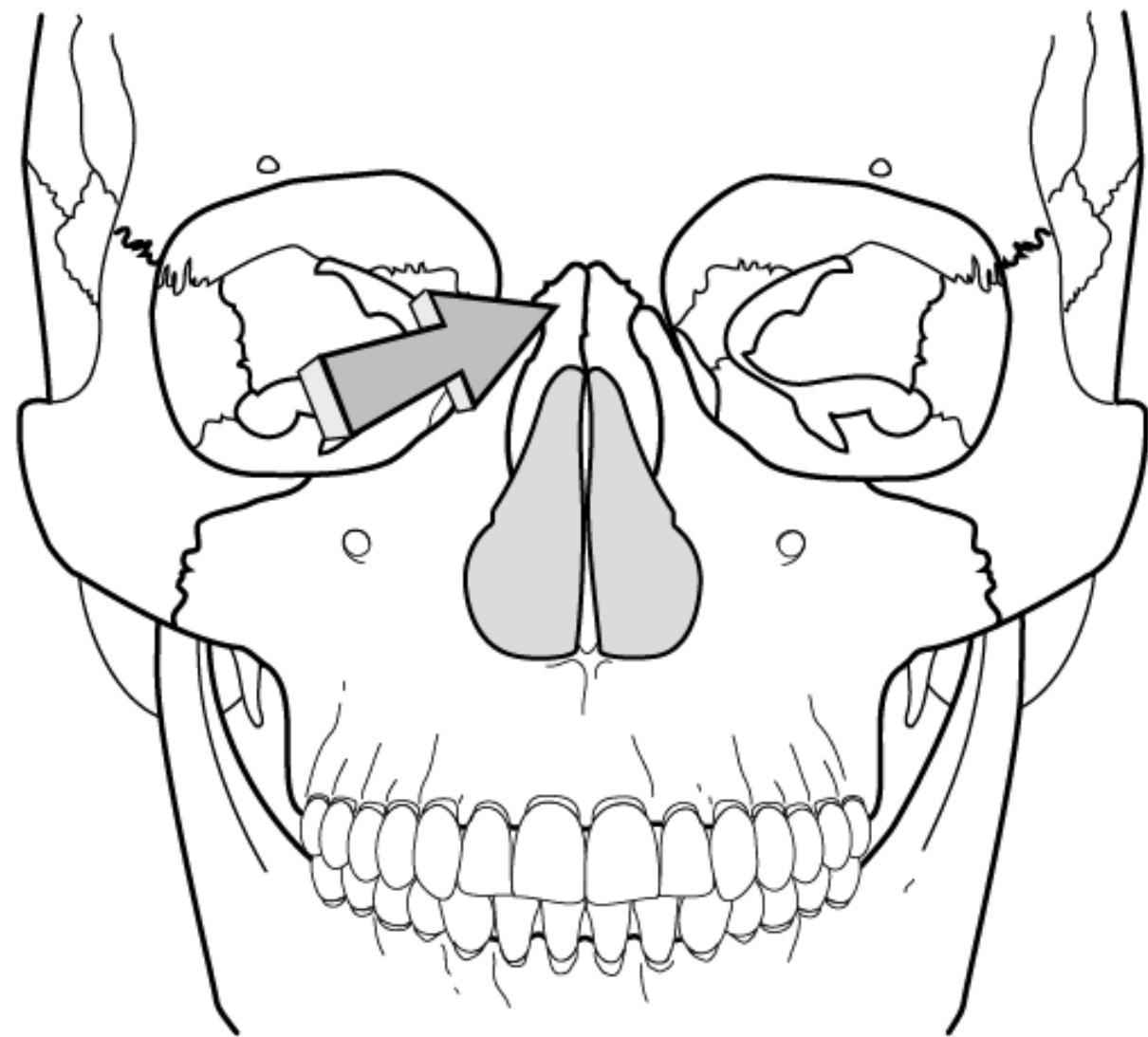




Nasosphenoidal fault

- Tenderness: lower edge of greater wing on the high side, upper edge of greater wing on the lower side
- Challenge
- Correction : pressure in the direction of challenge during inspiration





Universal fault

- Type of misalignment
- Correlation to other faults
- Breathing pattern
- Muscle role
- SCM
- Upper trapezius
- Challenge-direction of correction
- Evaluate posture after correction

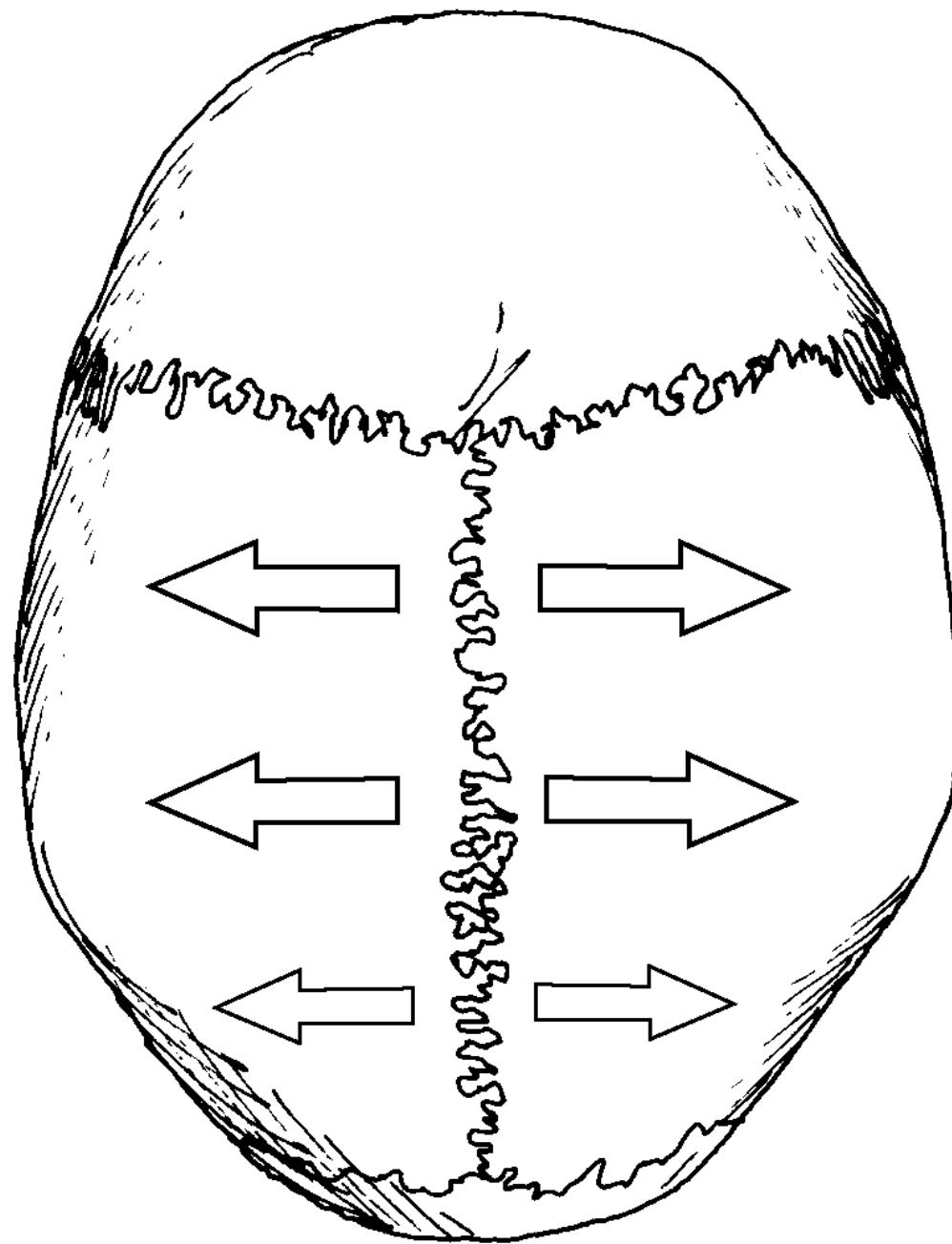


General sutural fault

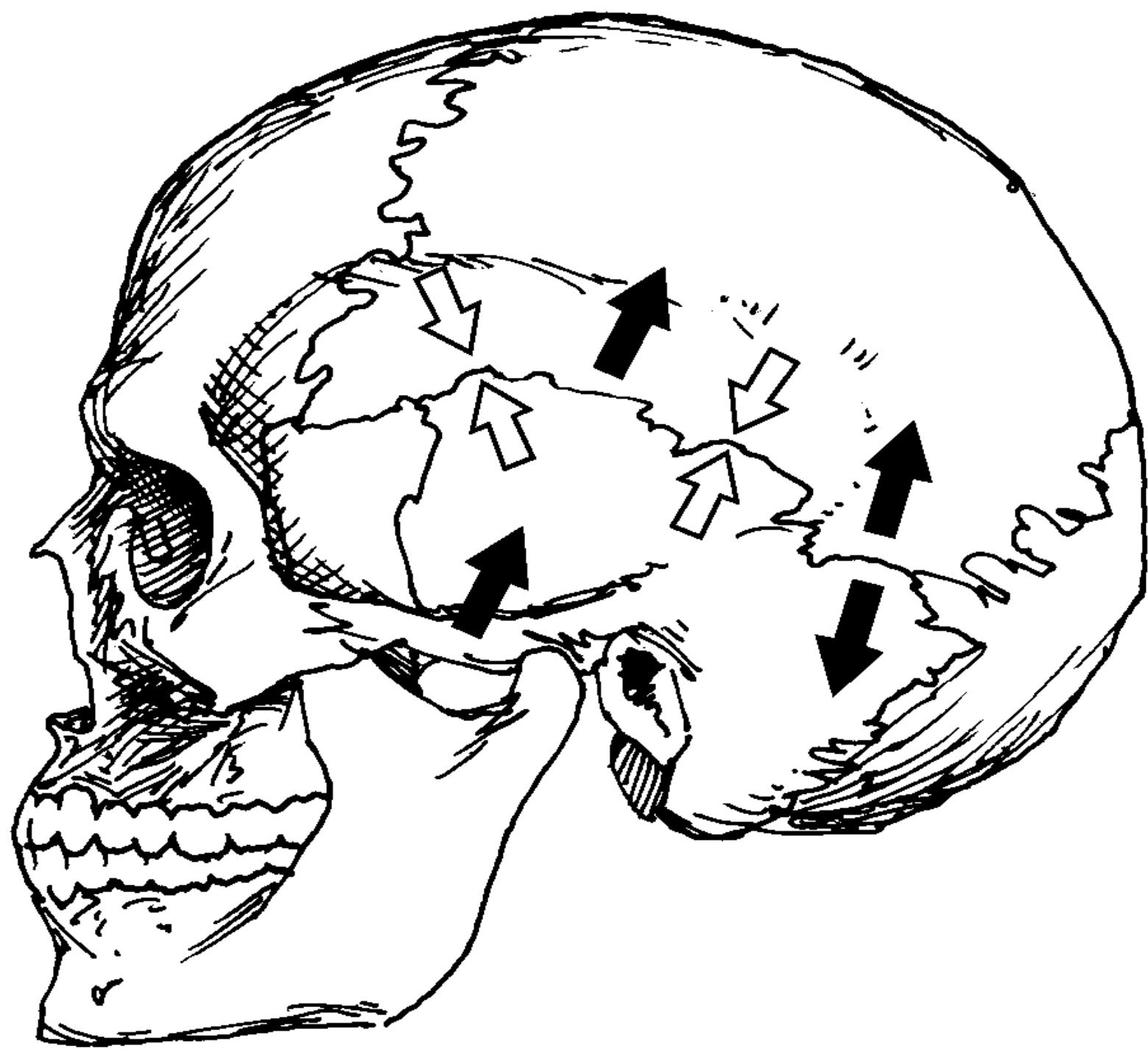
- Body language of suture faults
- Muscle role
- Palpation
- Jammed or separated
- Challenge
- Respiratory factor
- Correction

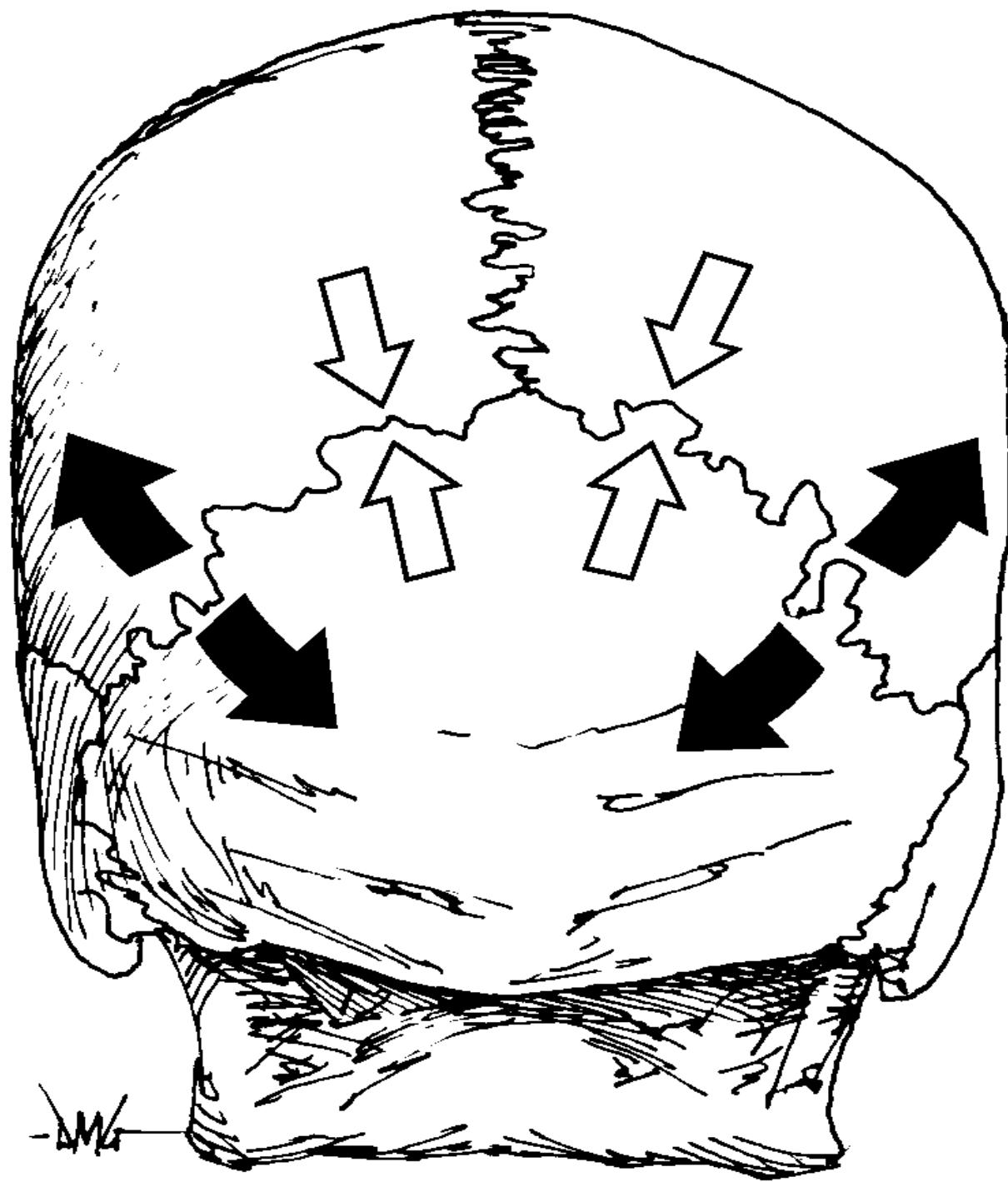
sagittal suture fault

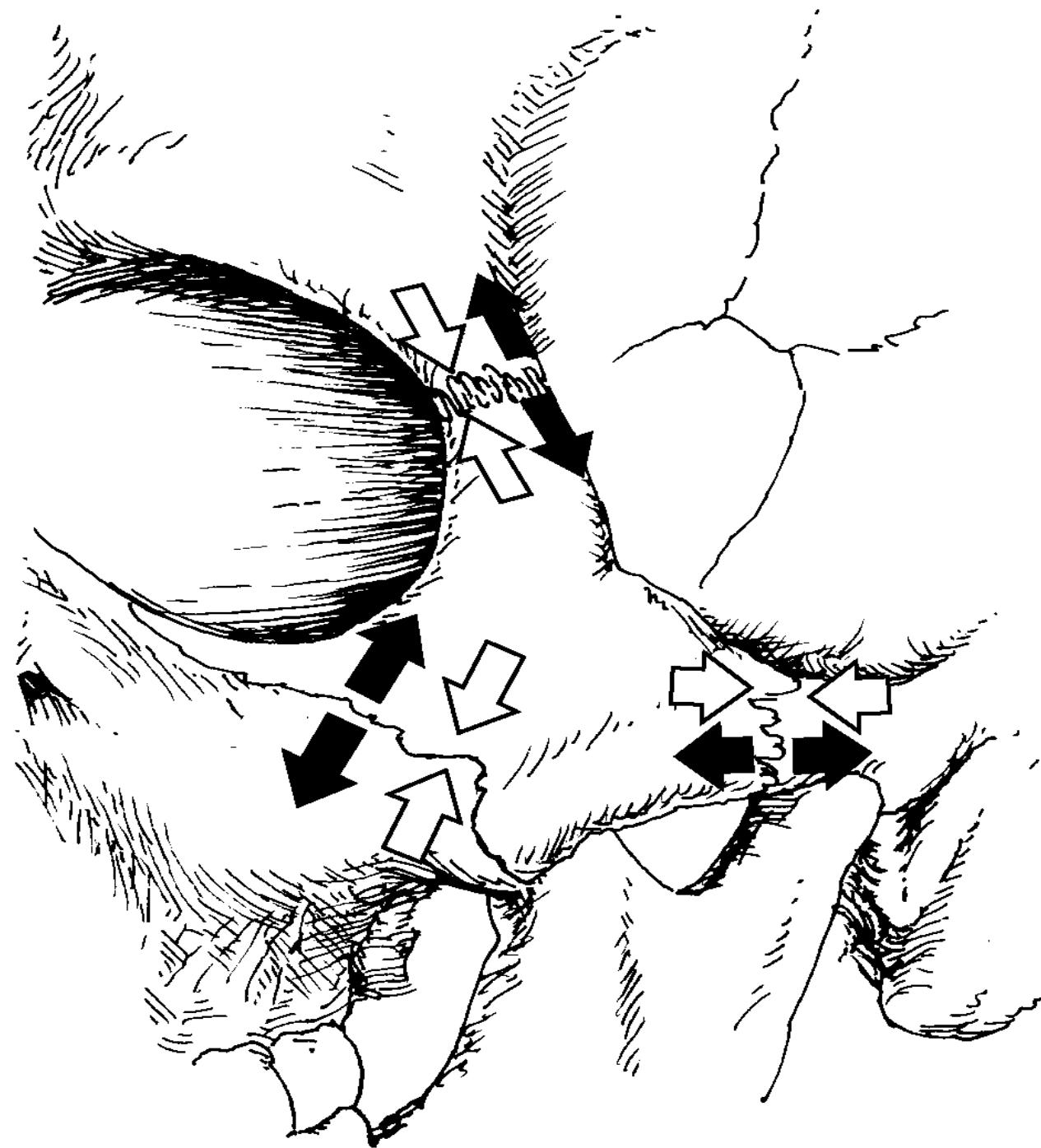
- Rectus abdominis, abdominal oblique 근력약화와 흔히 관계가 있다.
- 만성 요통이 있으면서 요추의 전방만곡이 심한(hyperlordosis)에 많다.
- 접촉검사
- 교정: squamous suture가 jamming이 되지 않도록 교정한다.











Flow charts-cranial correction
and finding subclinical problems

General screening of cranial fault (flow chart) by Dr. Walter

- Inspiration or expiration
- One nostril
- Oral or nasal
- Bilateral PMC one half breath out
- Deep neck flexor one half breath in
- TL to frontal eyebow
- TL to palate forced exp or insp

Sphenoid spread

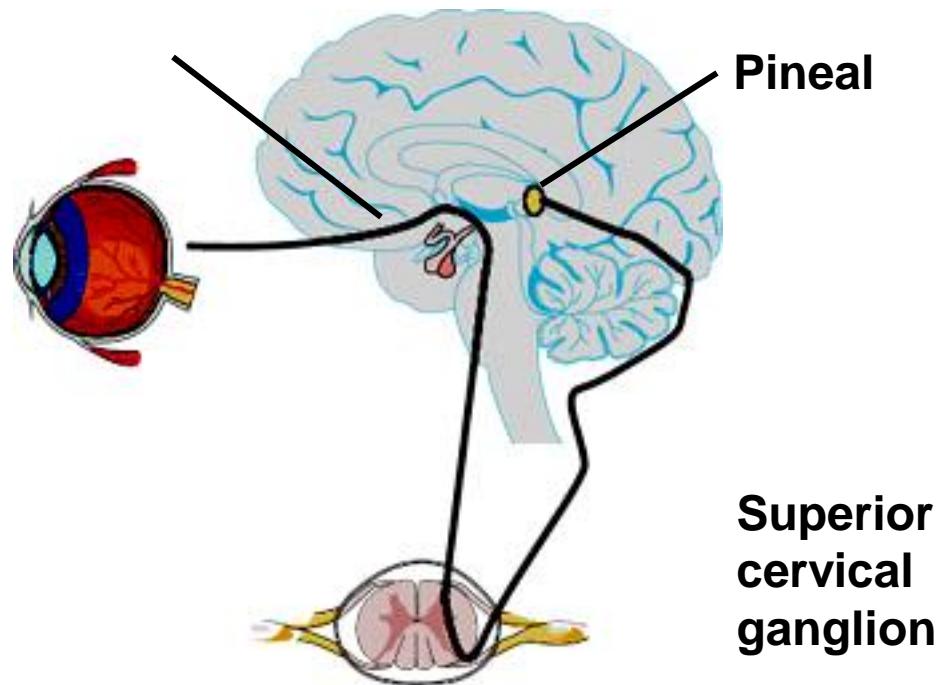
- compressed sphenoid bone
- related to pineal gland
- muscles weaken in darkness

Pineal gland

- Regulation of circadian rhythm
- Biological clock
 - Daily - monthly - yearly - lifetime
- Hormone = Melatonin
 - Production increases in darkness stimulated by norepinephrine from postganglionic sympathetic nerves that innervate the pineal

Pineal Innervation

Suprachiasmatic nuclei

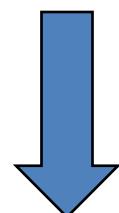


- darkness turns on the pineal gland
pineal inhibits endocrine

Body language

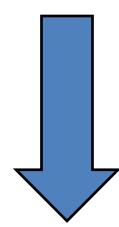
- 오전에 증세가 있는 경우
- 수면장애, 새벽에 깨는 경우, 아침에 늦게 일어나는 경우
- 생리불규칙
- 부신피질기능장애

Melatonin



Tryptophan

5 hydroxytryptophan



5 Hydroxytryptamine (Serotonin)

N -Acetylserotonin

Acetyl CoA

Melatonin

Pineal and melatonin

- Pineal inhibits all endocrines
- “melatonin turns on when the lights are off.”
- Patient weakens in darkness
- Sphenoid spread
- Pineal support
- Pineal LYH

Cranial and mandibular challenge and correction

- Press greater sphenoid wing bilaterally-I weak
이거나
- Endocrine related muscle이 불을 껐을때 약해진다
- Correct Pterygoids
 - Strain counterstrain
 - Percussion
 - Spondylogenic tapping
- Separate pterygoid plates
- Separate rami

Sphenoid Spread (Pineal Problems)

- 접형골은 외측에서 내측으로 압박받을 수 있다. 이러한 문제가 심한 경우 송과선의 문제와 관련된다.
- 송과선에 문제가 있는 경우 방안에 불을 켰을 때 강한 지표근육이 약해진다. 경구용으로 송과선 추출물을 경구 투여하면 다시 근육이 강해진다.. 관련된 sphenoid compression cranial fault를 교정하면 light-dark challenge가 정상화된다.

Sphenoid Spread (Pineal Problems)

- challenge: 하악골의 ramus나 접형골 대익을 외측에서 내측방향으로 압박했을 때 강한 지표근육이 약해지고 다시 송과선 추출물을 투여할 때 강해진다.
- 교정: 하악골의 ramus를 내측에서 외측으로 적당한 강도로 약 5초간 밀어준다(*intraorally*). 교정 후에 다시 챌린지하여 확인한다. 방을 어둡게 한 후에 다시 챌린지 확인한다.
- 수면장애나 아침에 기상시 문제가 있는 경우에 도움이 된다.

근육과 장기와의 관계

- Chapman NL-organ relation을 Dr. Goodheart 최초로 근육과 관련된 장기에 대한 기술
- 그 뒤로 근육을 이용한 여러 진단, 치료학문에 이용됨

Heart

- Subscapularis
- Vastus lateralis
- Middle deltoid

subscapular

SUBSCAPULARIS

Description:

thick, triangular muscle,
lying on the costal surface
of scapula

Origin:

the subscapular fossa

Insertion:

the lesser tubercle of
humerus

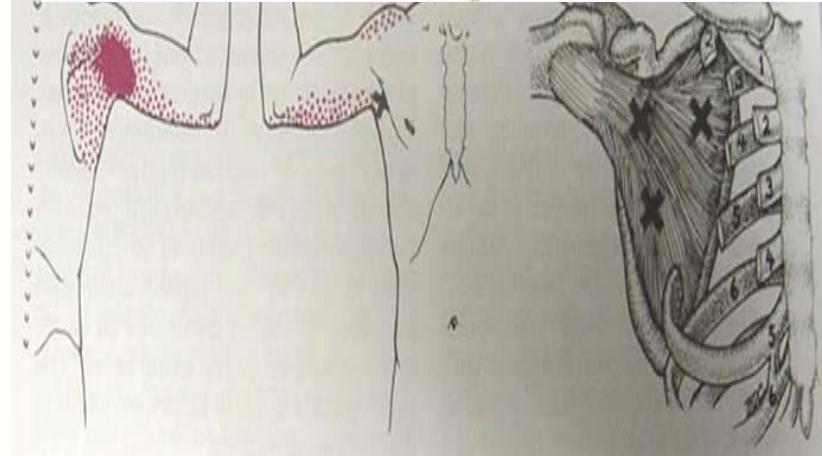
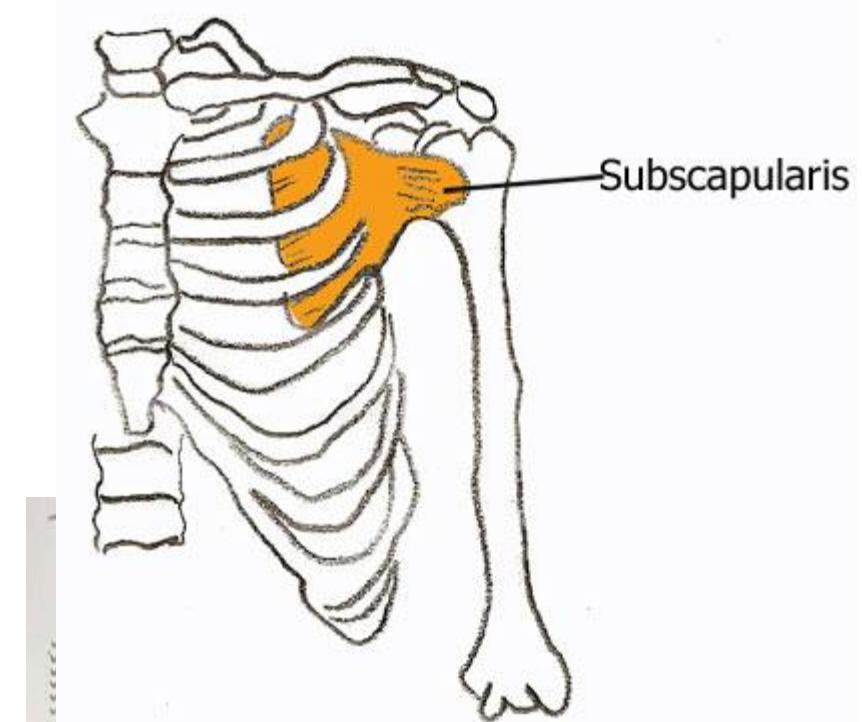
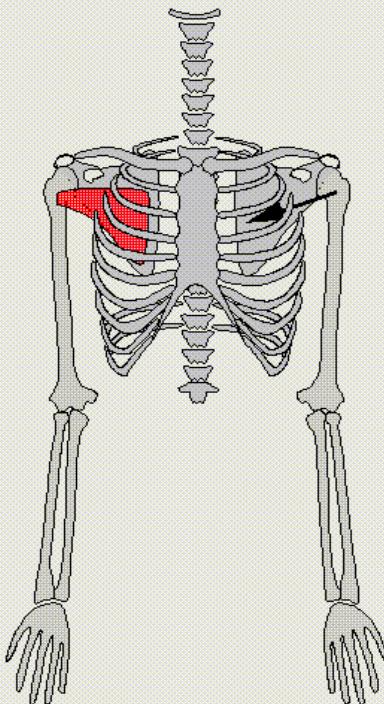
Function:

- medial rotation of the arm
- adduction of the arm

Modelization:

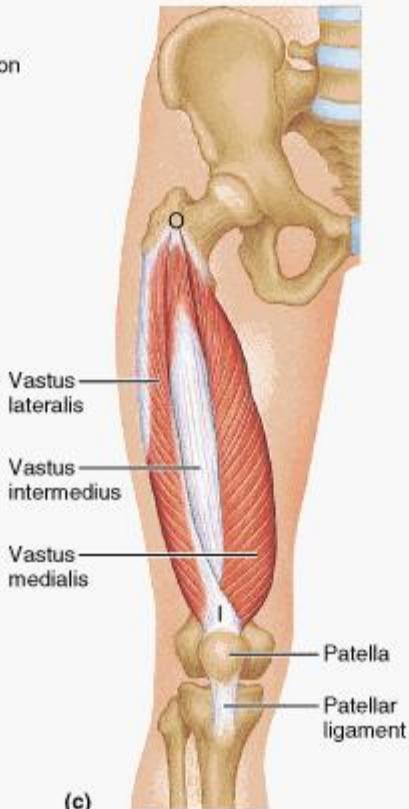
one vector between the
humerus and the
subscapular fossa

Notes:

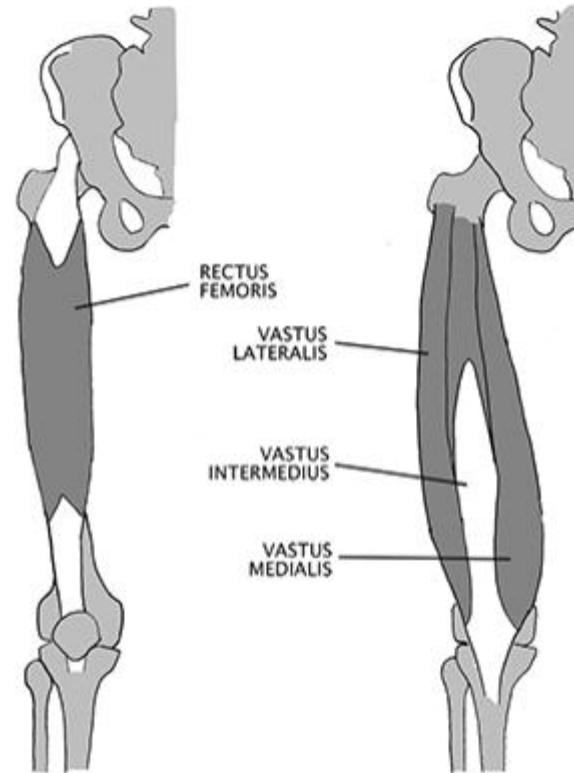


quadriceps

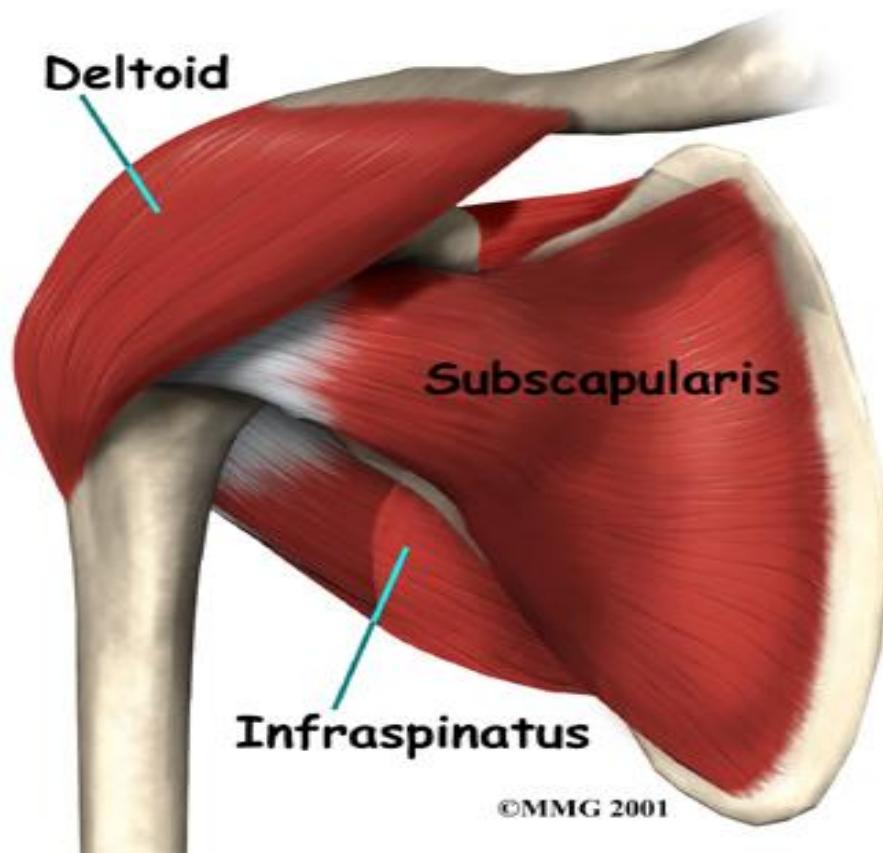
O = origin
I = insertion



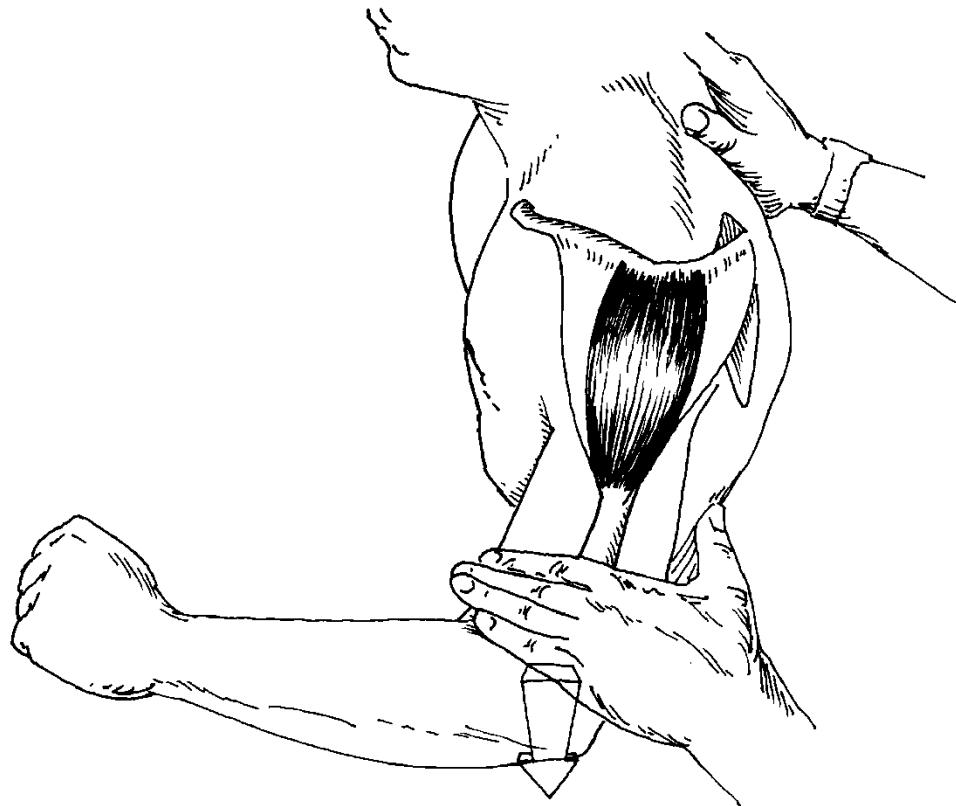
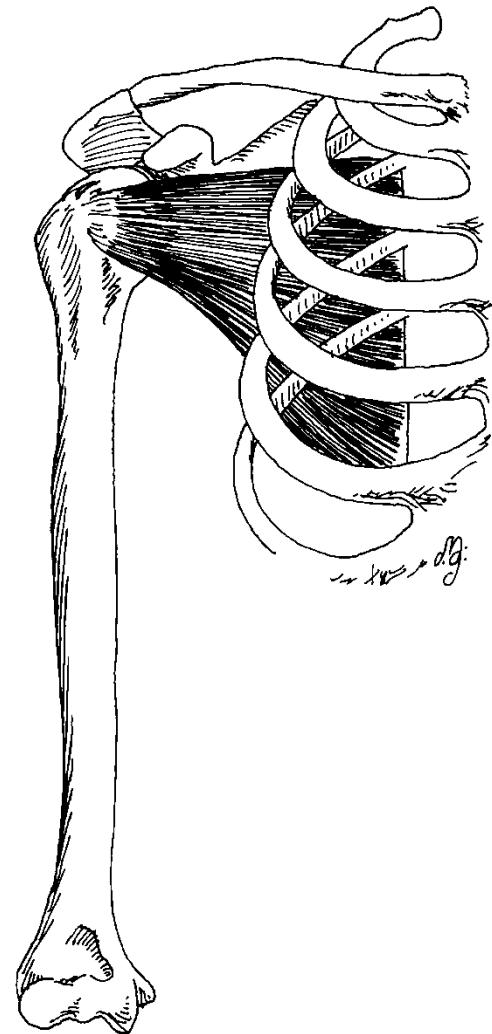
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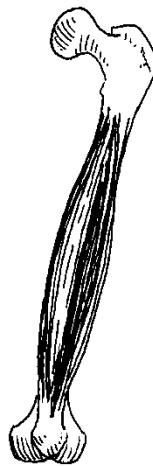
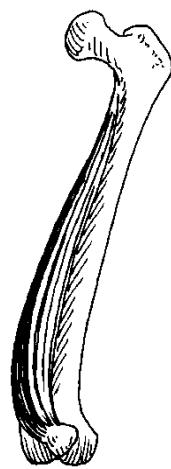
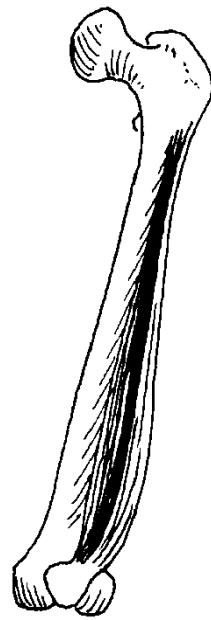
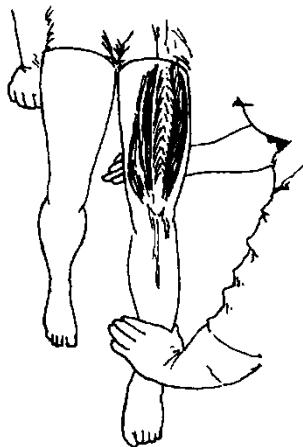


deltoid



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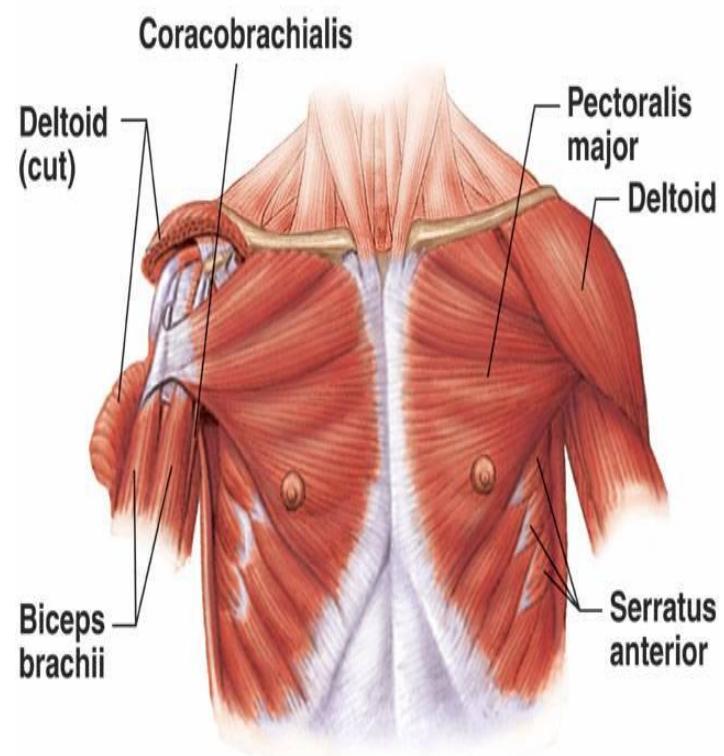
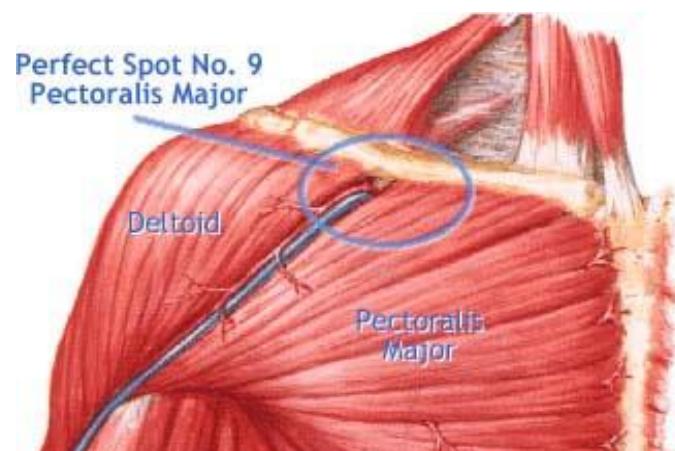
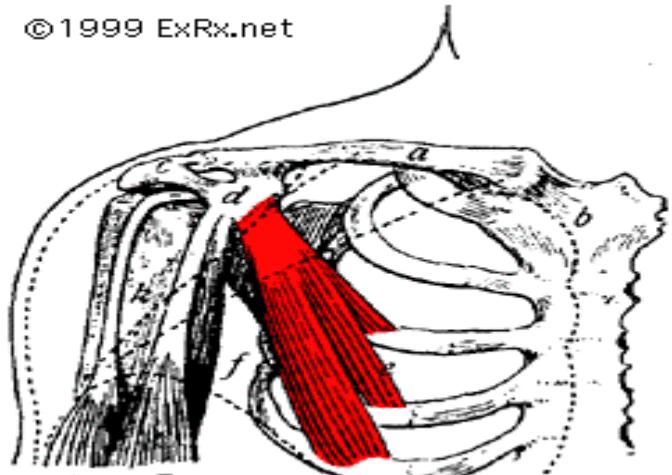


Liver

- PMS
- Rhomboid

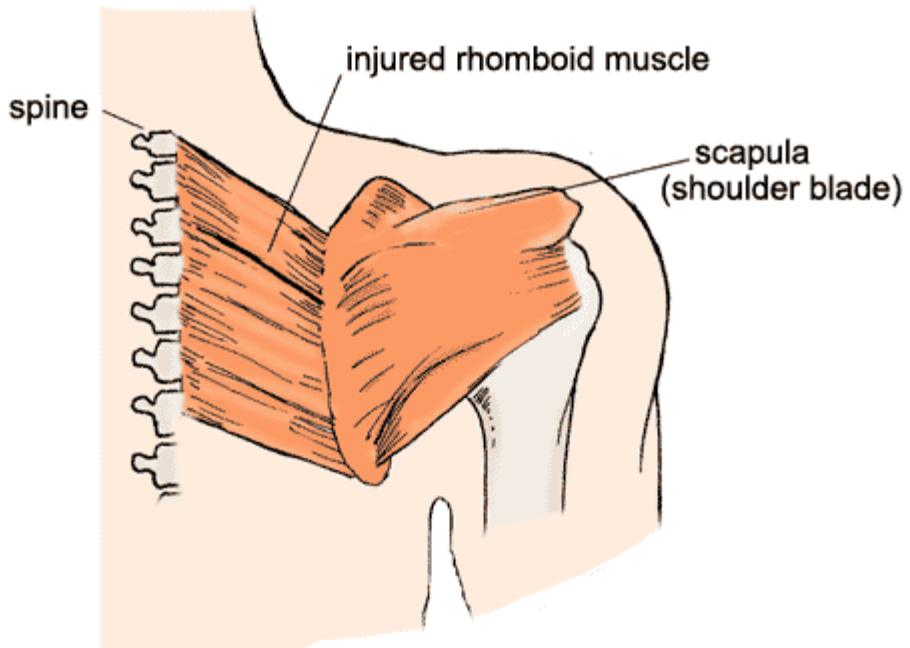
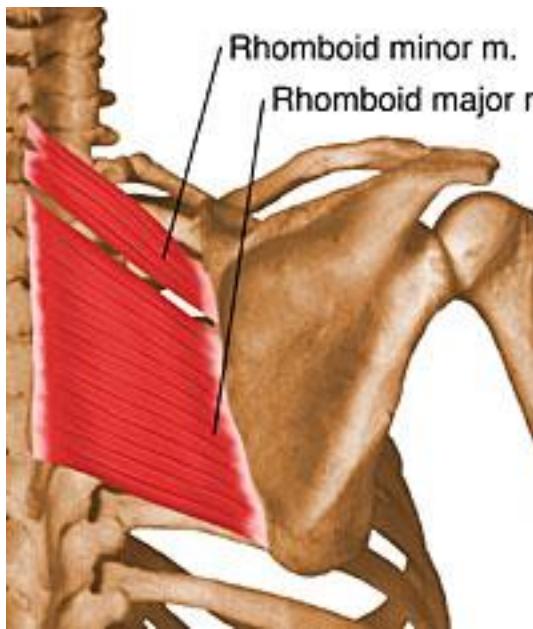
pect

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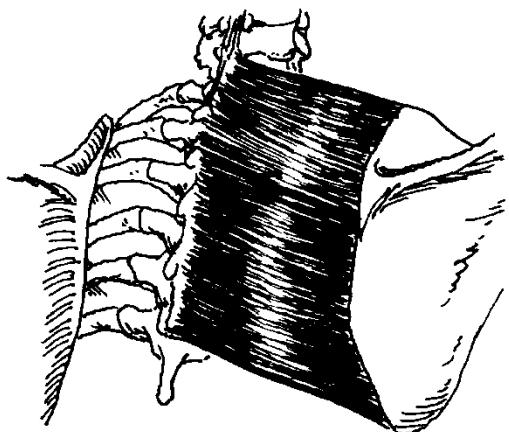
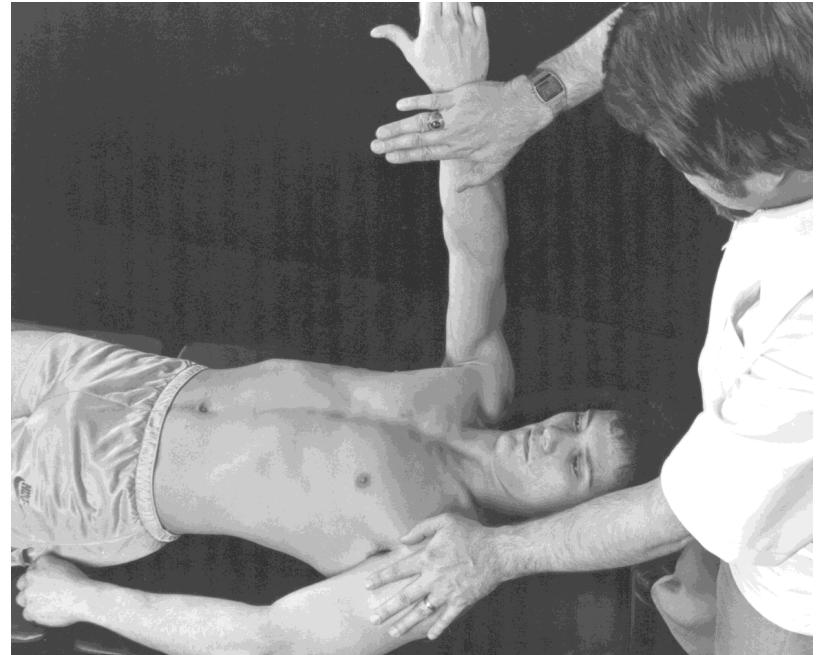


rhomboid

Rhomboid Muscle Strain/Spasm



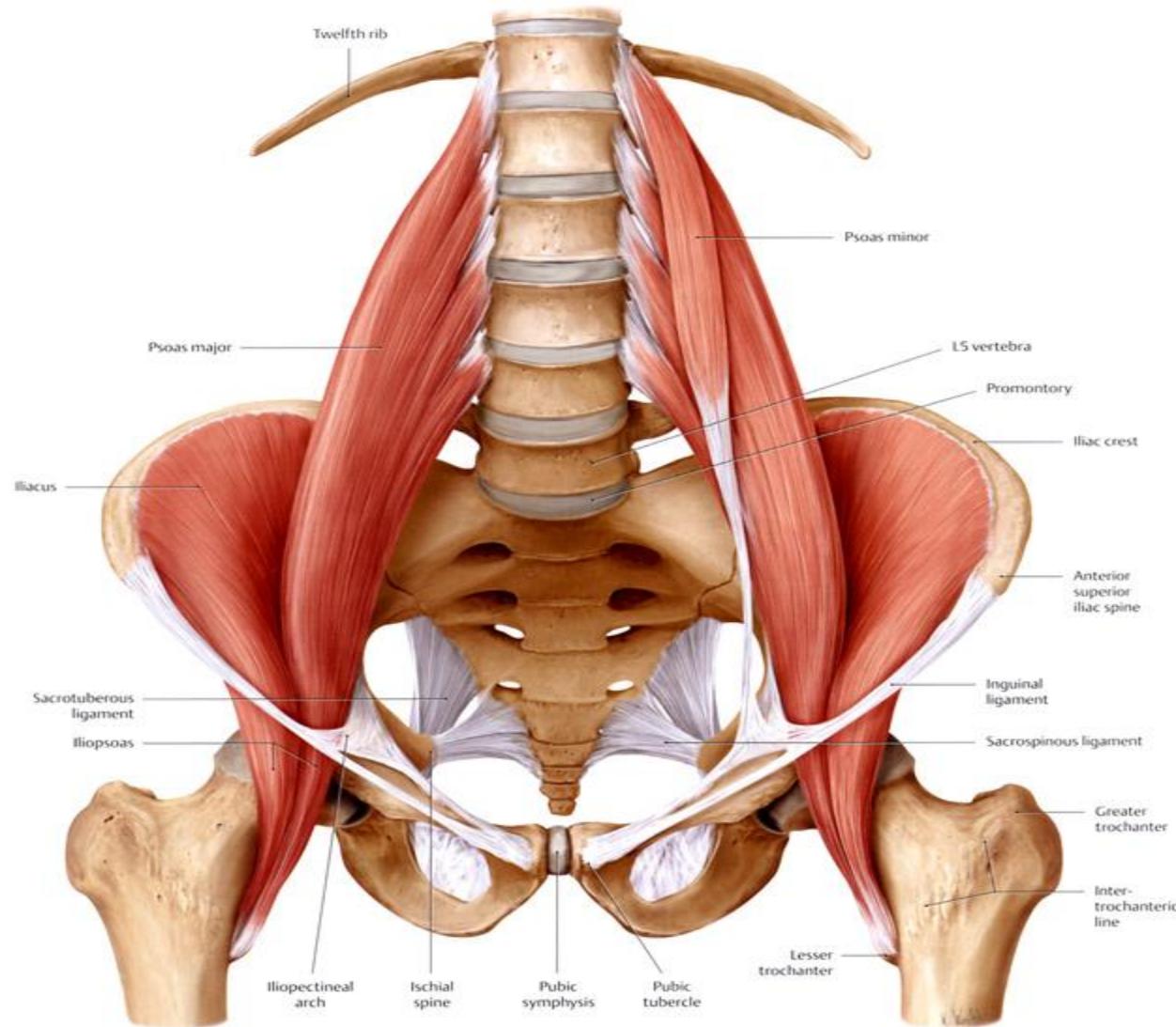
Copyright © 2002 McKesson Health Solutions, LLC. All rights reserved.

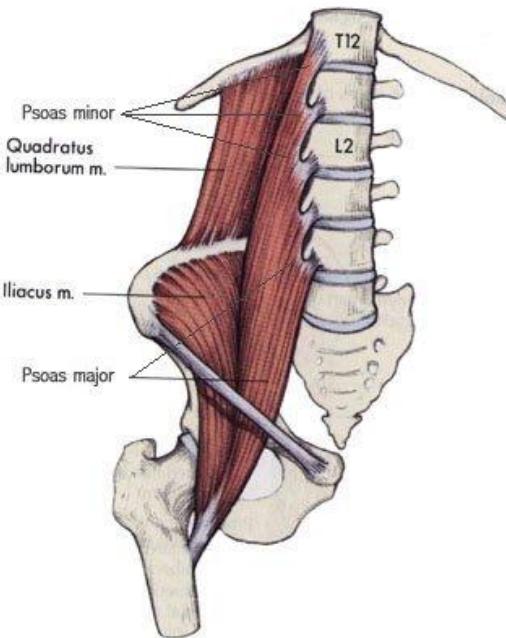
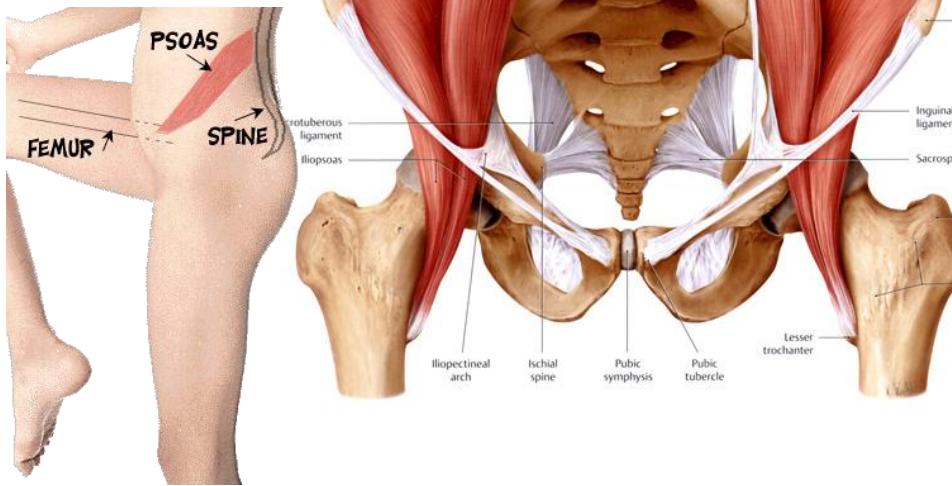
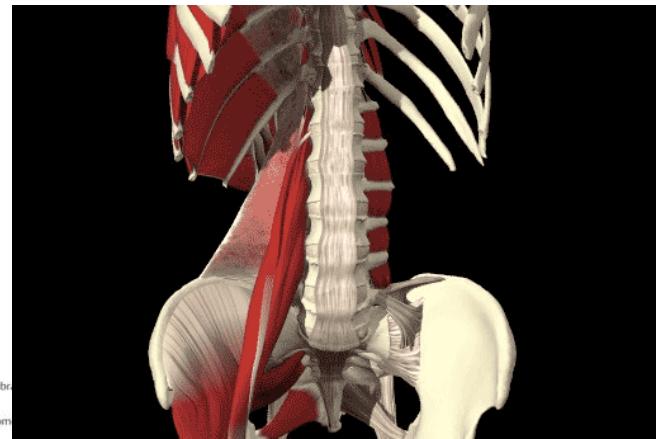
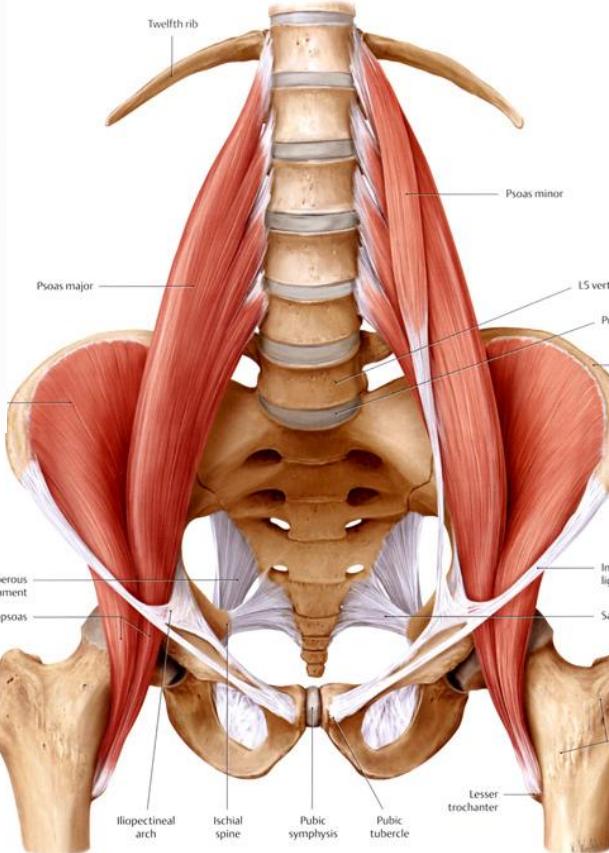
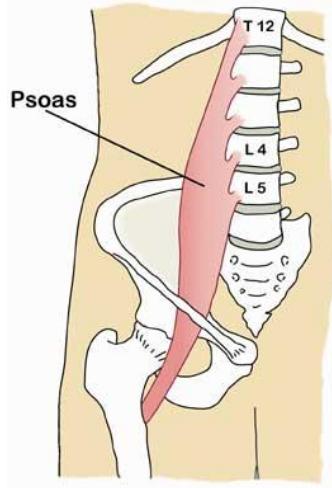


Kidney

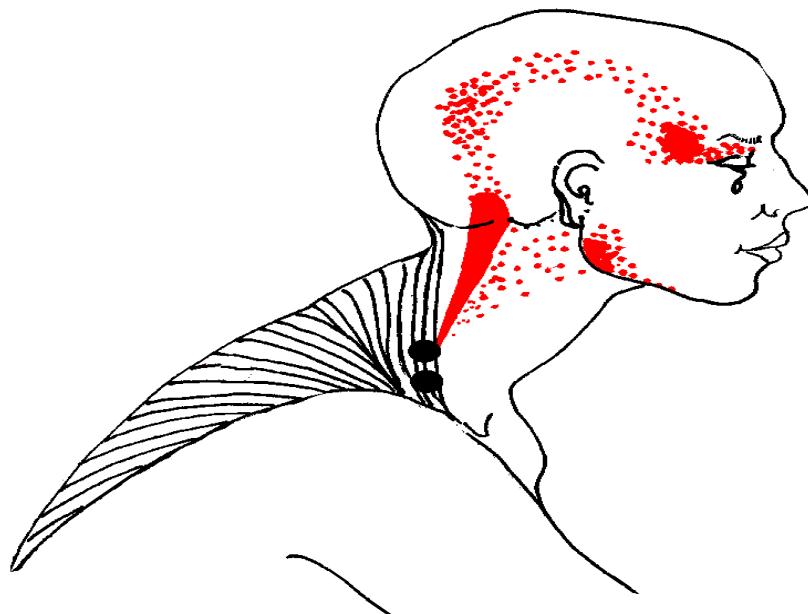
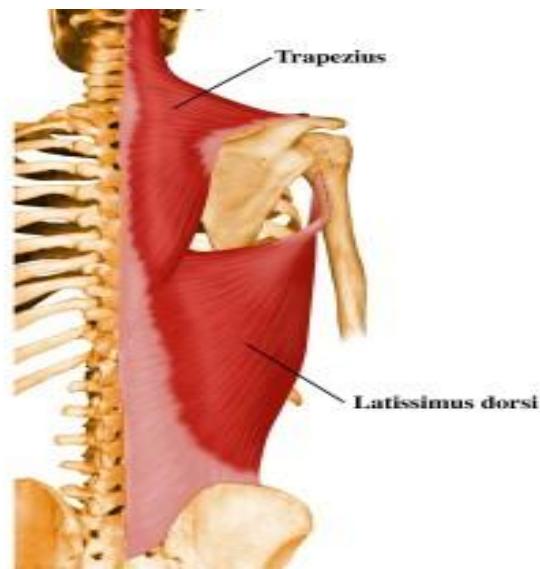
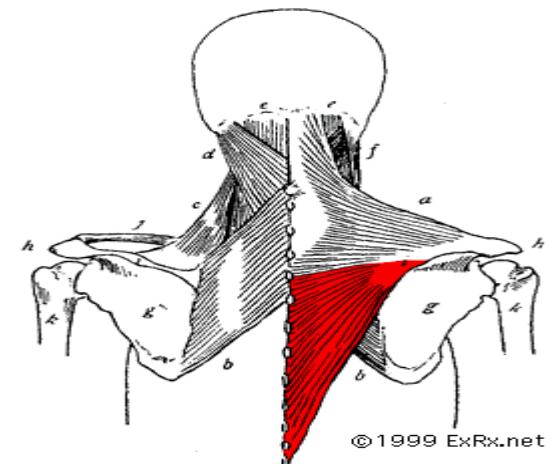
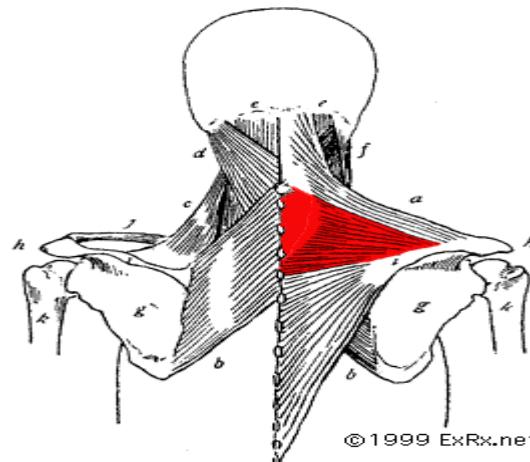
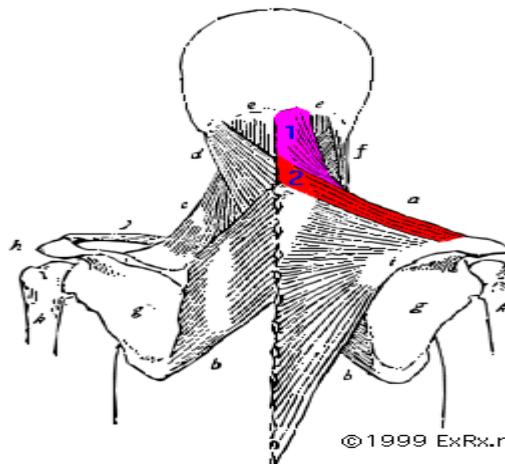
- Psoas/iliacus
- Intertransversarii
- Upper trap
- Gemellus sup
- Obturator externus

psoas

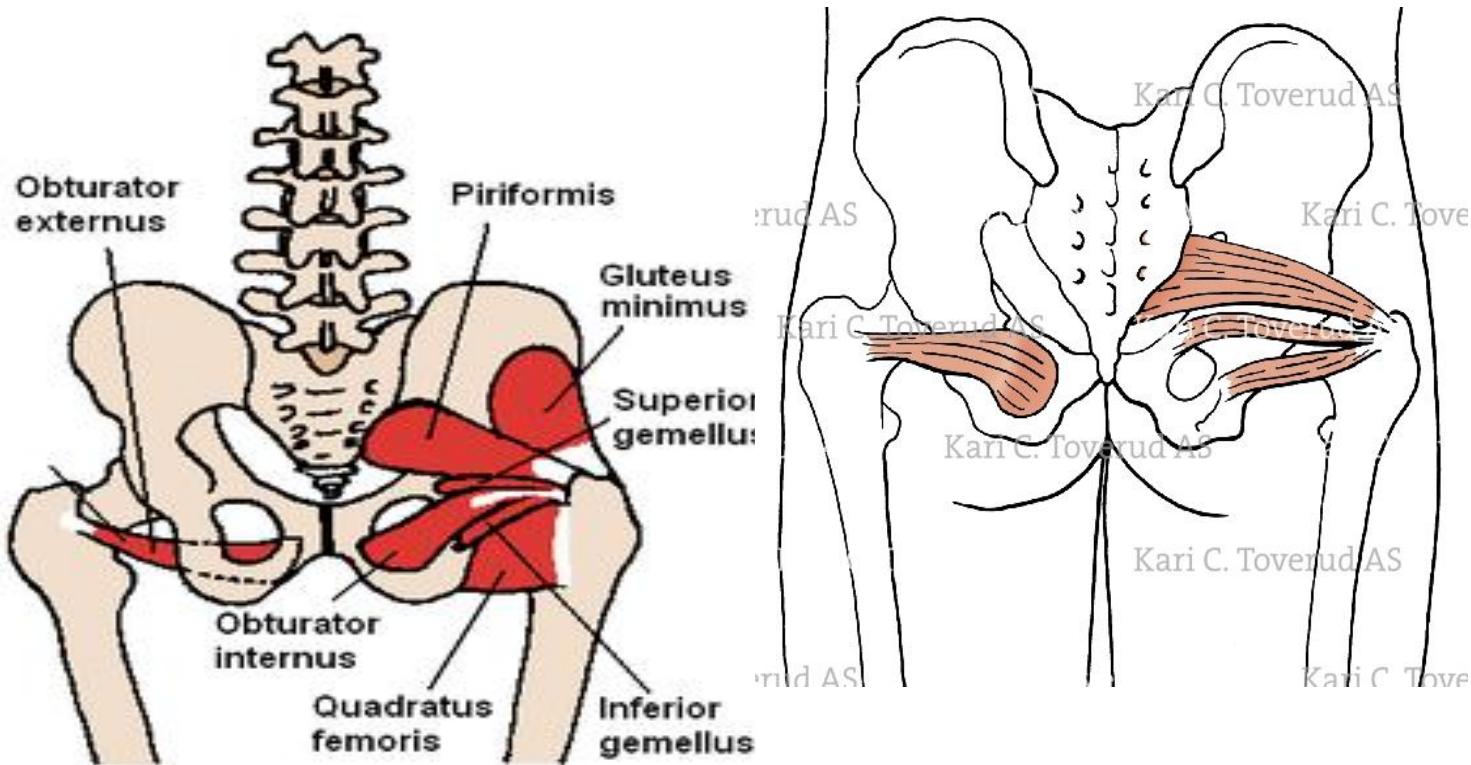




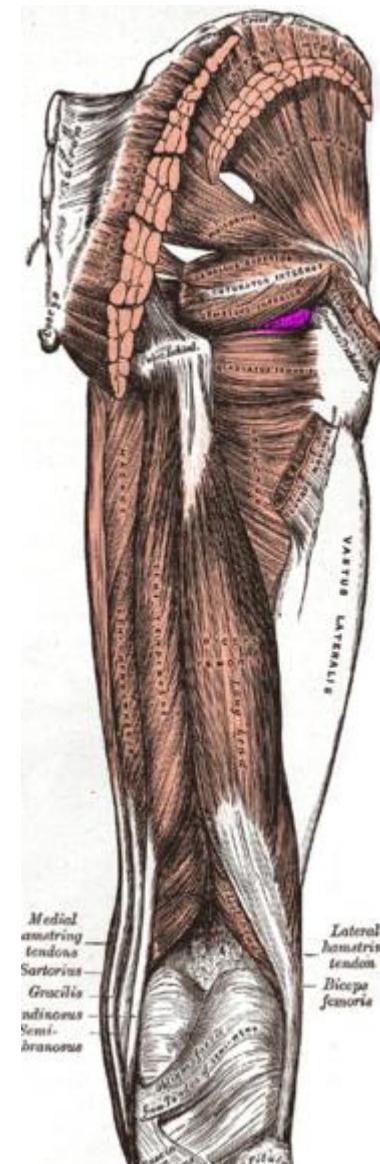
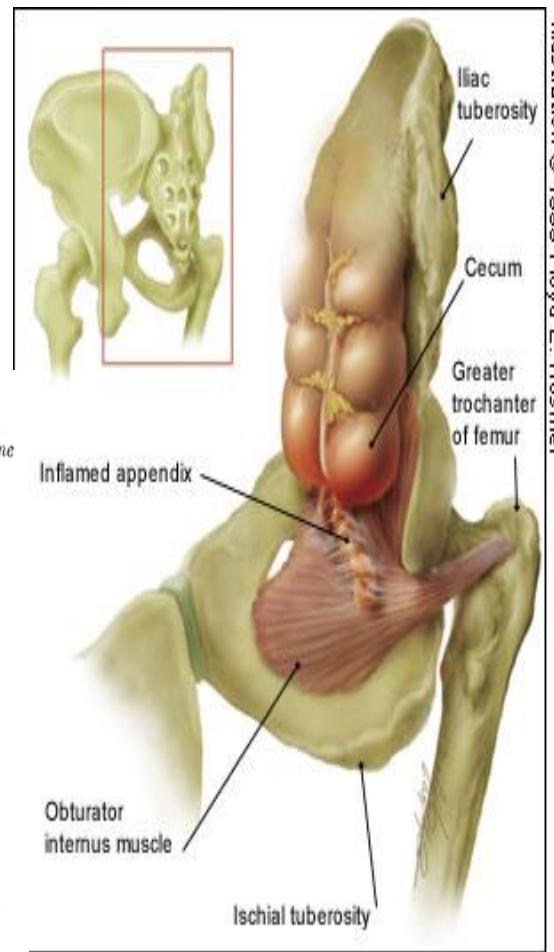
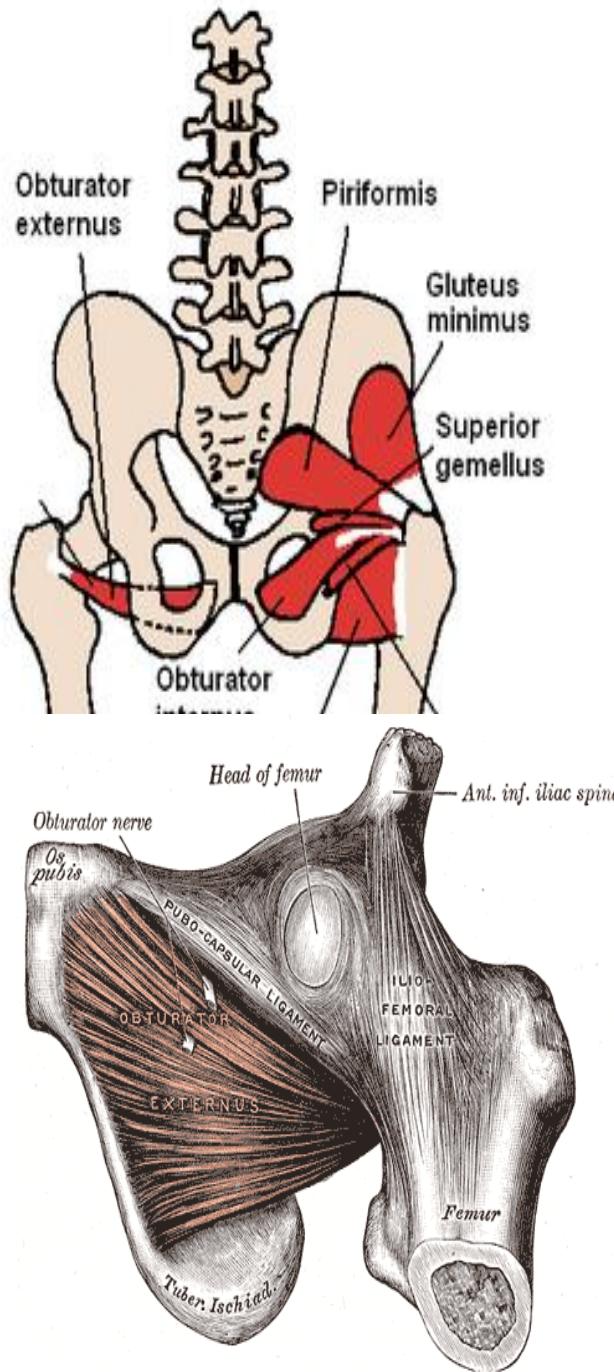
trap

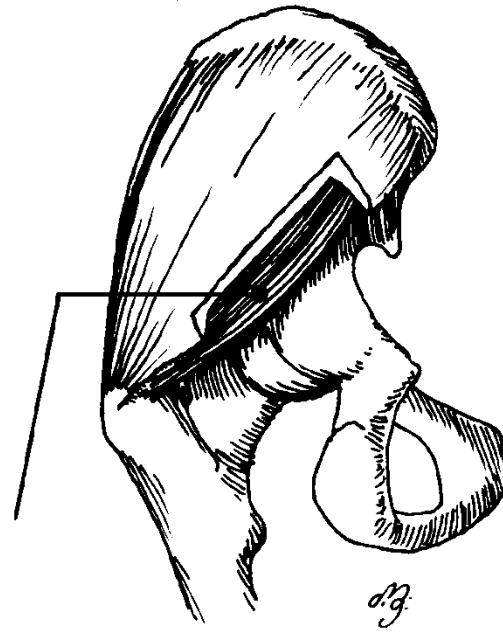
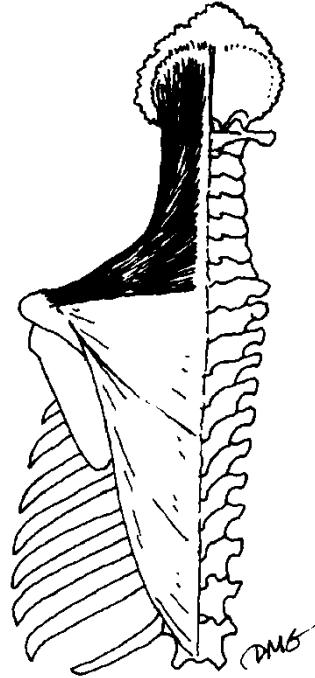
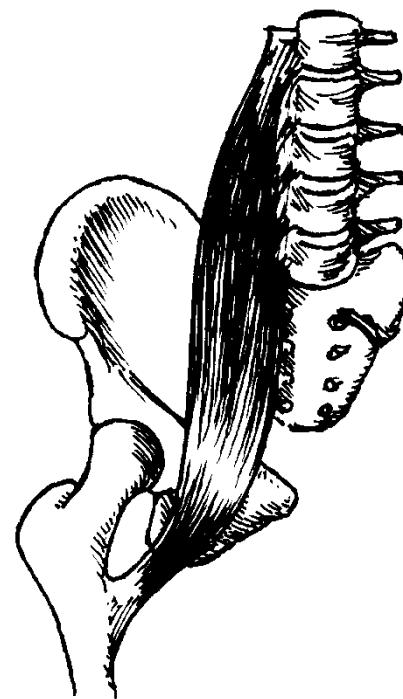
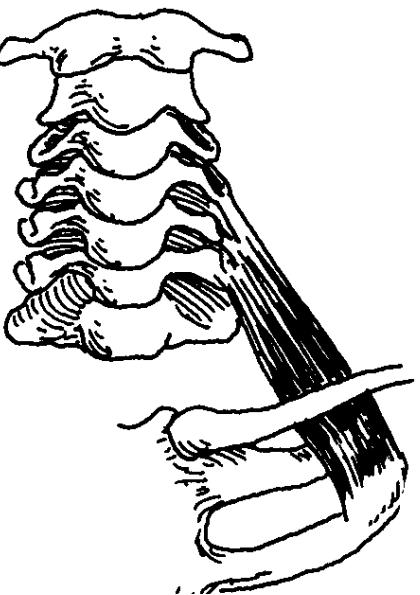


gemellus



Obturator ext

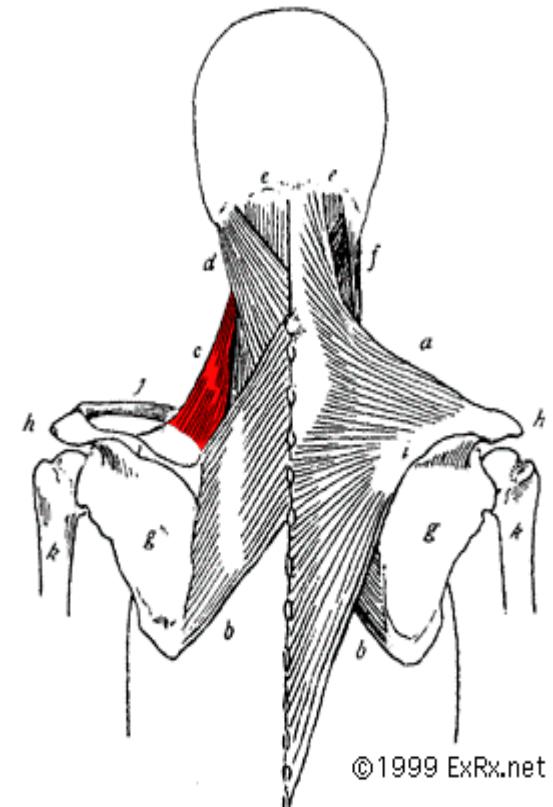
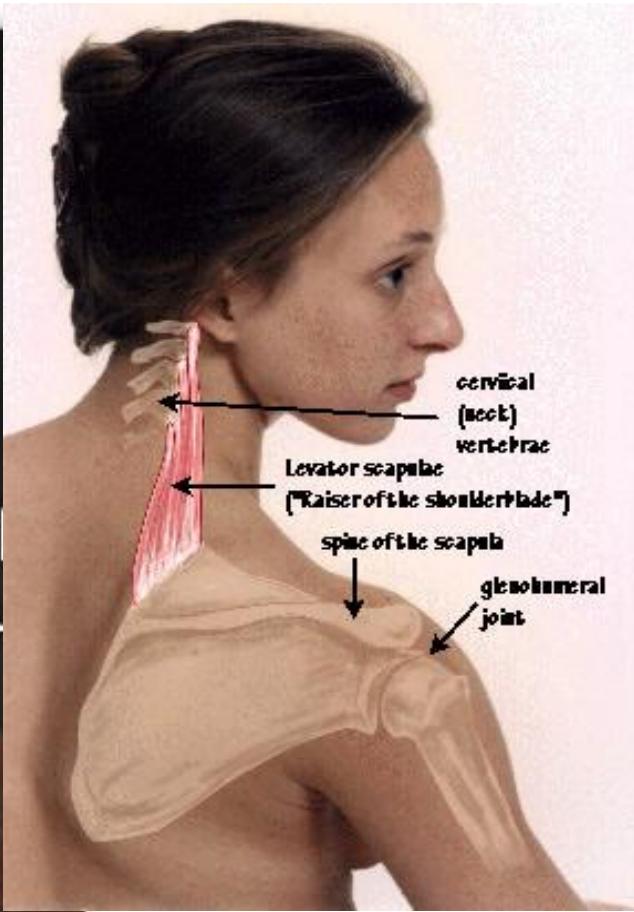
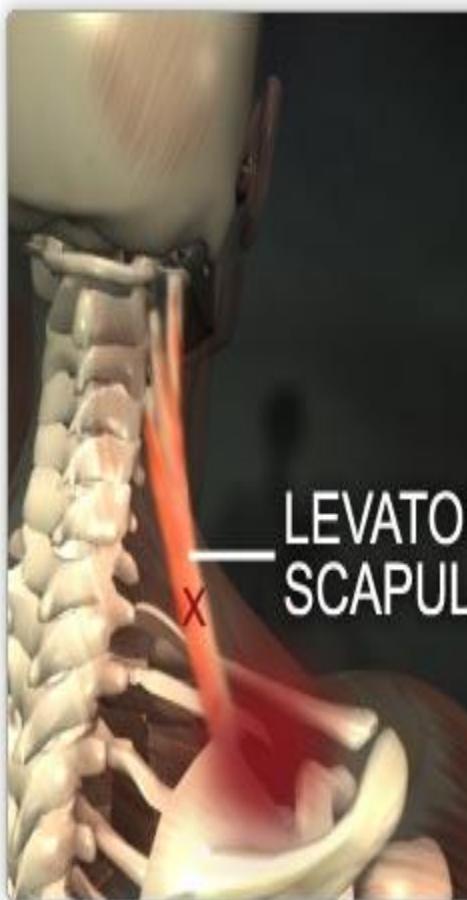




Lung

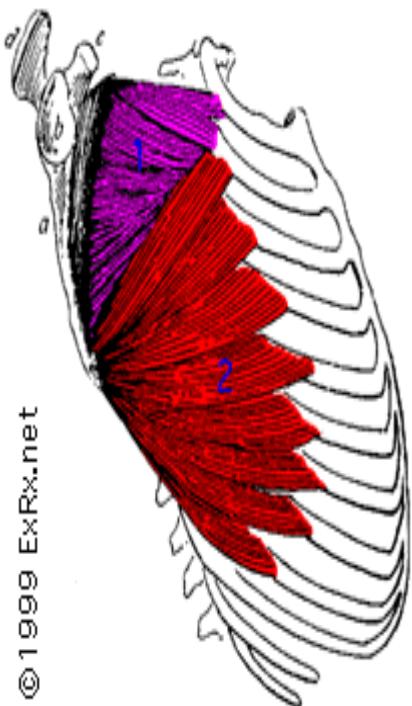
- Post deltoid
- Serratus ant
- Levator scapulae
- External pterygoid

Levator scapula

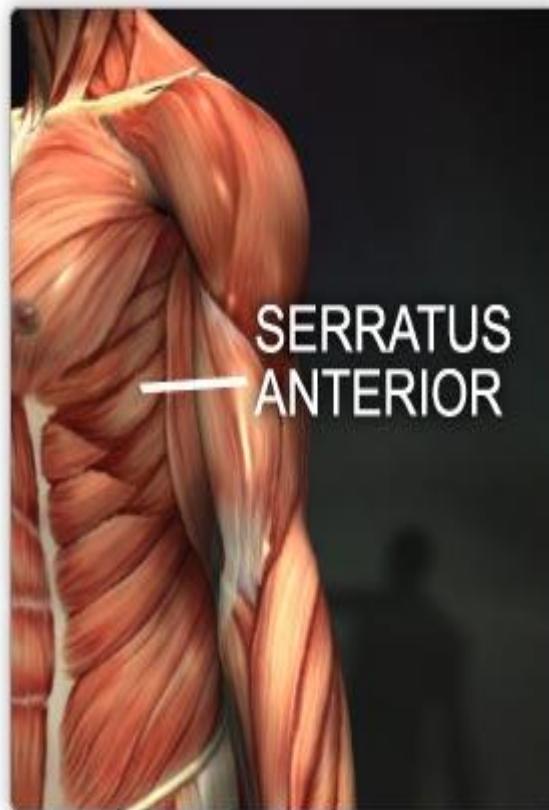
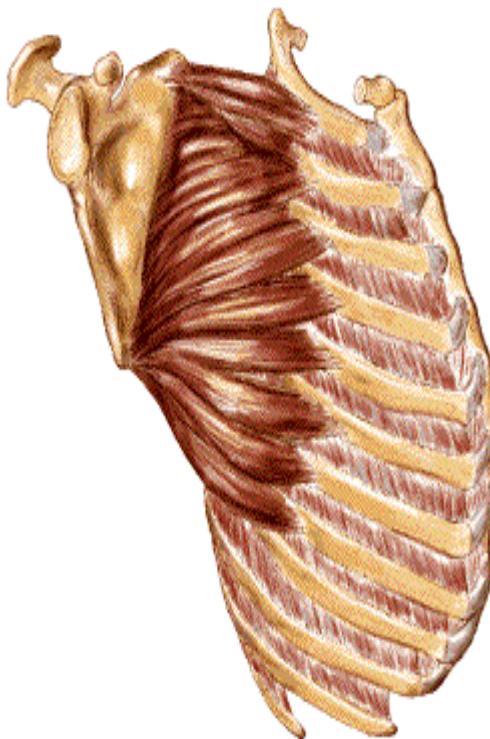


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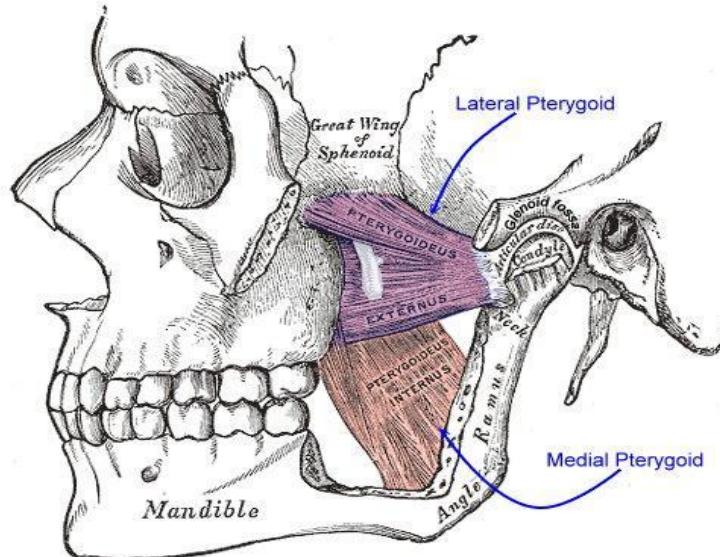
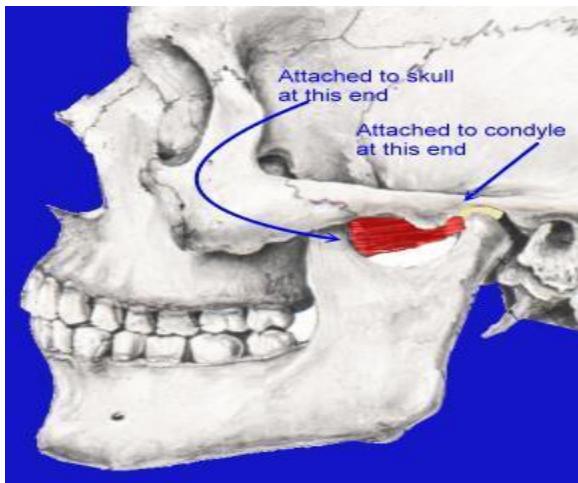
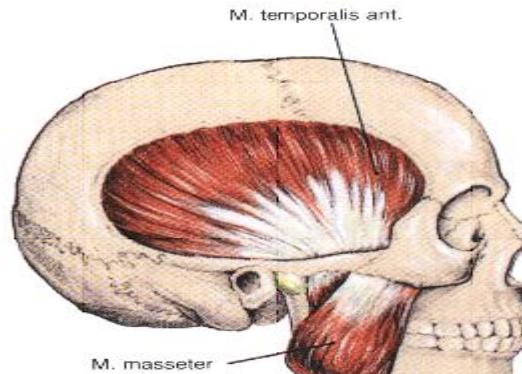
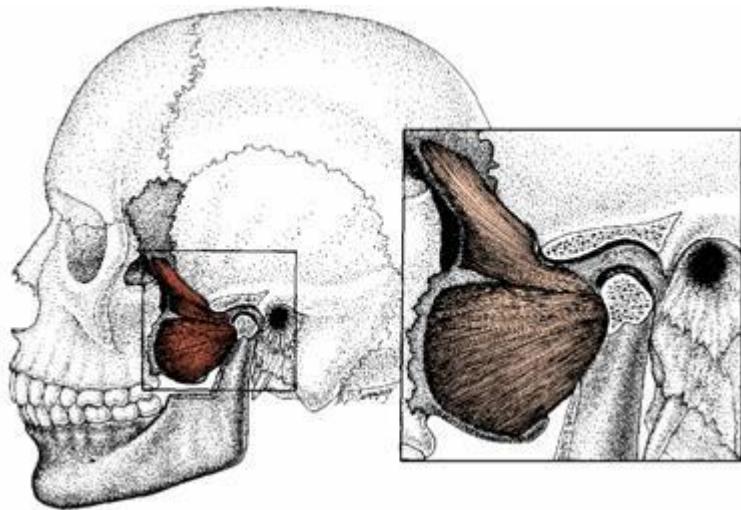
Serratus anterior

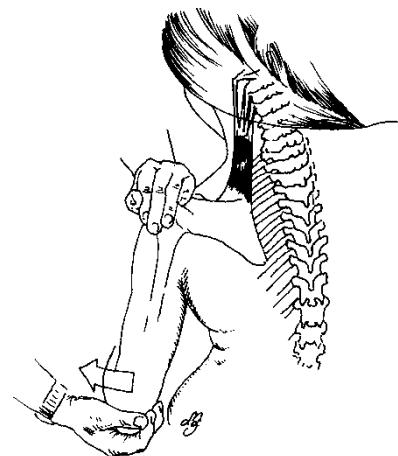
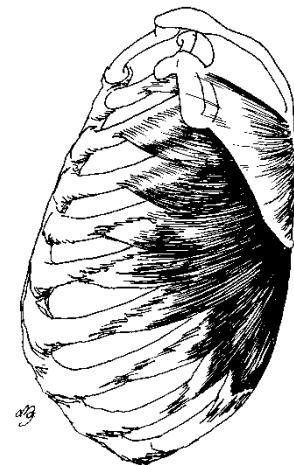
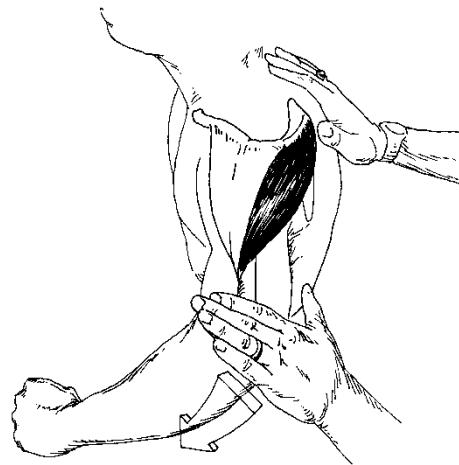


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TMJ muscles

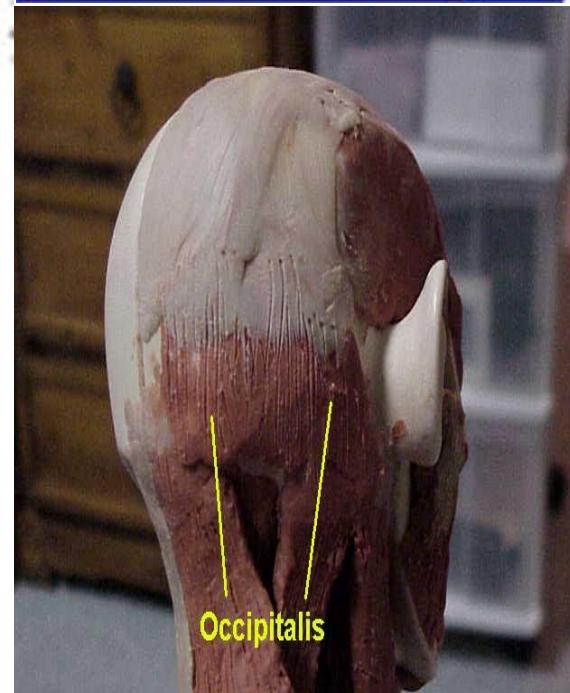
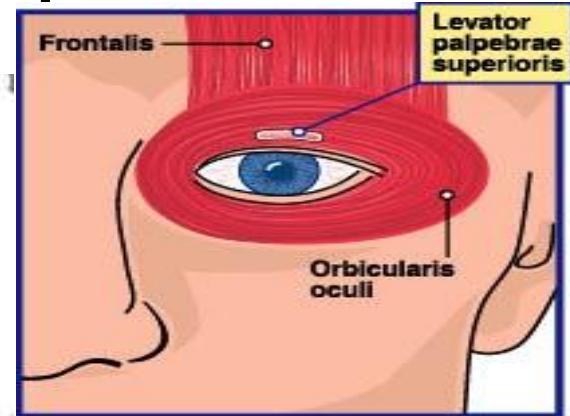
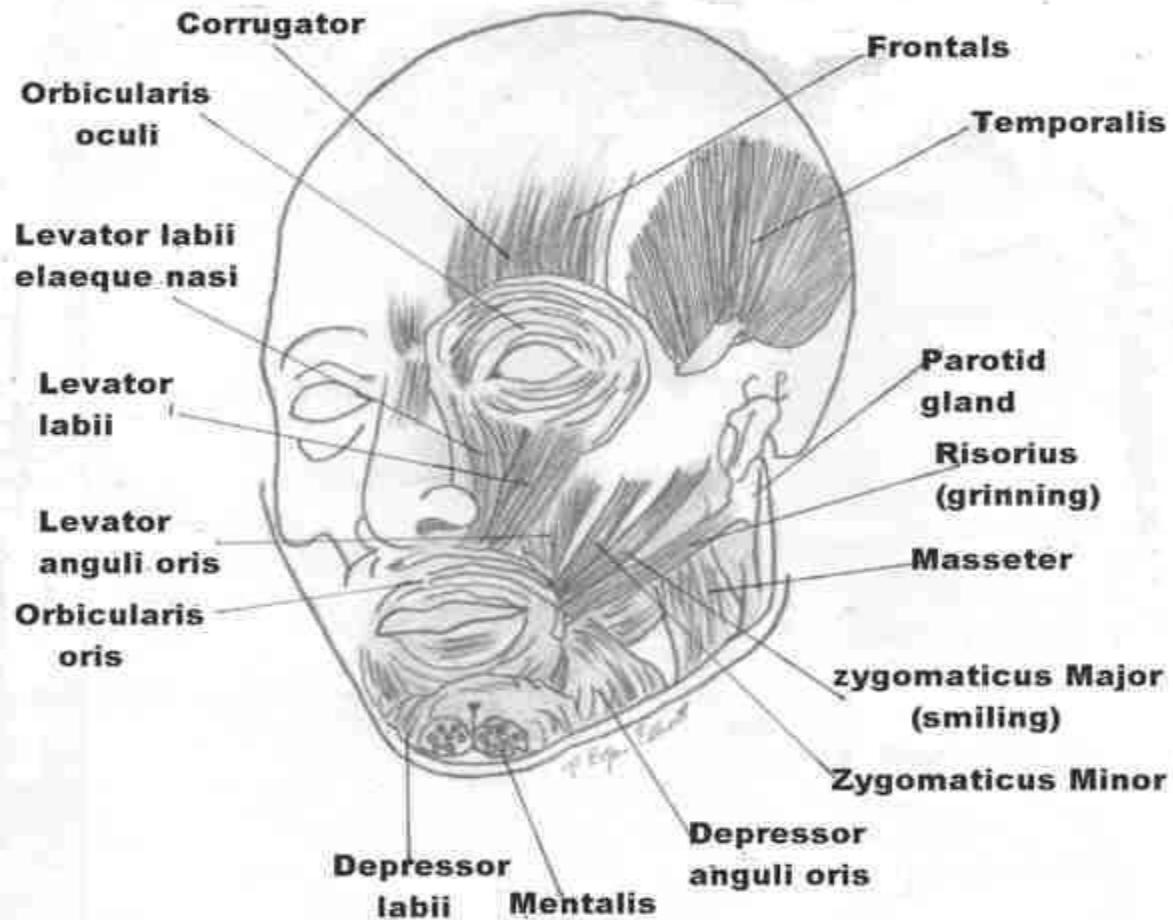




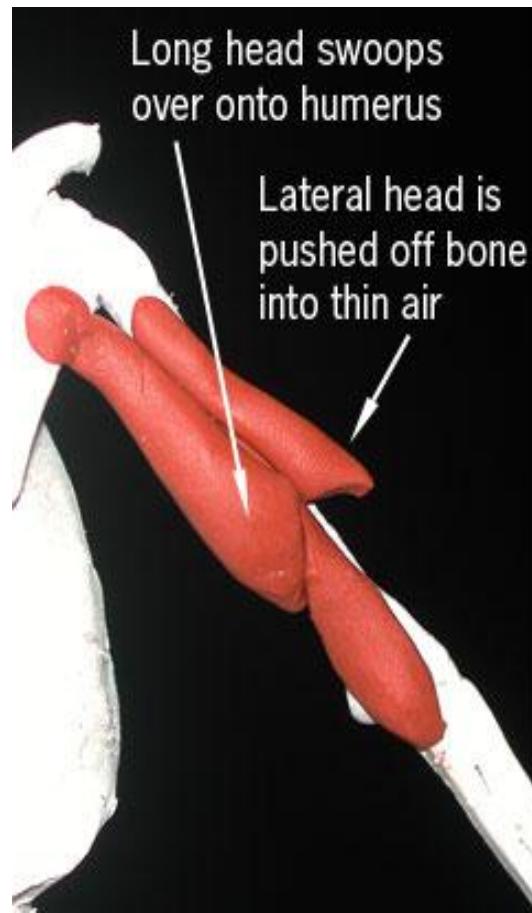
Spleen-pancreas

- Zygomaticus minor
- Orbicularis oris
- Buccinator
- Ticeps brachi
- Middle/lower trap
- Latissimus dorsi

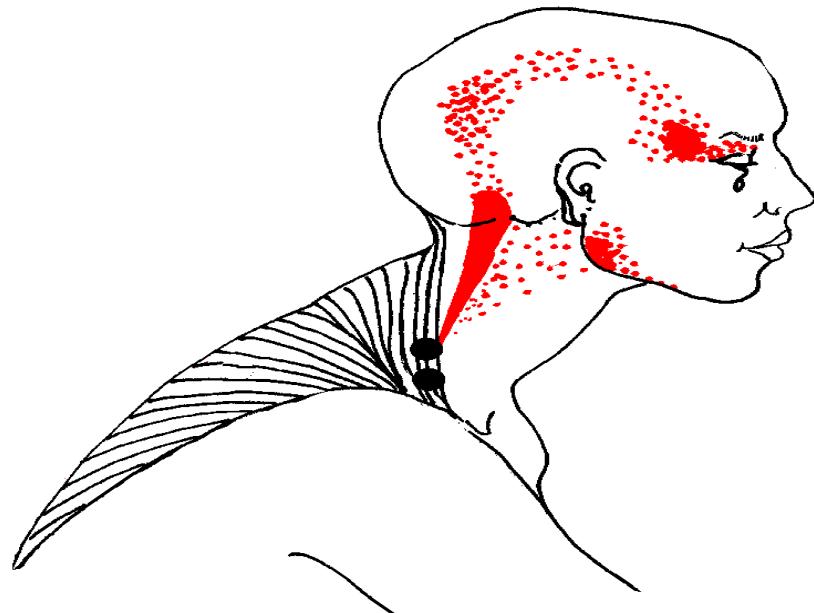
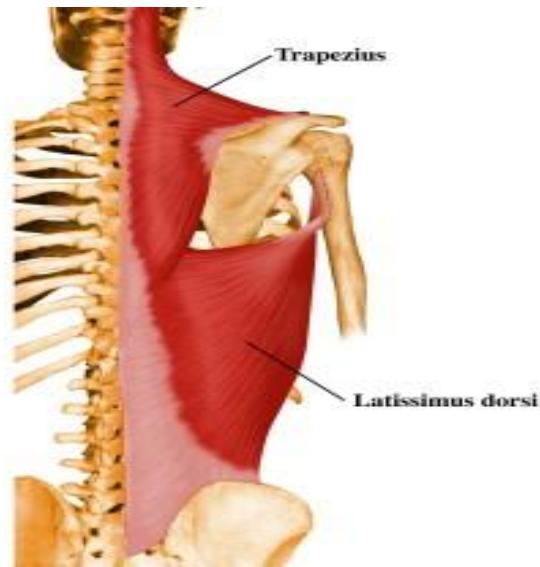
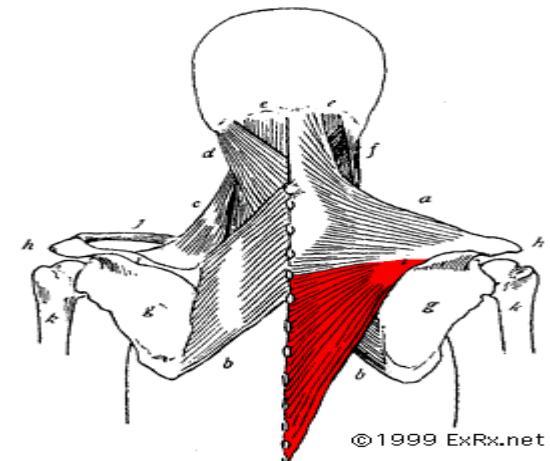
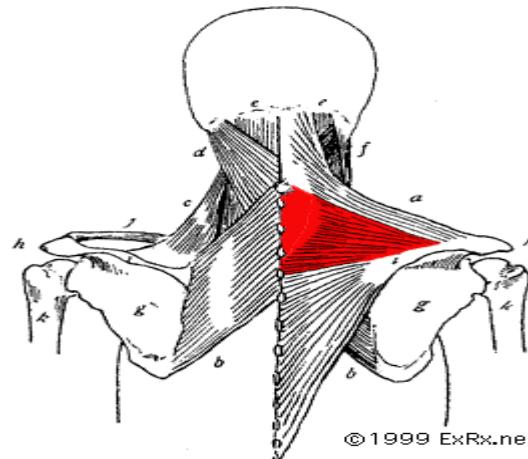
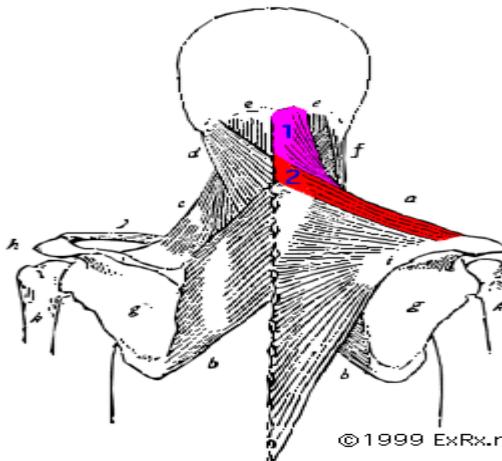
Orbicularis/occipitalis

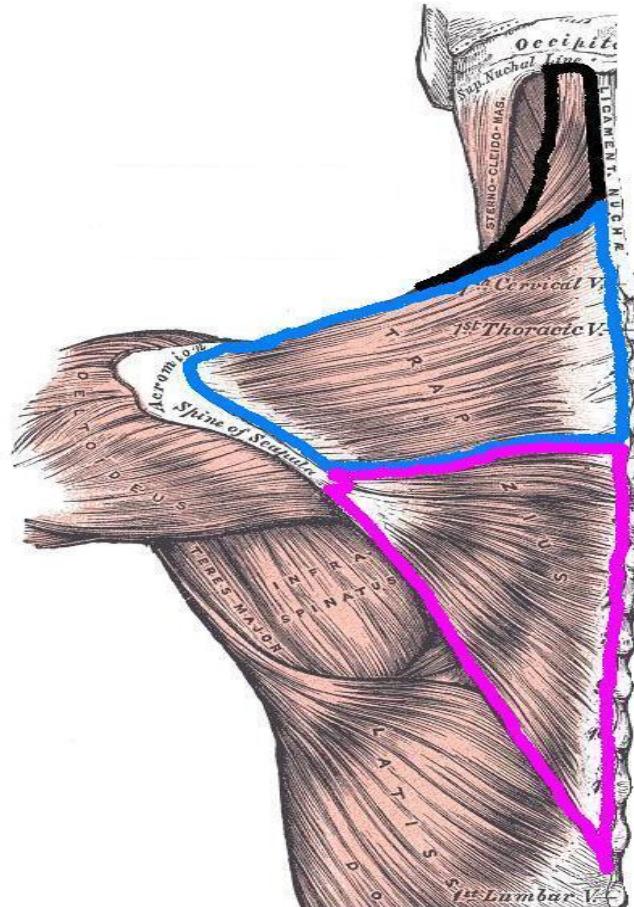


Biceps/triceps



trap



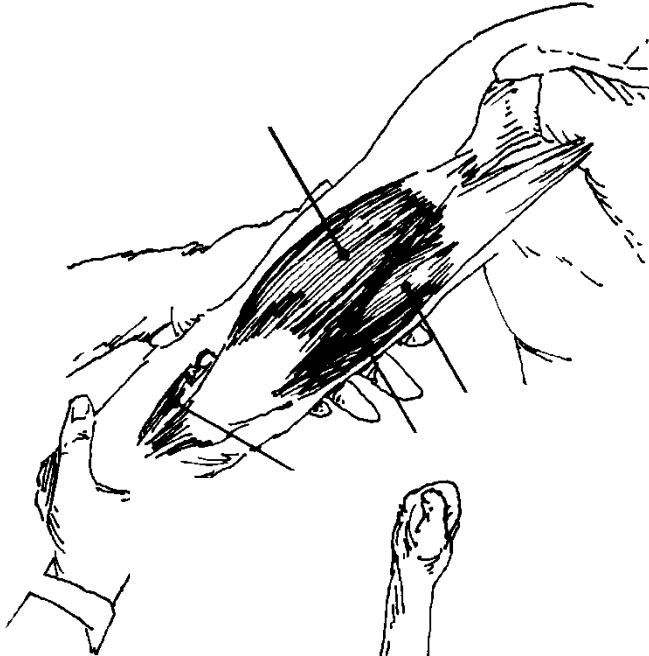


**Upper
Trapezius**

**Middle
Trapezius**

**Lower
Trapezius**

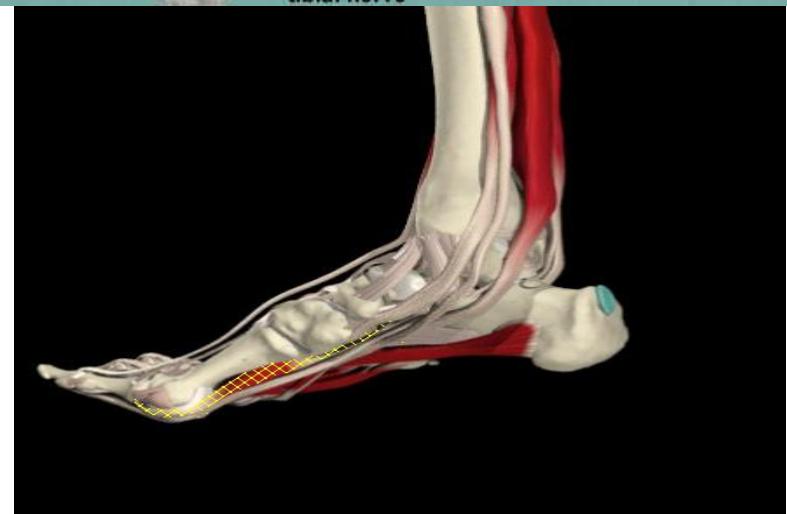
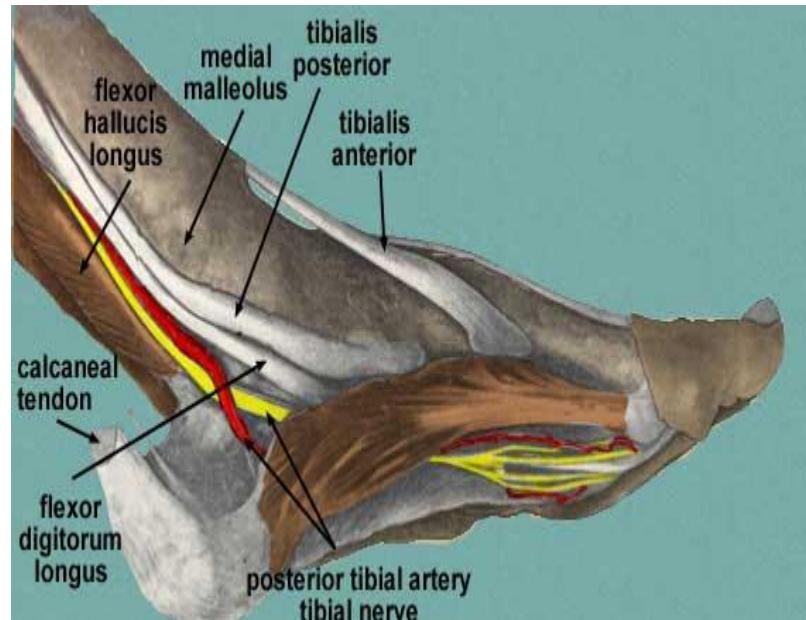
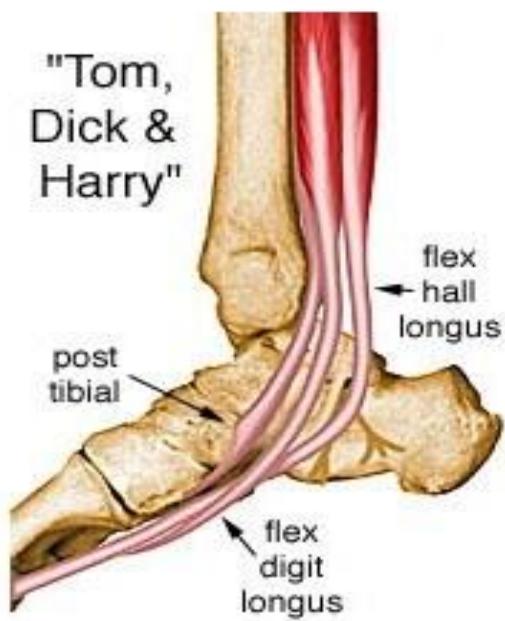
Divisions of the Trapezius Muscle



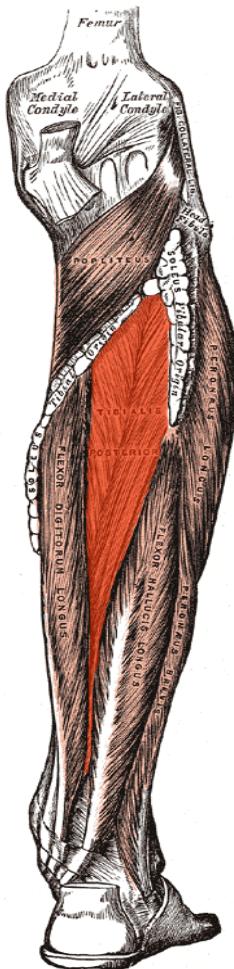
Adrenal

- FHL
- TP
- Piriformis
- Sartorius
- Adductors
- Soleus
- Gastrocnemius

Flexor hallucis



Tibialis posterior

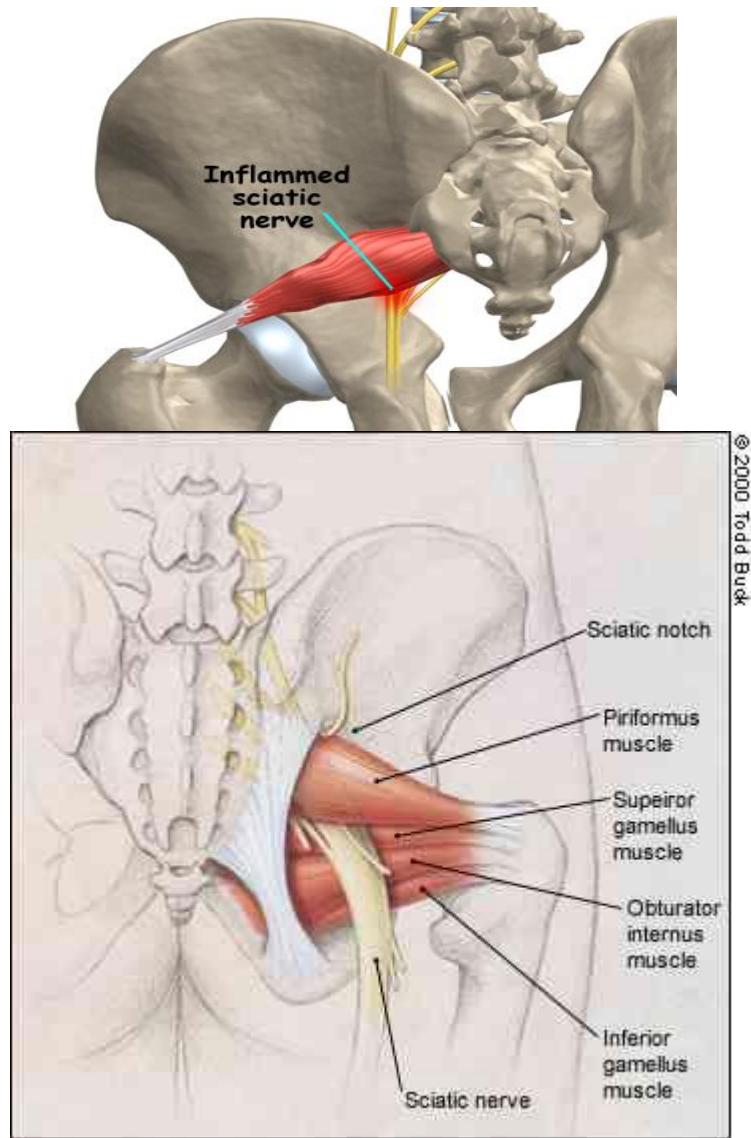
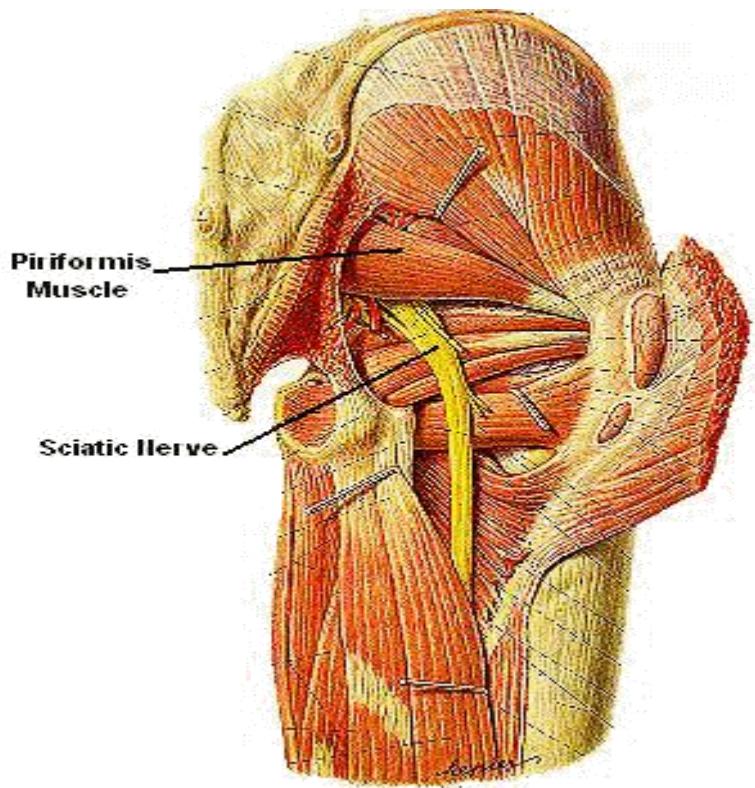


Posterior Tibial
Tendon Problems

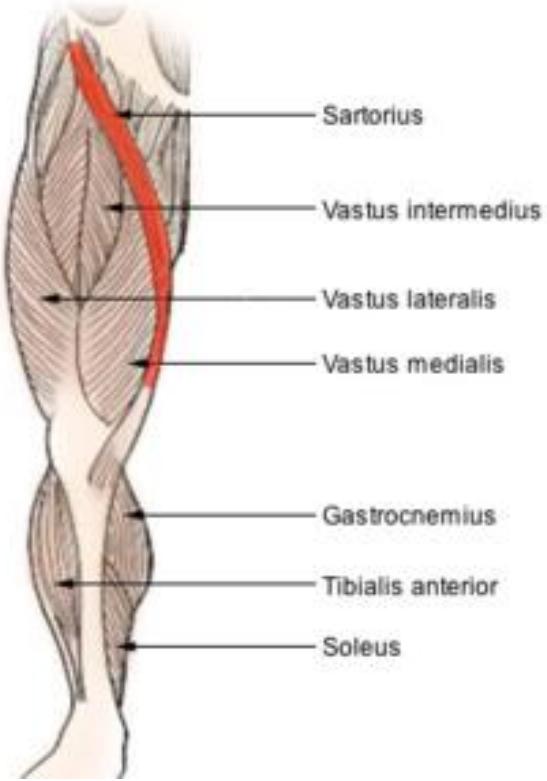
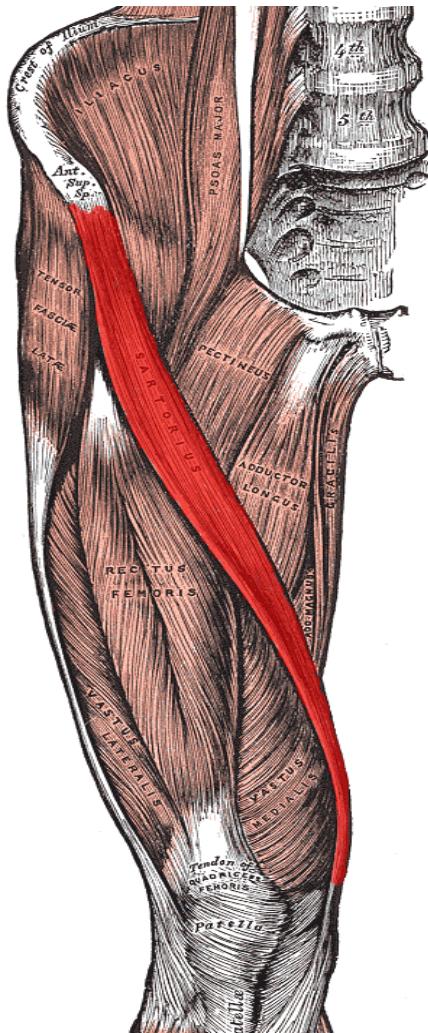


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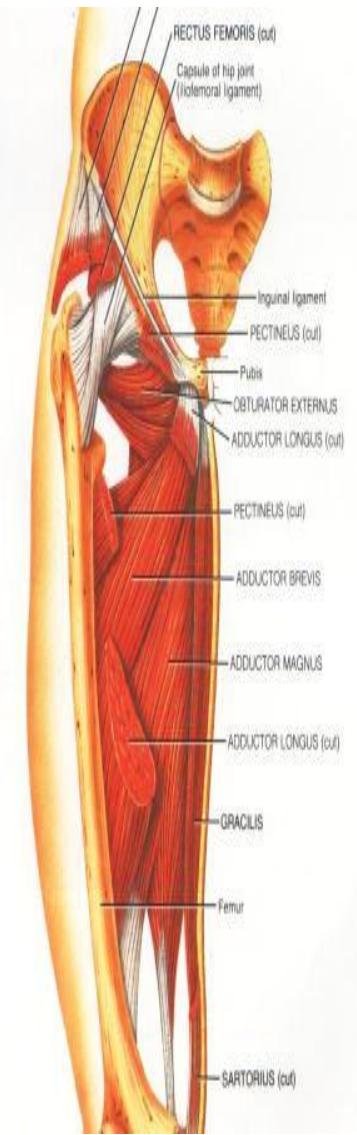
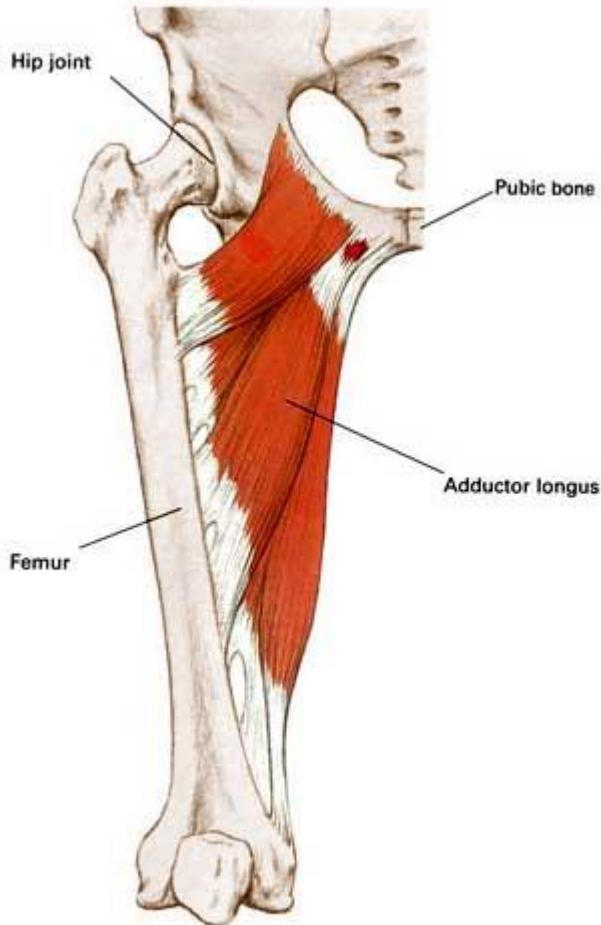
piriformis



sartorius



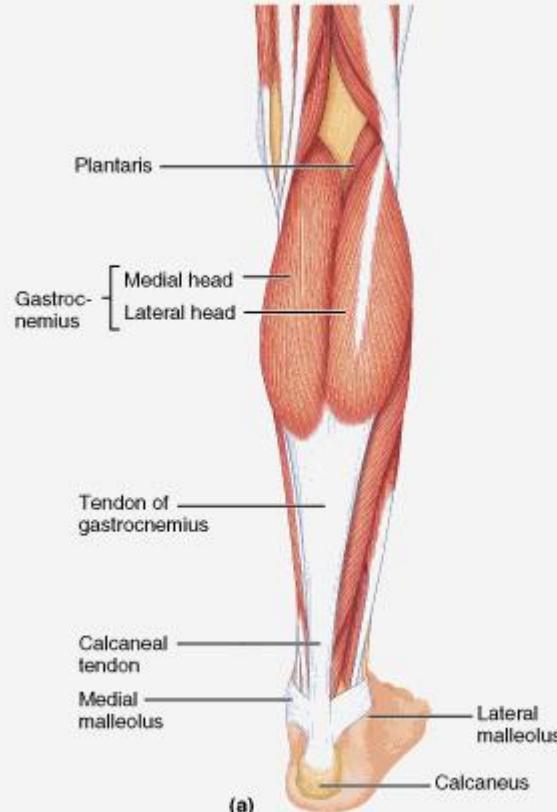
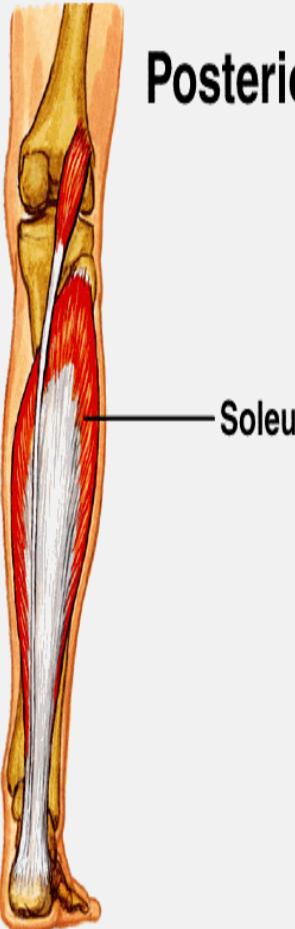
adductor



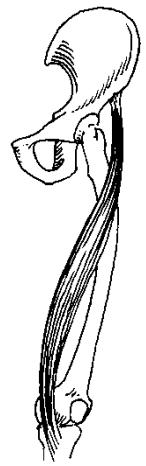
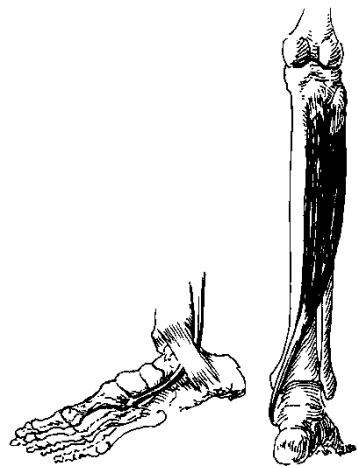
Gastrocnemius/soleus

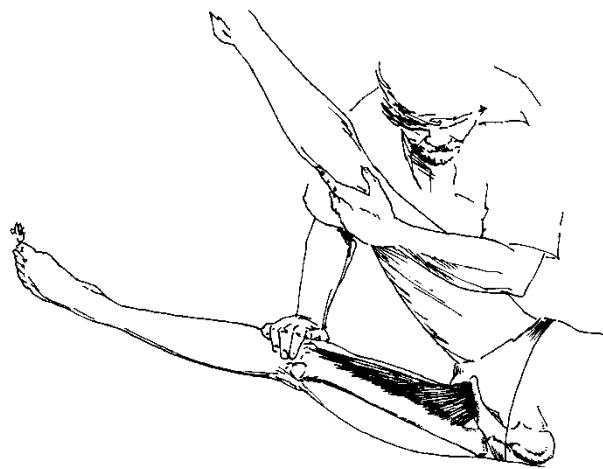
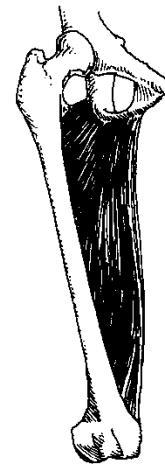
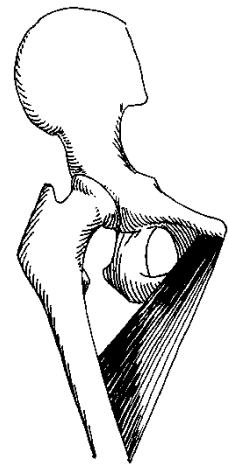
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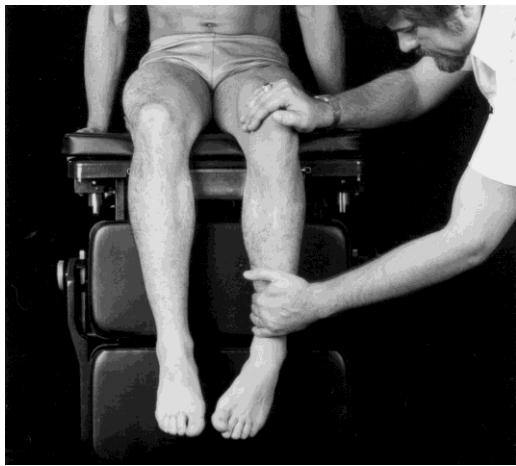
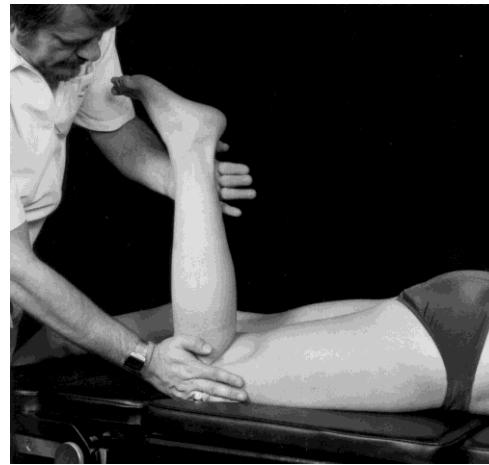
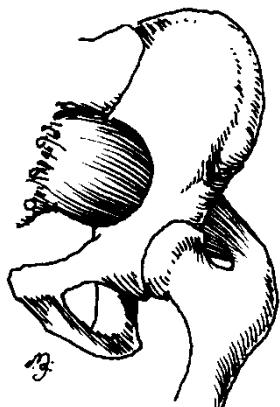
Posterior Leg Muscles (3)

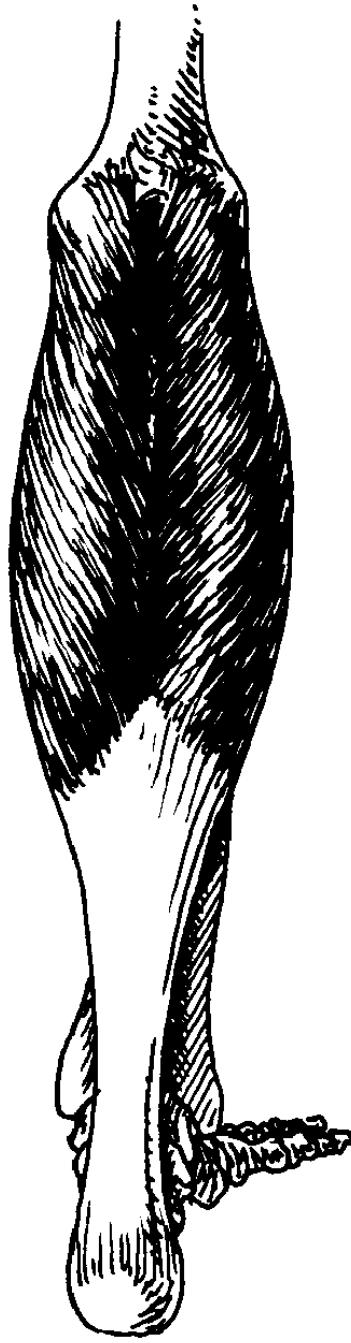
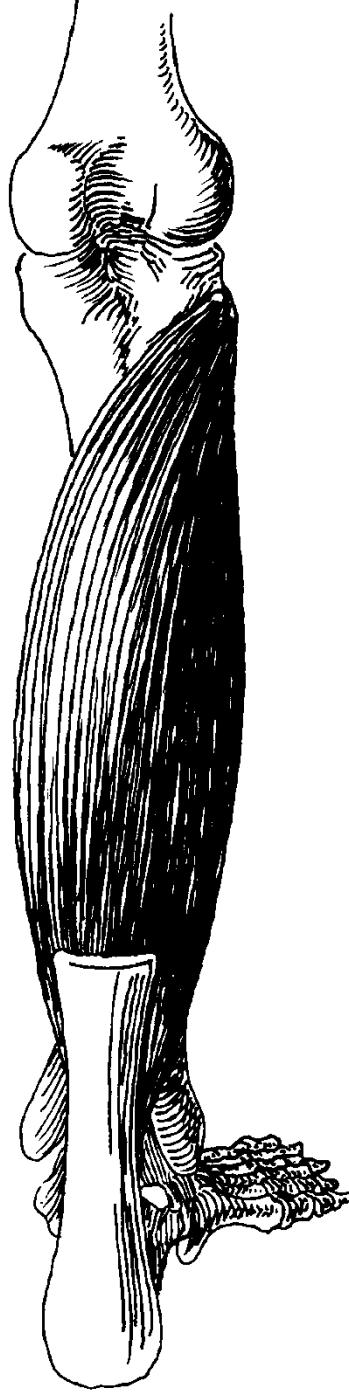


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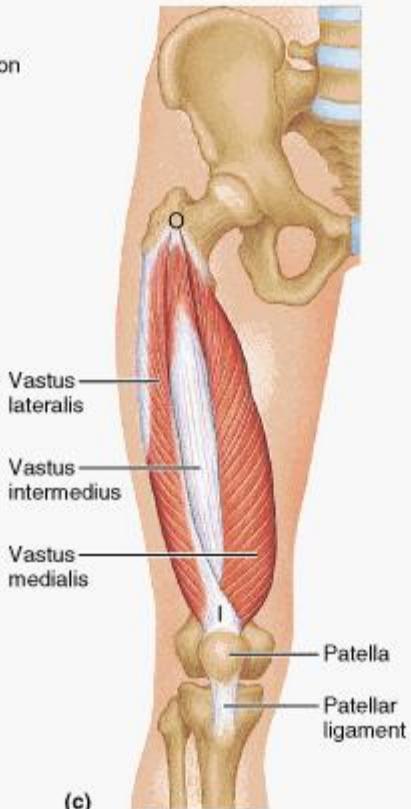


SI

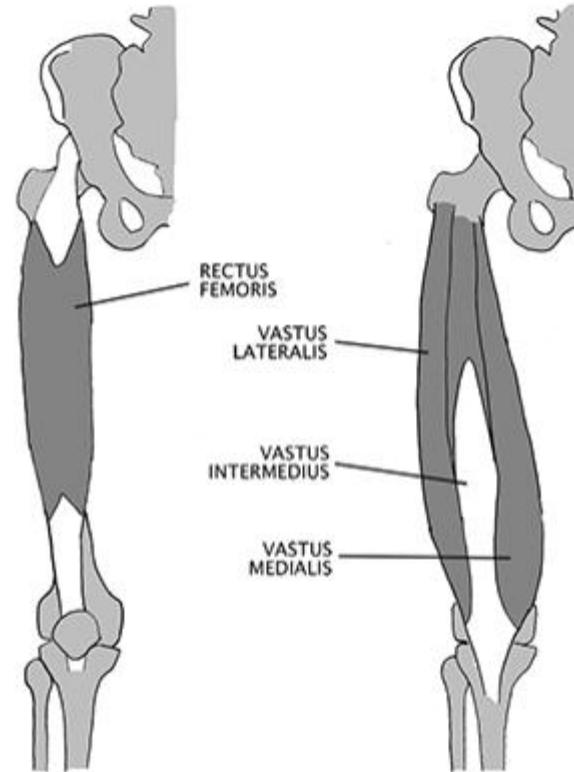
- quadriceps
- Palmaris longus(duodenum)
- Anconeus(ilium)

quadriceps

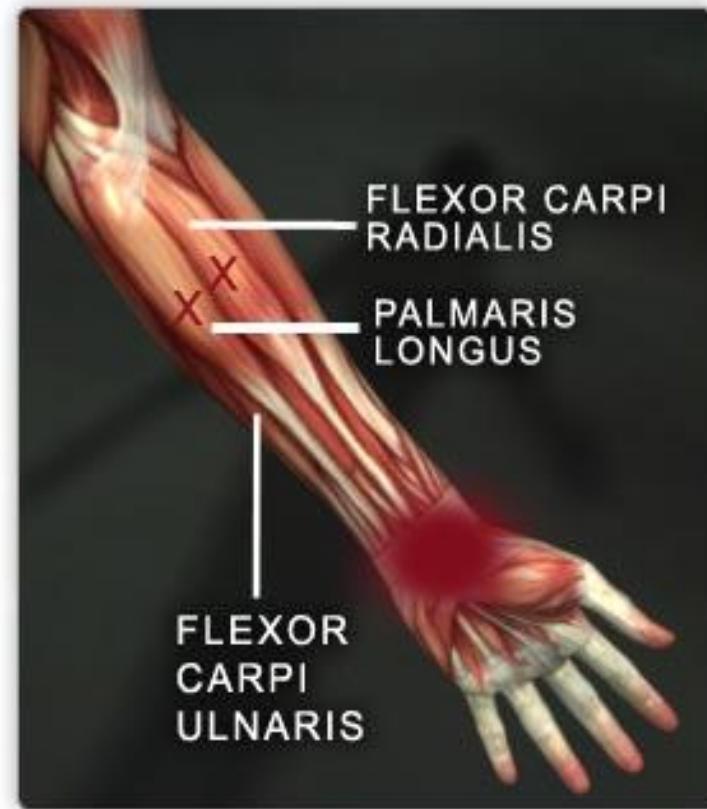
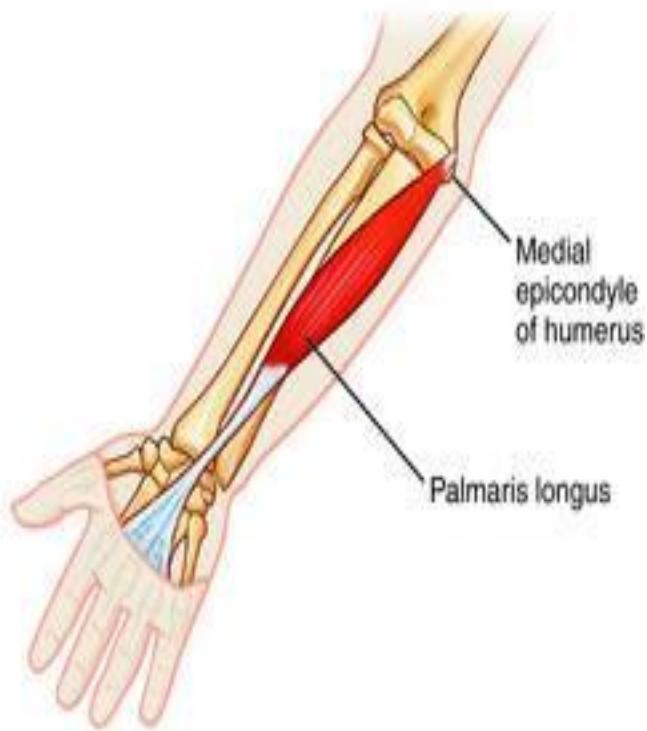
O = origin
I = insertion



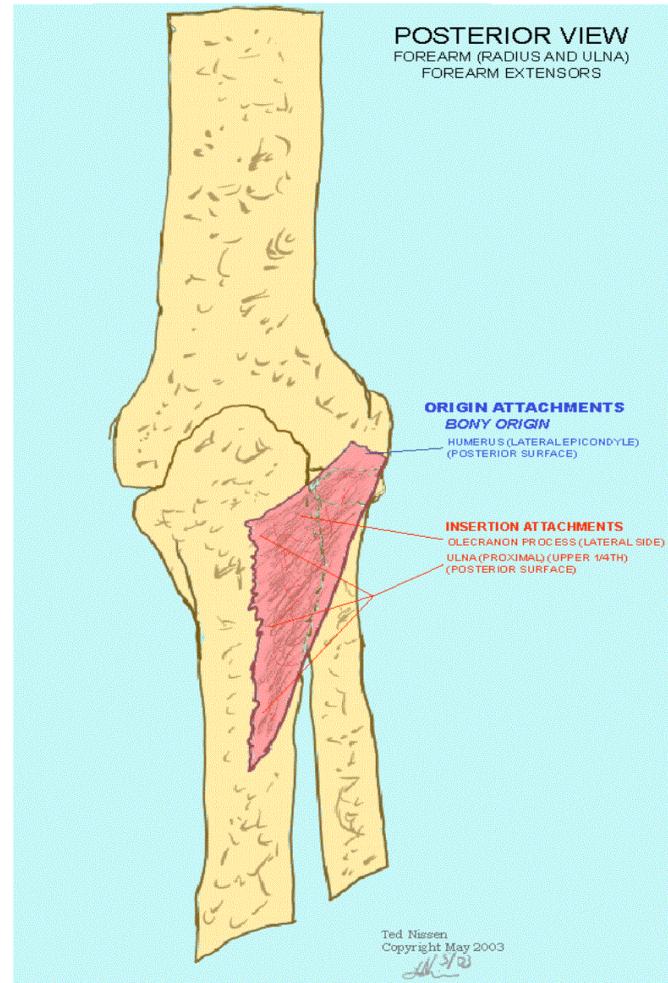
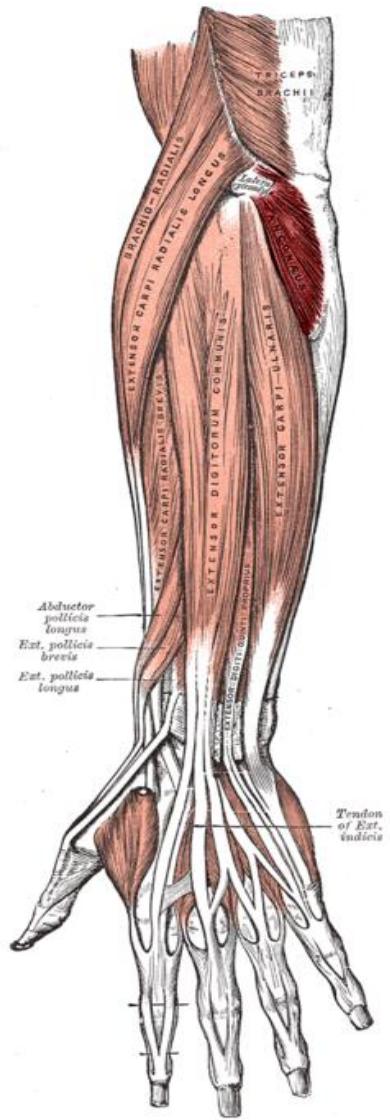
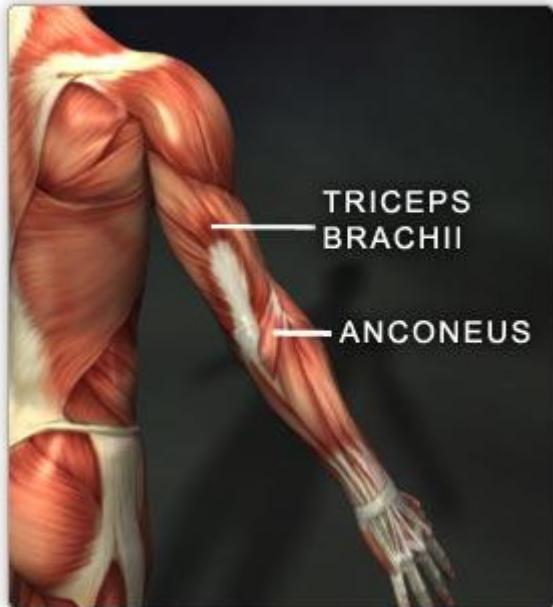
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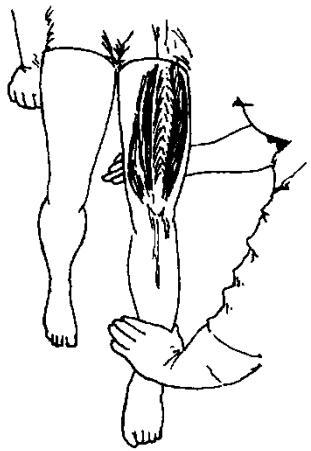
Palmaris longus



anconeus

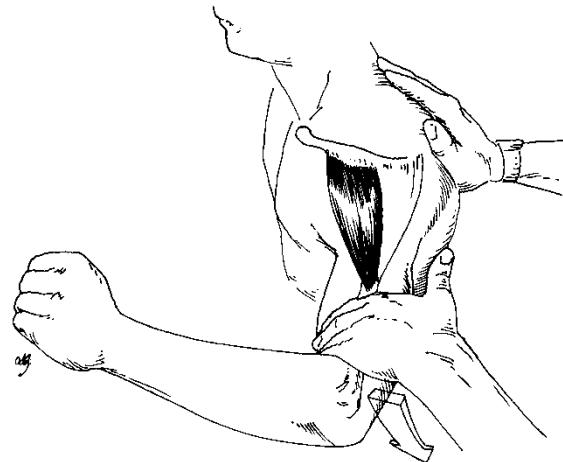
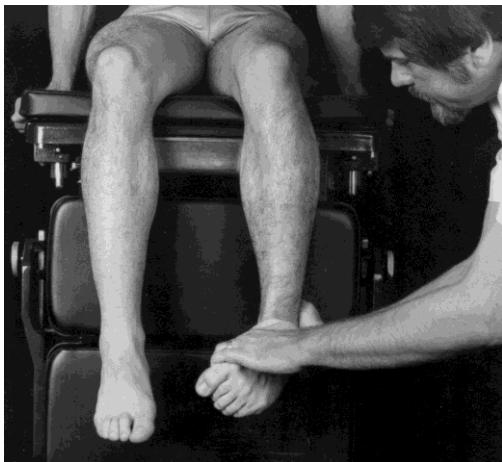


Ted Nissen
Copyright May 2003

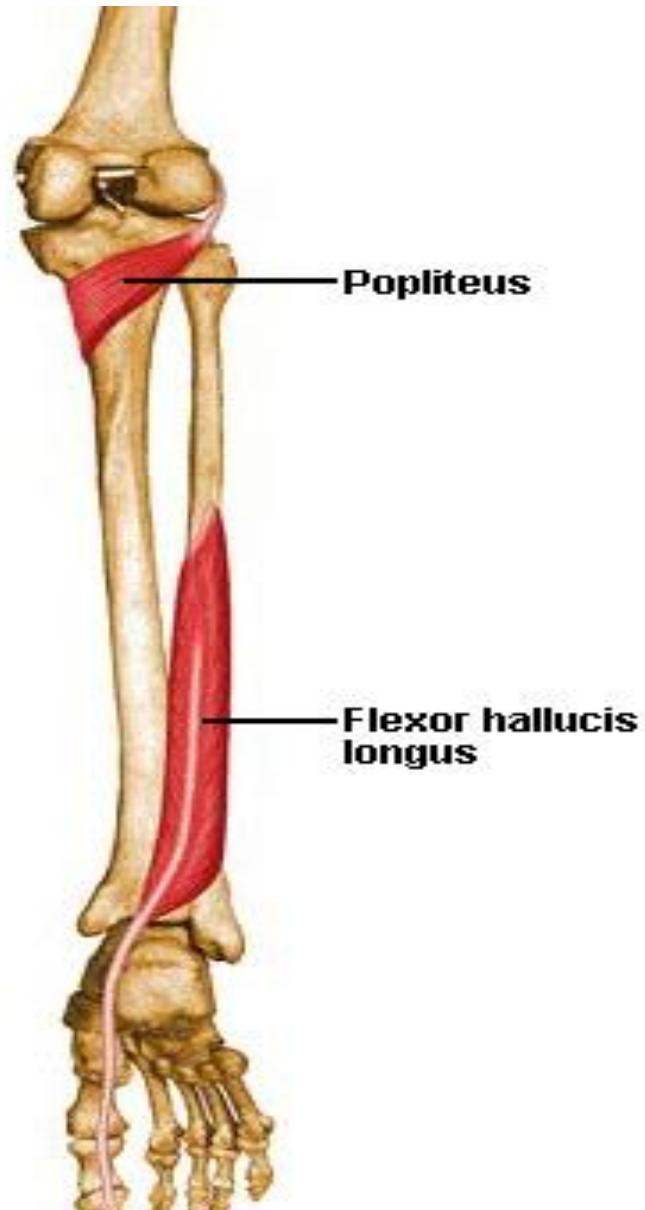
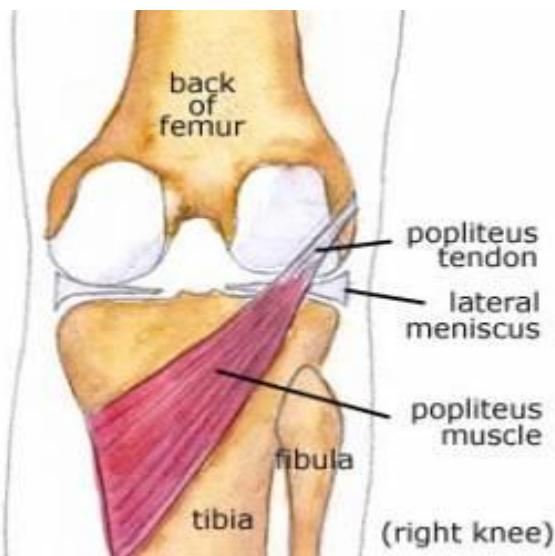


GB

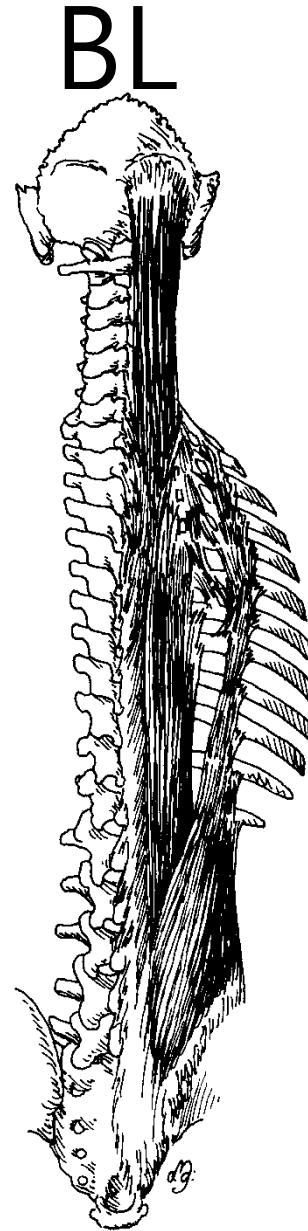
- Popliteus
- Ant deltoid



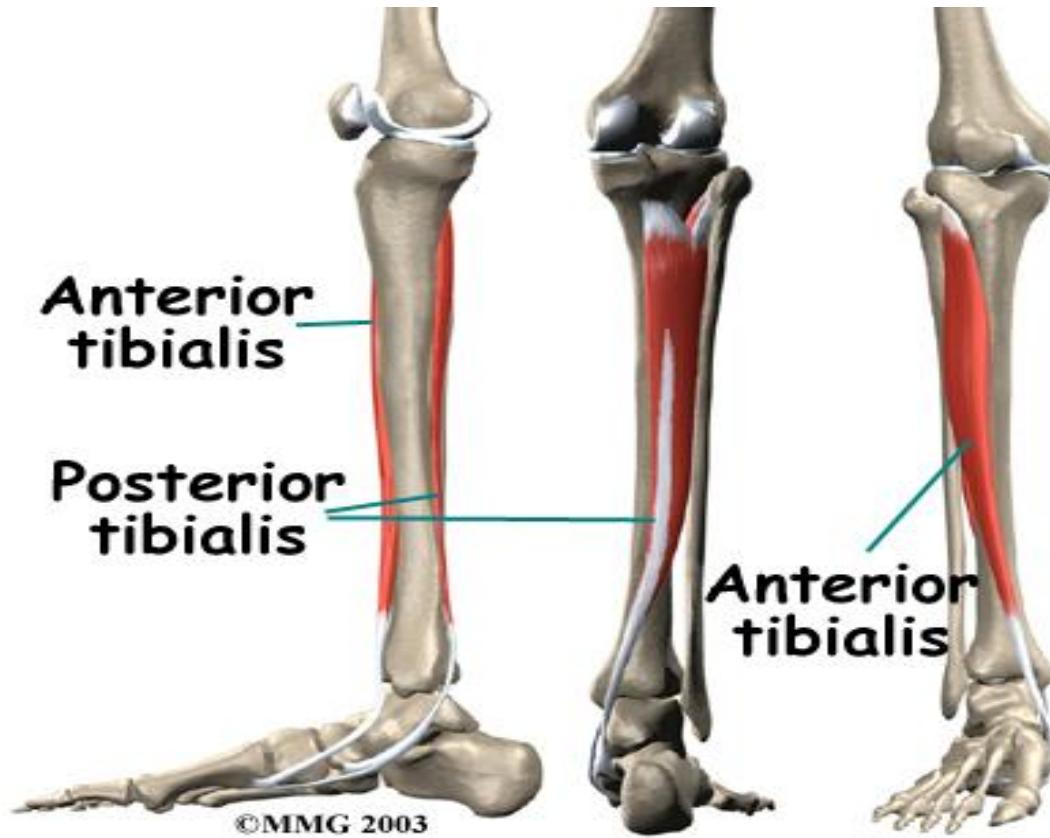
popliteus



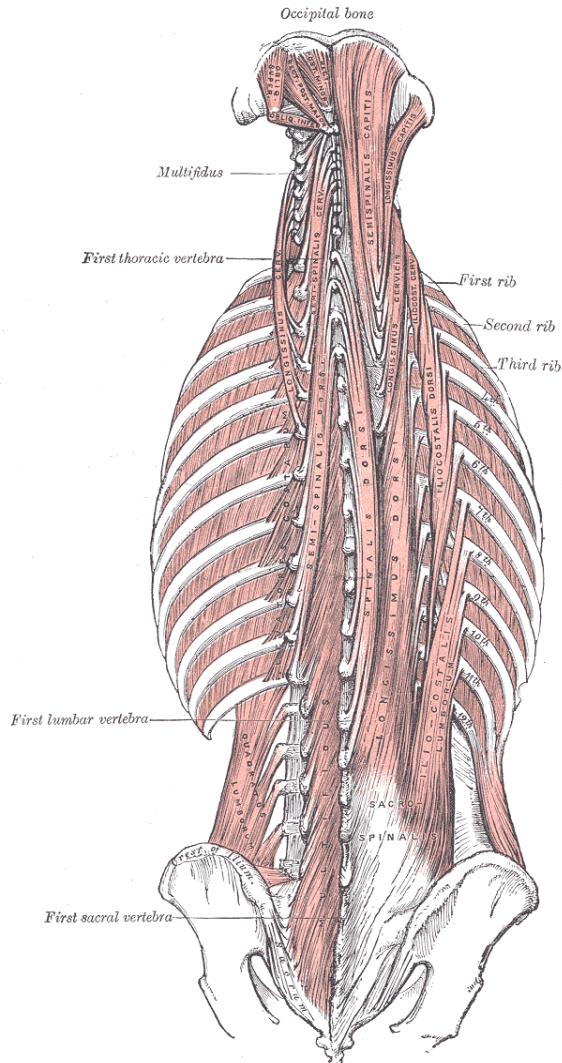
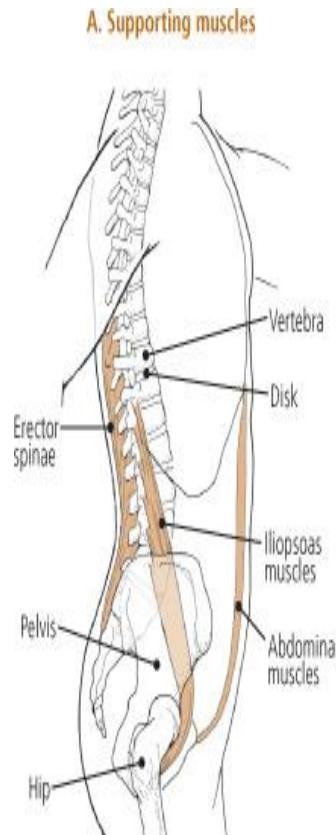
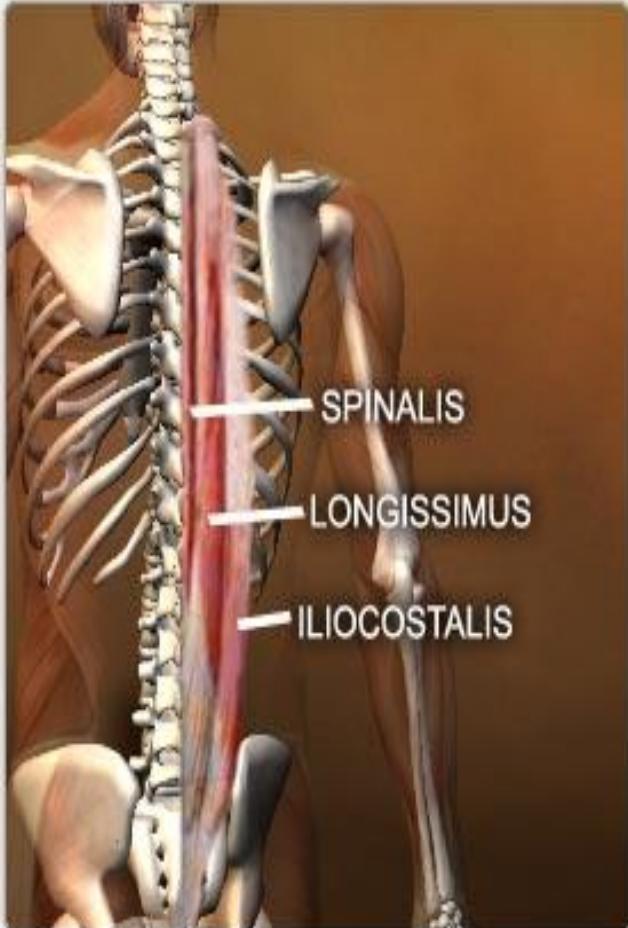
- TA
- Erector spinae



Tibialis anterior/posterior

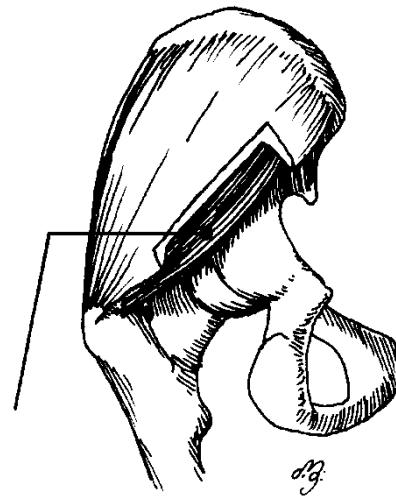


Erector spinae

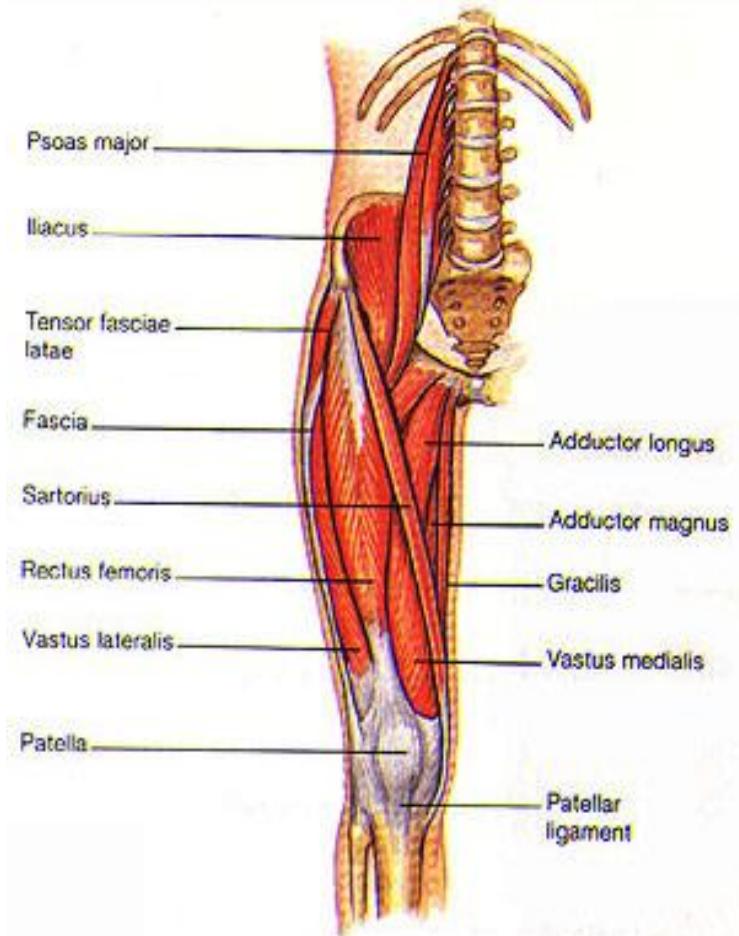
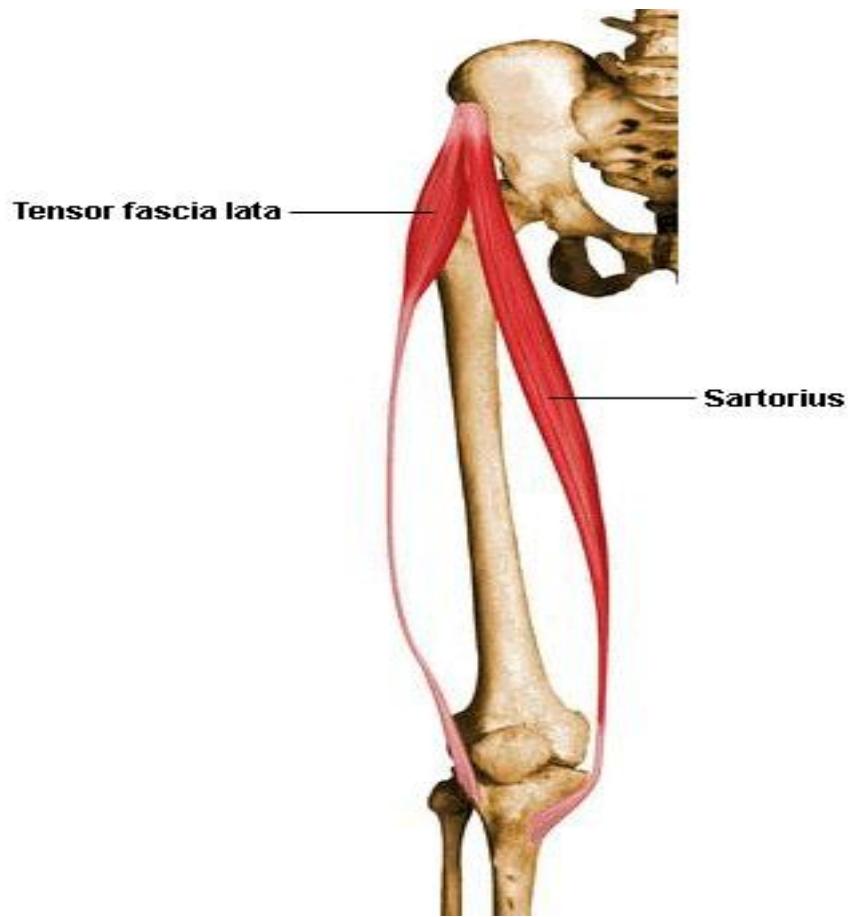


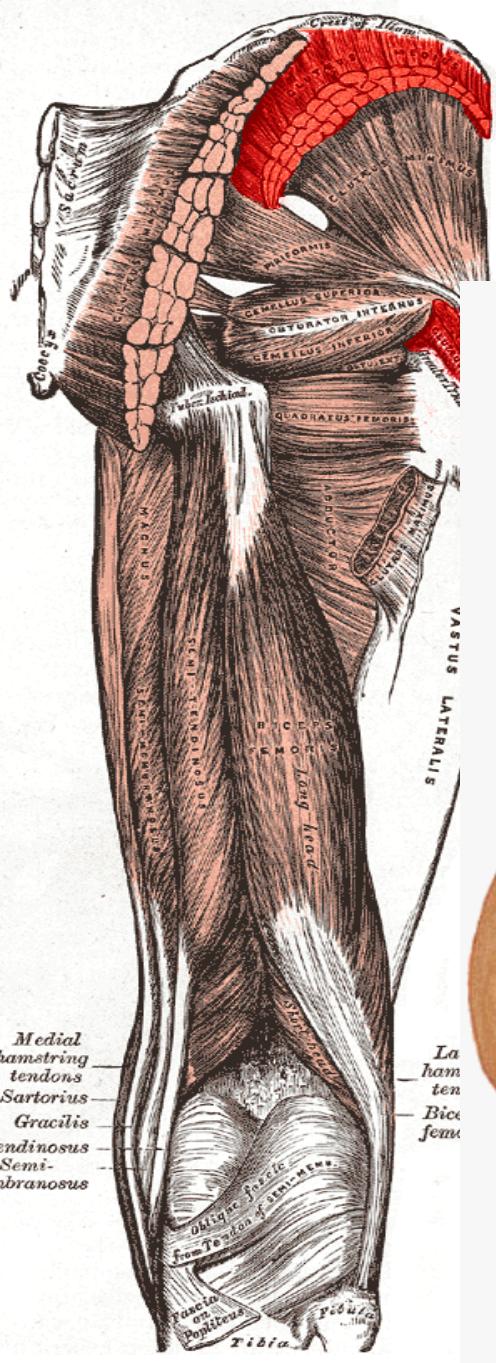
LI

- TFL(sigmoid colon)
- Gluteus minimus(ascending colon)
- Gracilis(rectum)
- Biceps femoris
- Quadratus lumborum



TFL/sartorius





gluteus

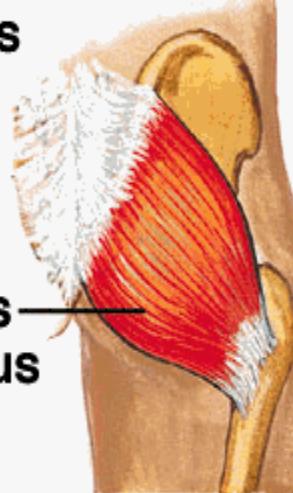
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Gluteal Muscles

Gluteus
medius



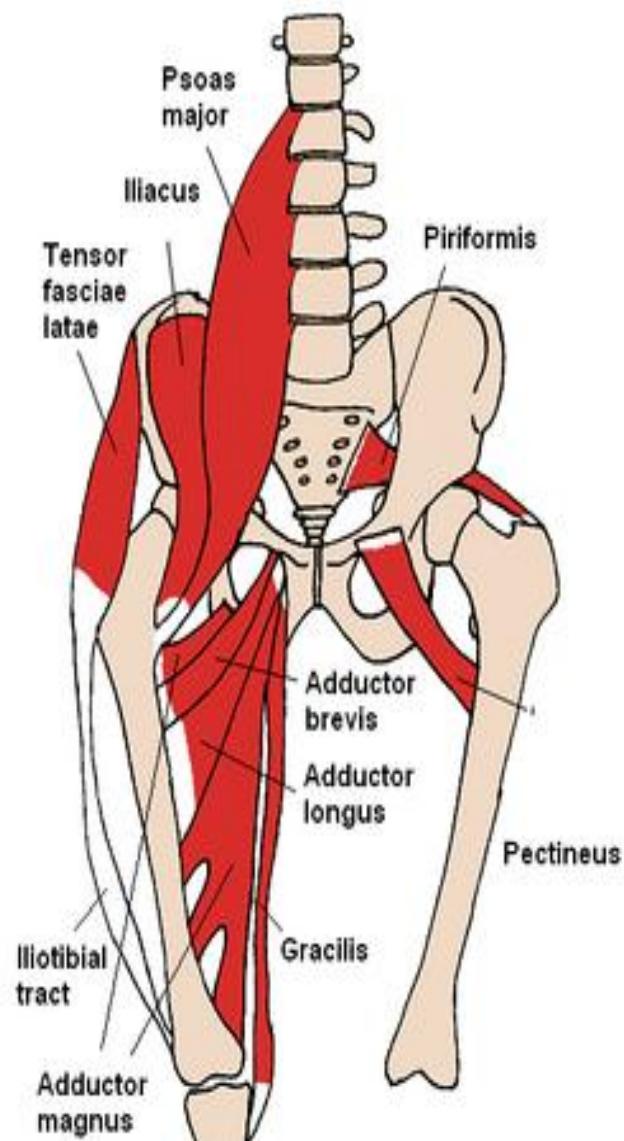
Gluteus
minimus



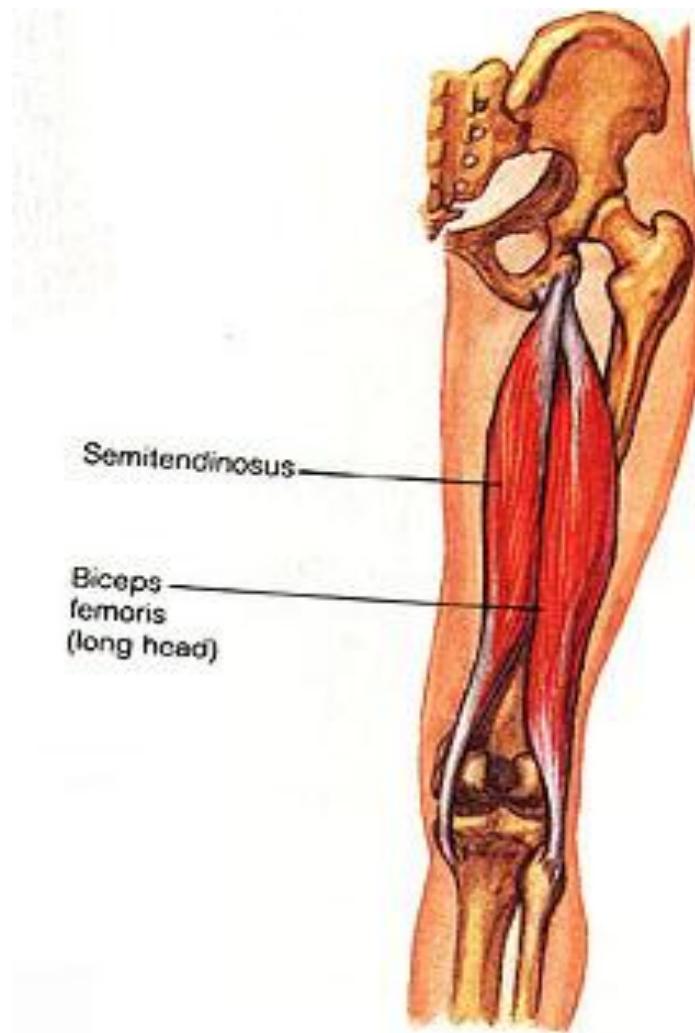
Gluteus
maximus



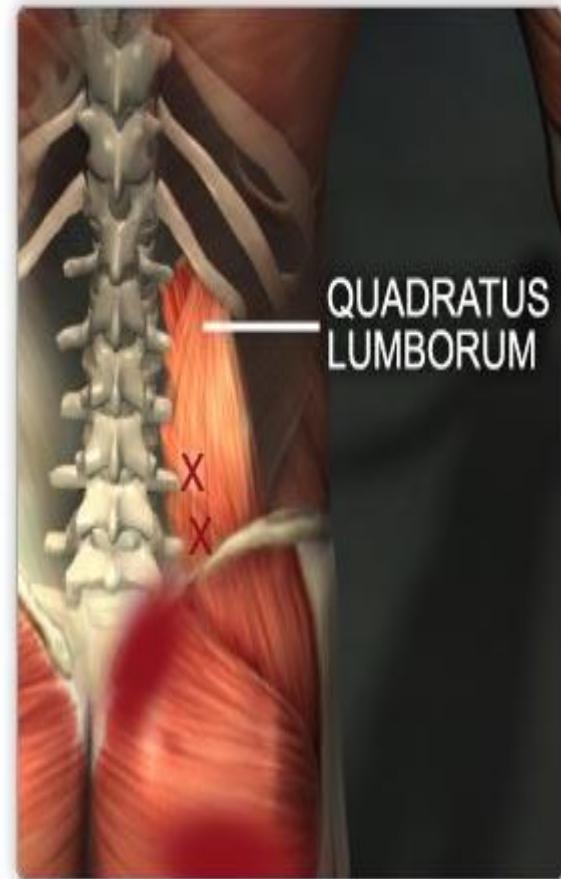
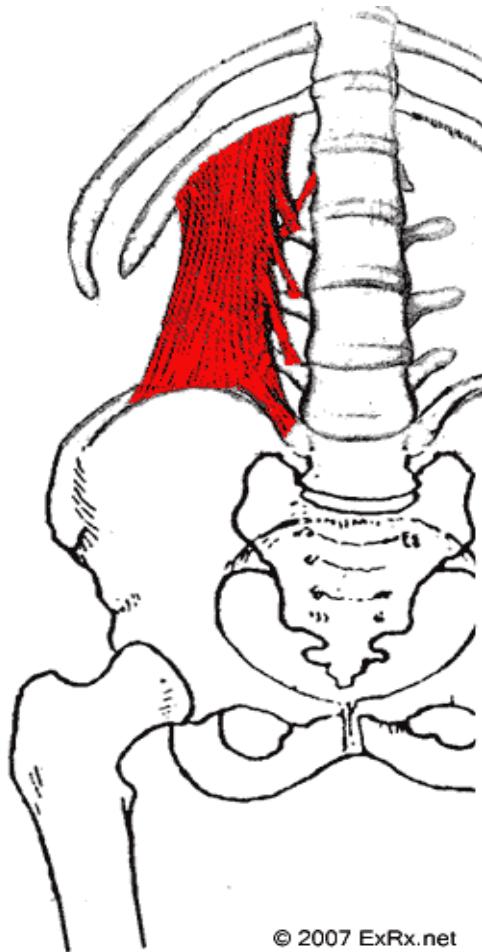
Gracilis

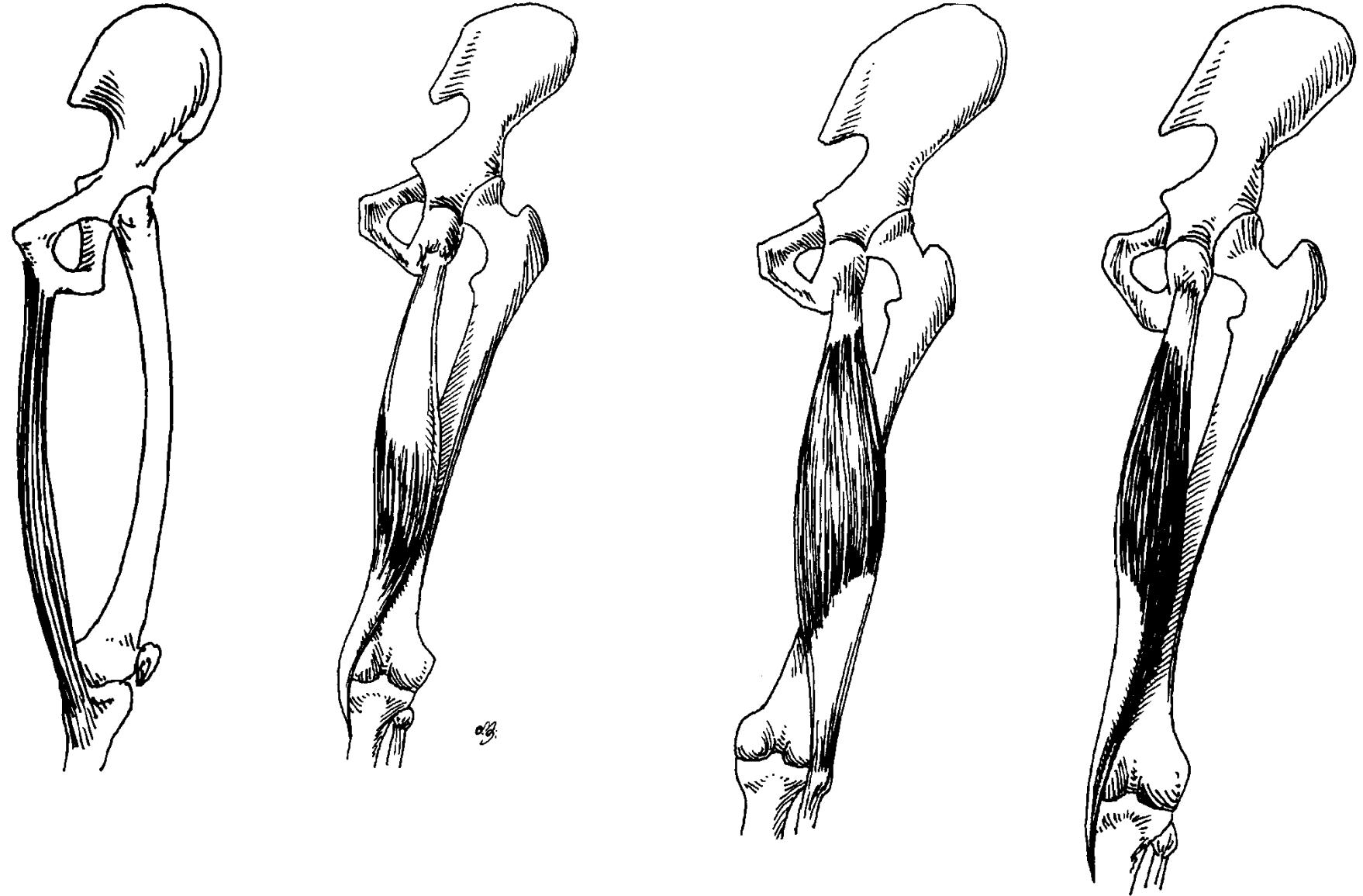


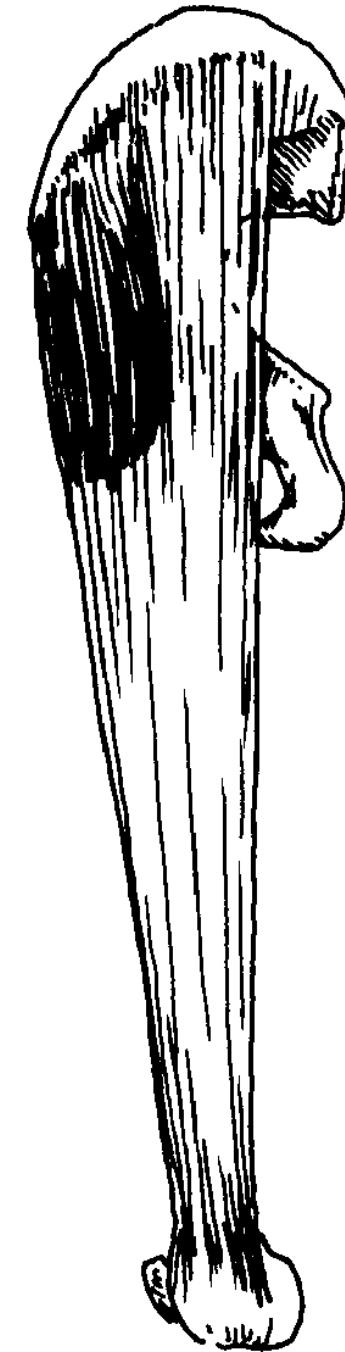
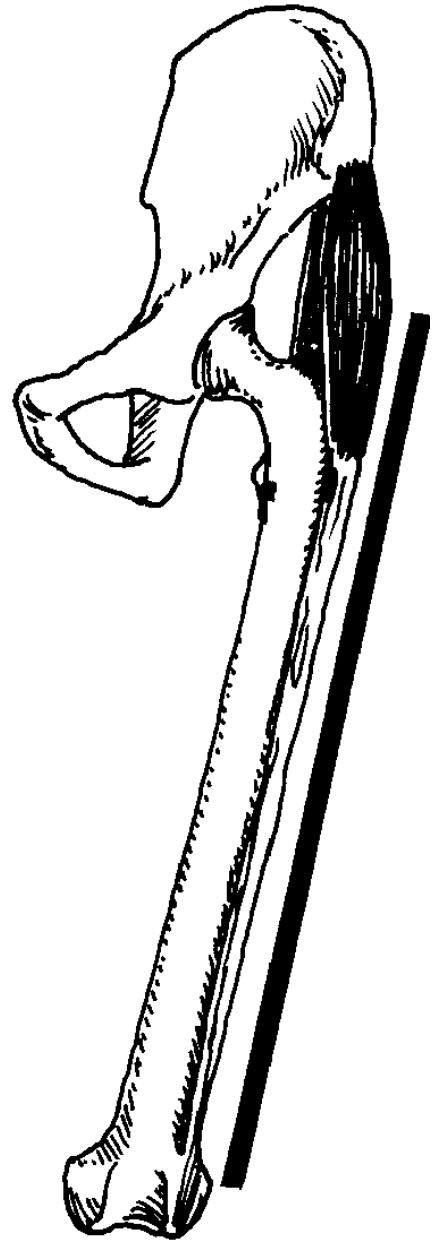
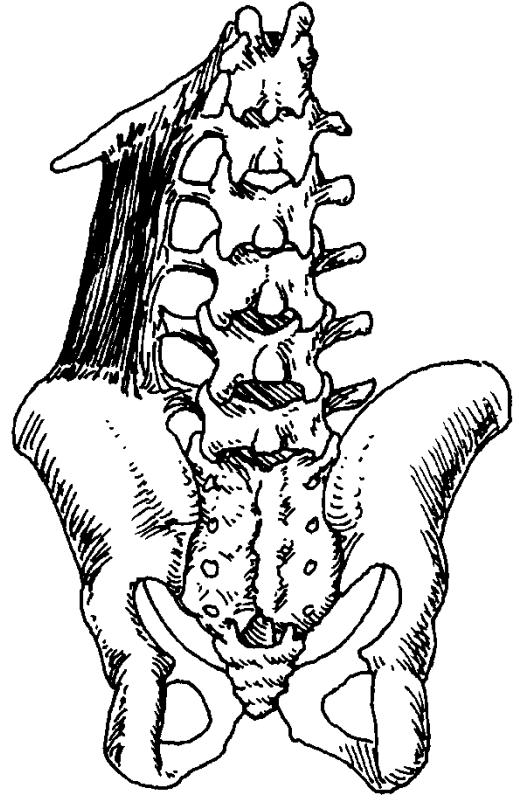
Biceps femoris



QL

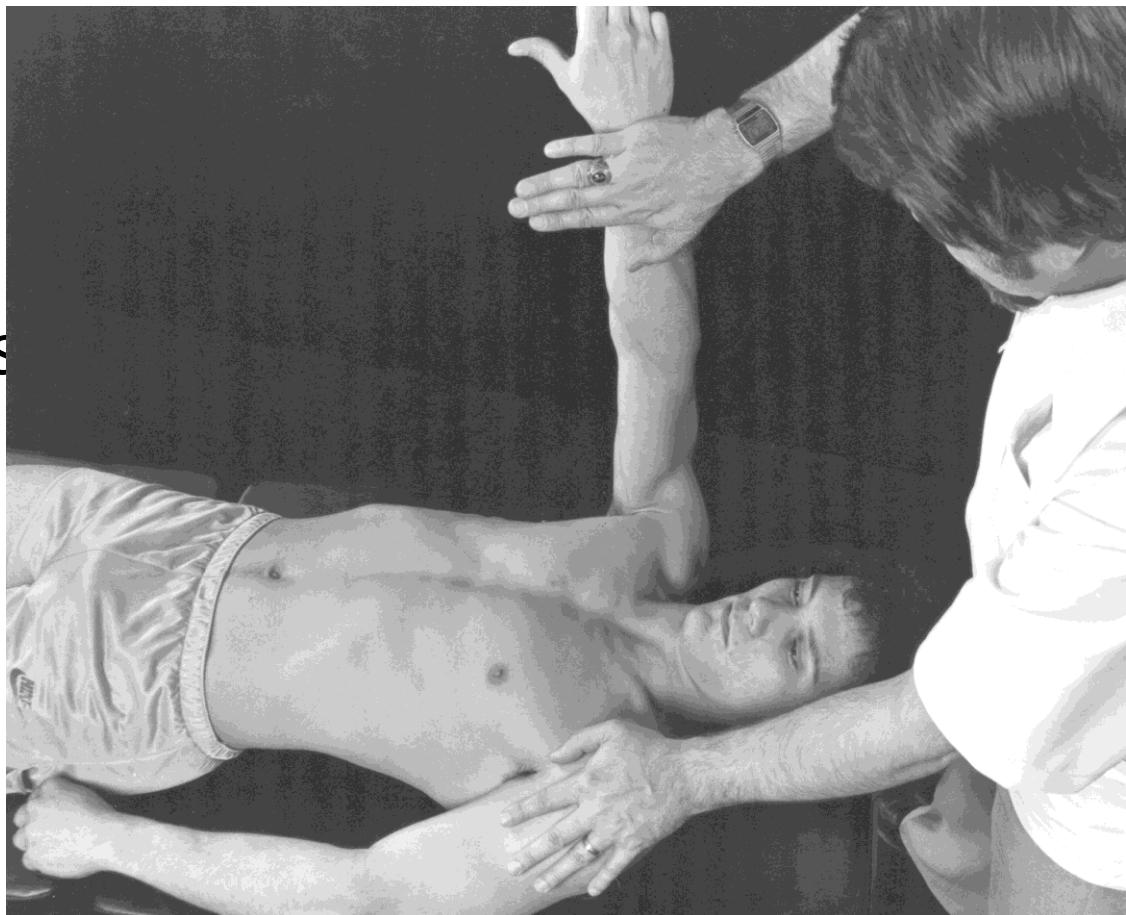


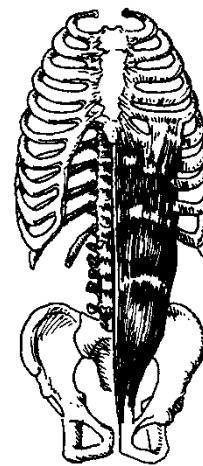
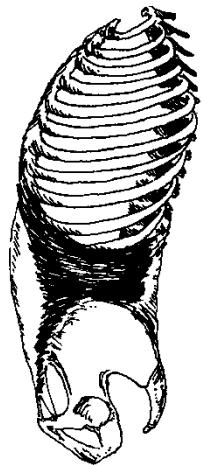


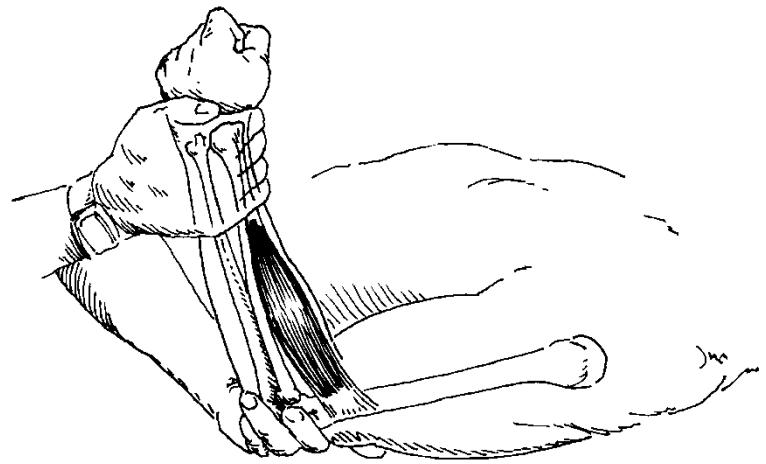
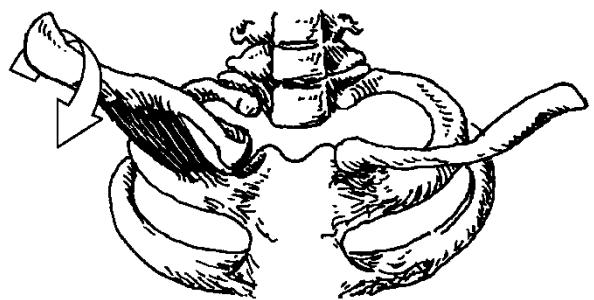


ST

- **PMC**
- Abdominals
- Neck flexor/extensor
- Diaphragm
- Subclavius
- Brachioradialis





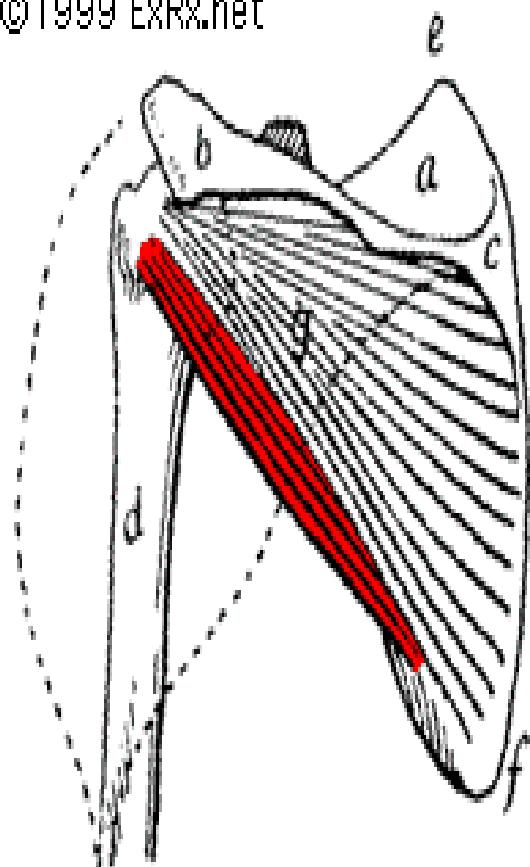


Thyroid

- Teres minor
- Supraspinatus
- Adductor pollicis

Teres minor

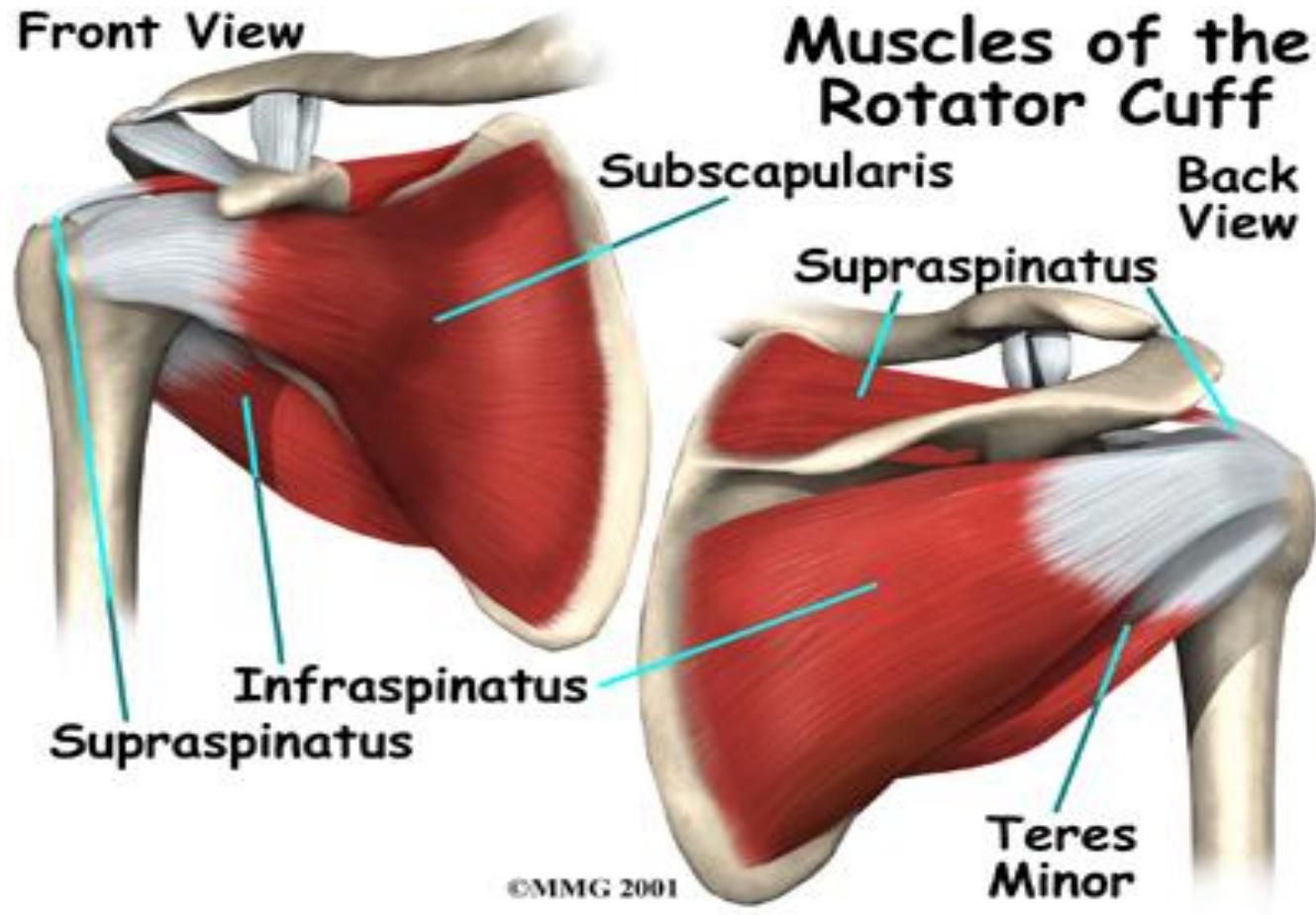
©1999 ExRx.net



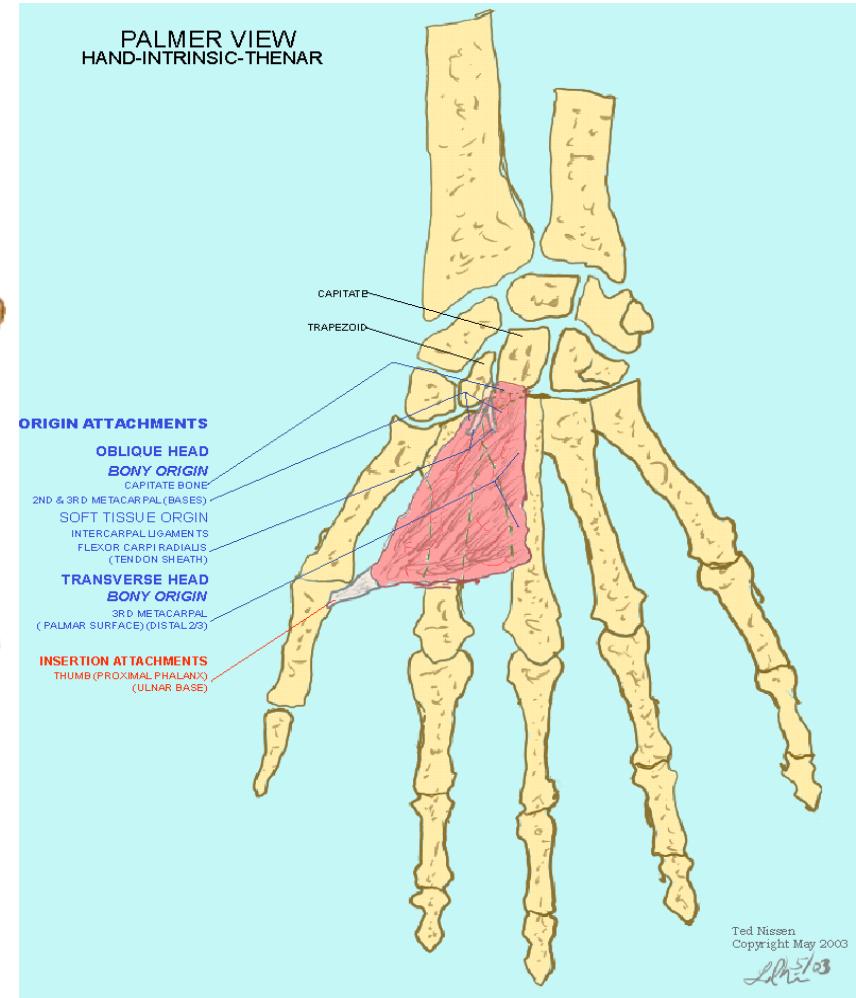
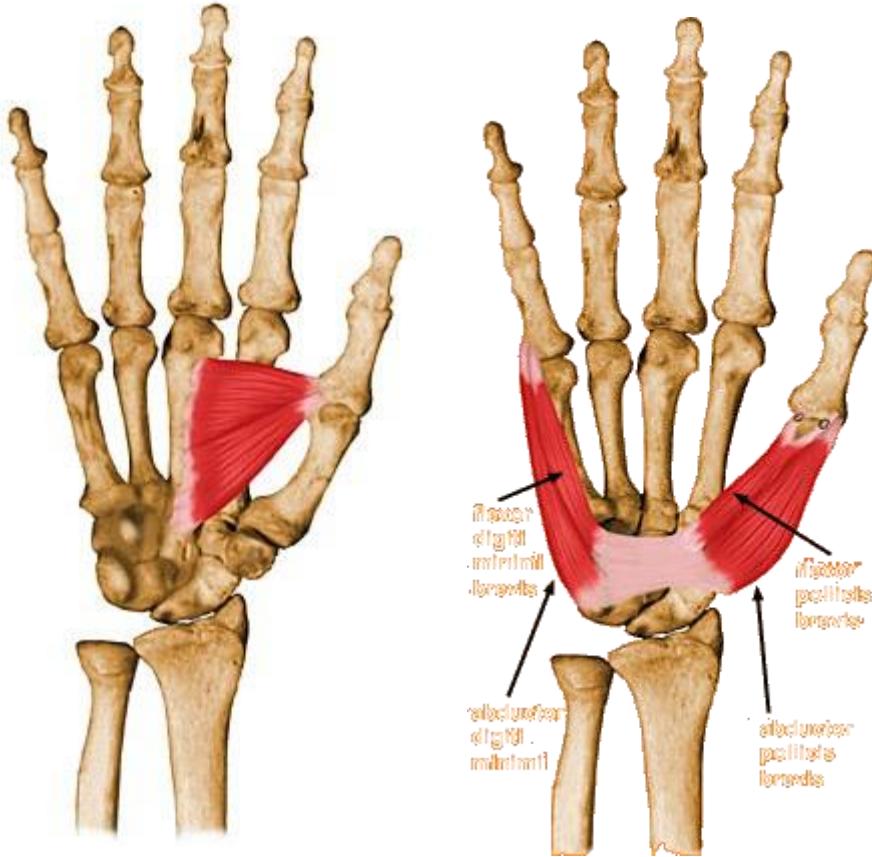
Rotator cuff muscles

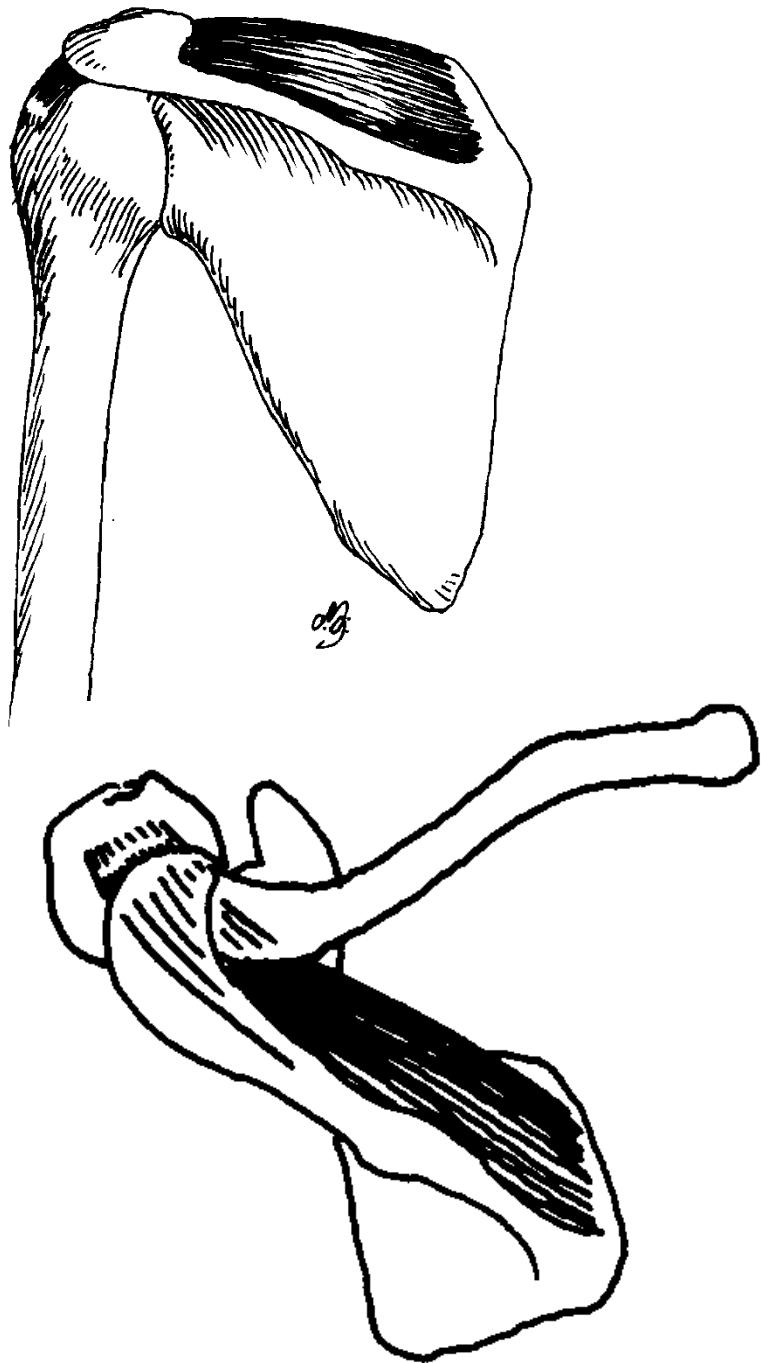


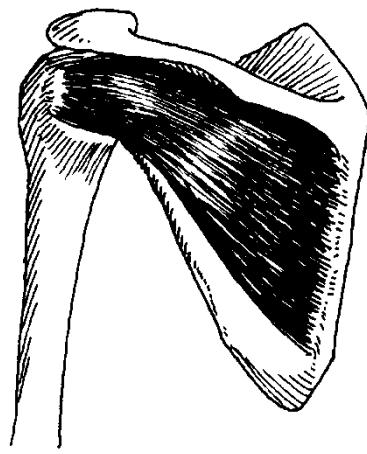
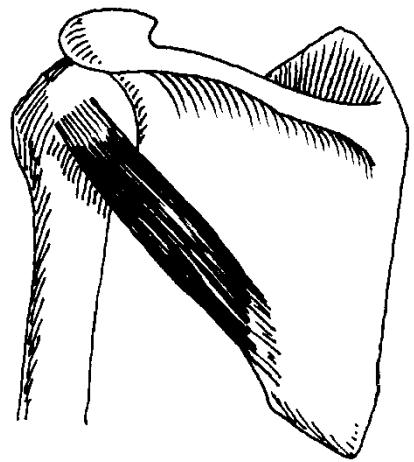
Rotator cuff



Adductor pollicis



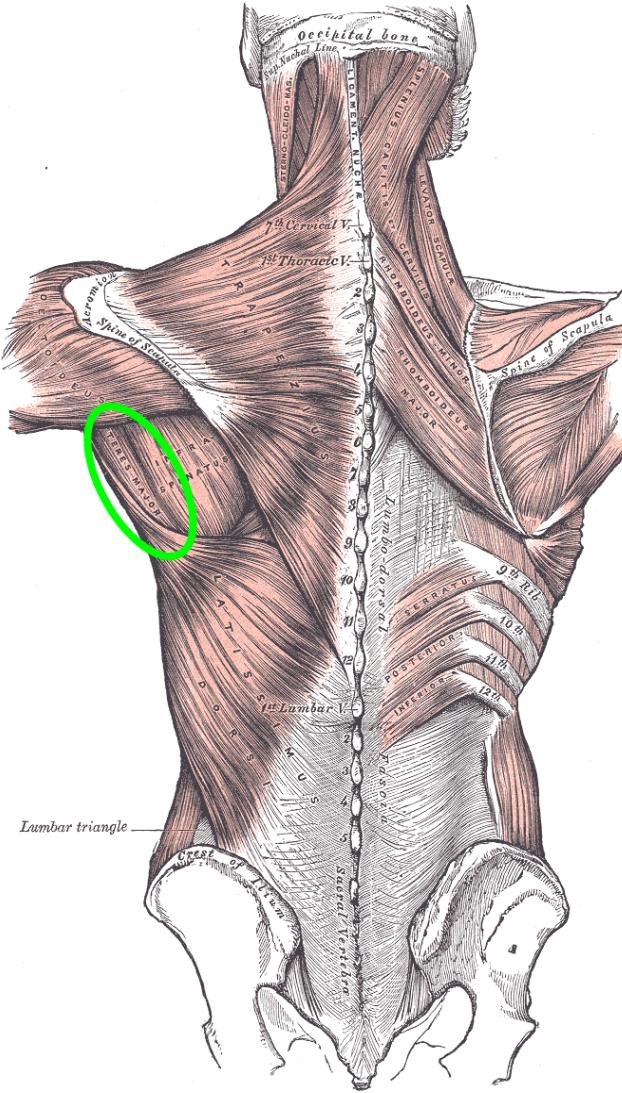


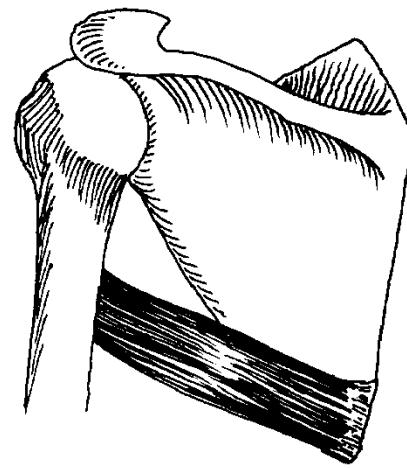
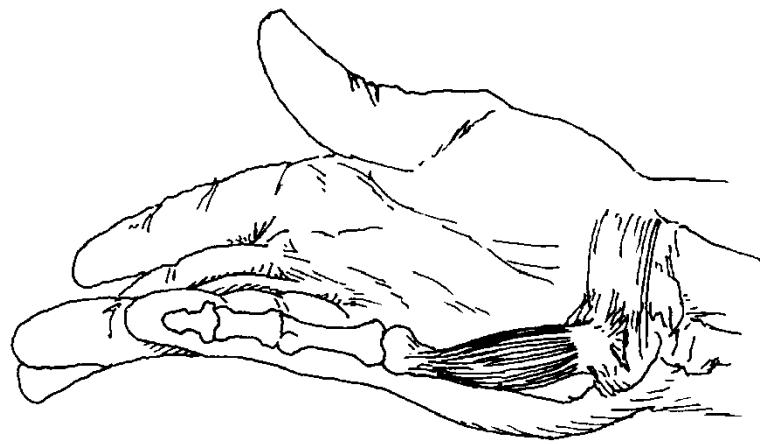


Thymus

- Dorsal interossei
- Hyoid
- Teres major
- Opponens digiti minimi
- Masseter

Teres major

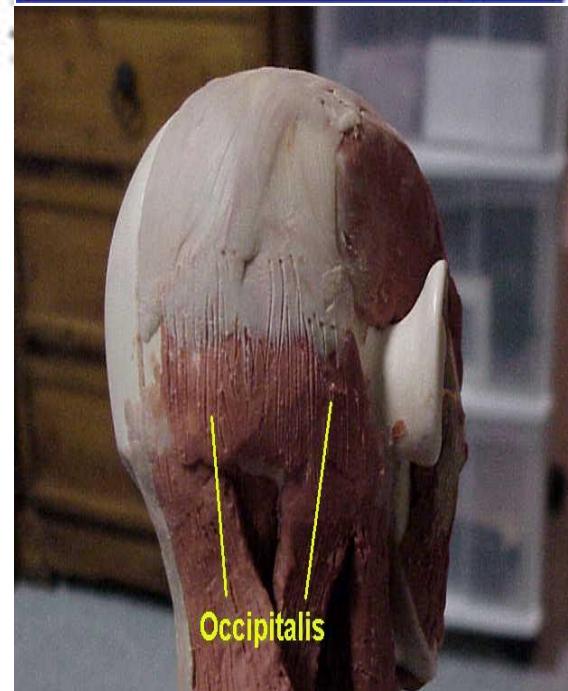
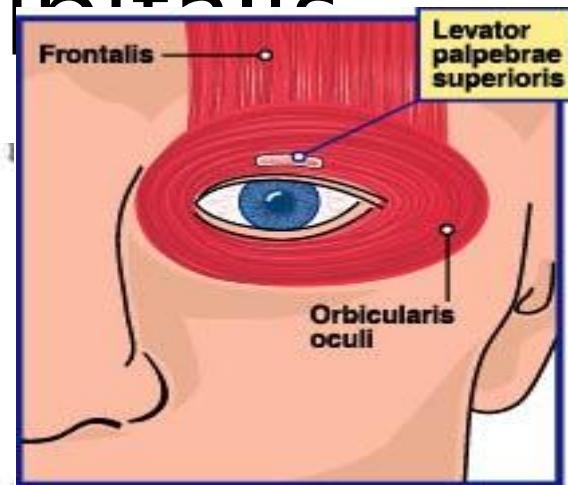
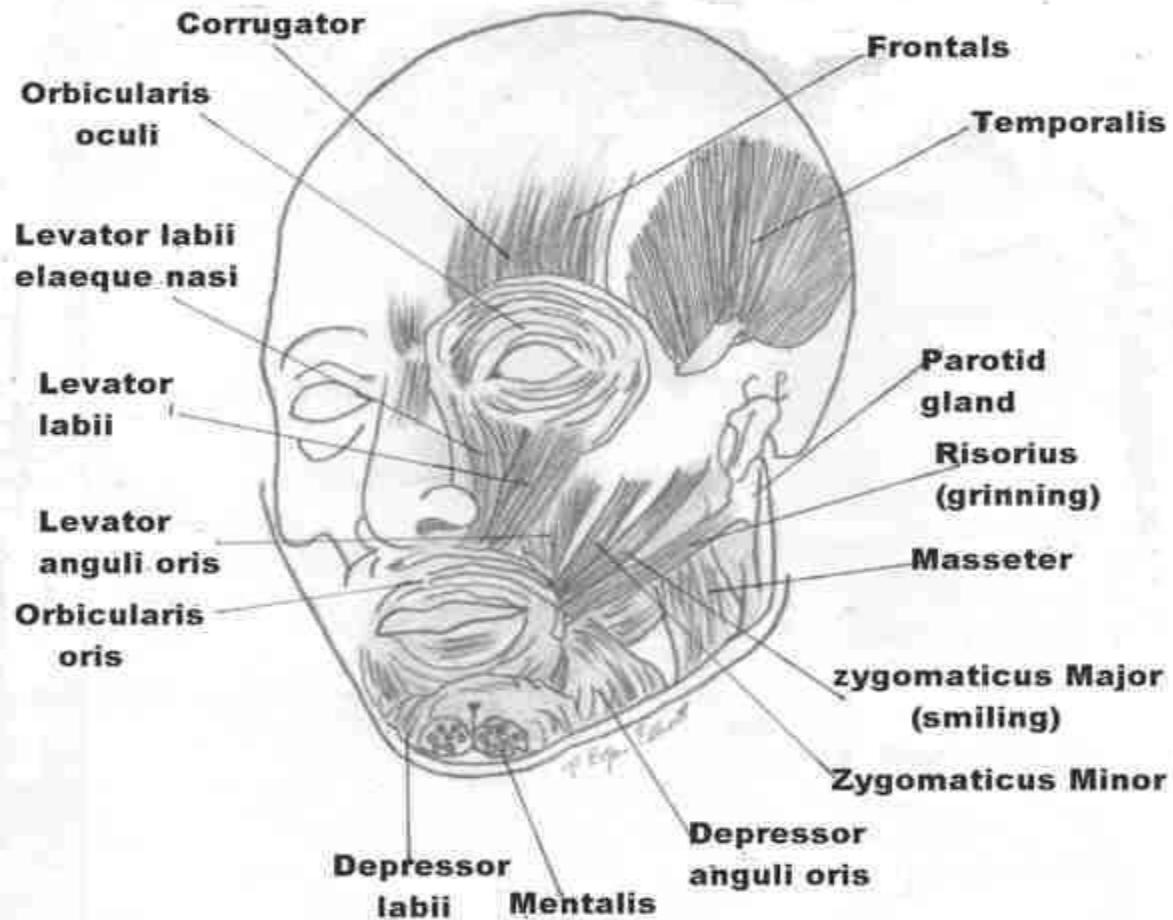




Thalamus

- Occipitalis

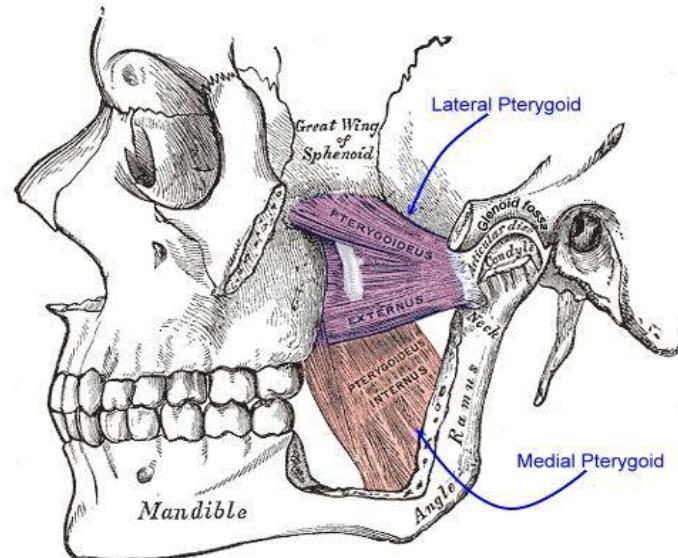
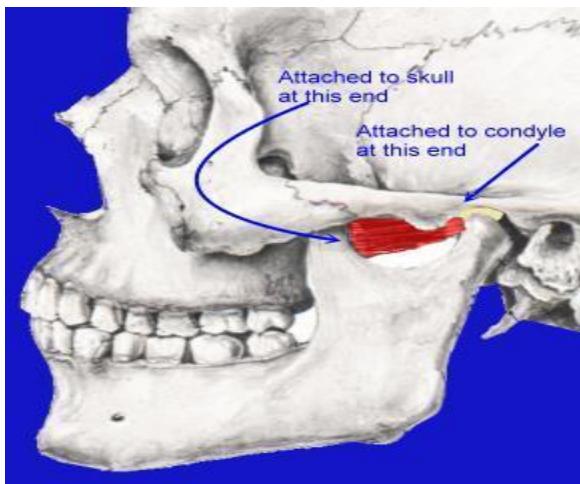
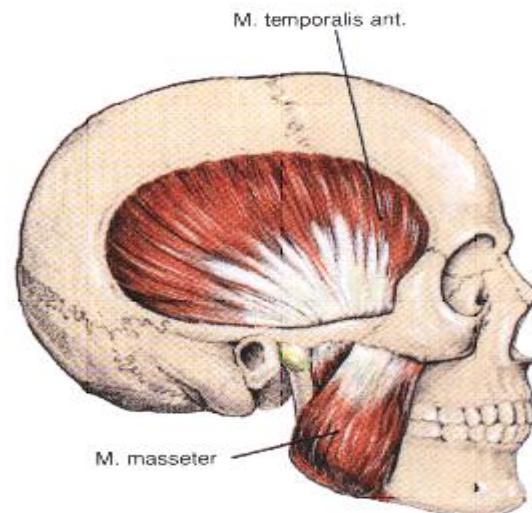
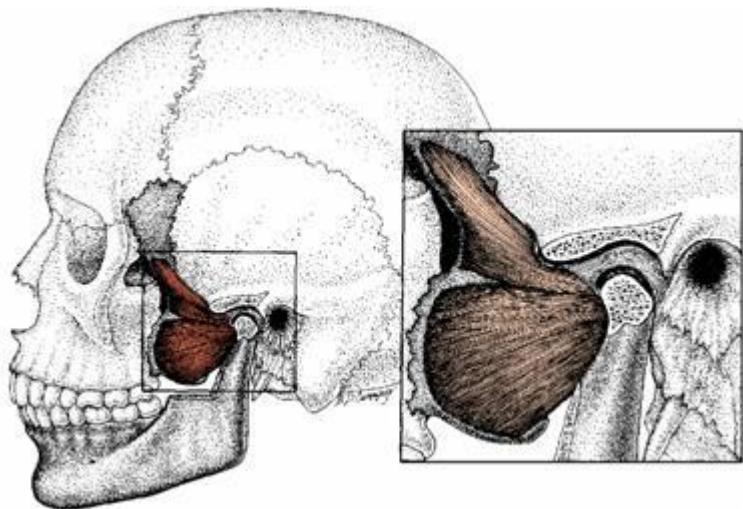
Orbicularis/occipitalis



Pituitary

- Internal pterygoid (post)
- Temporalis (ant)
- Iliolumbar lig
- Multifidus

TMJ muscles



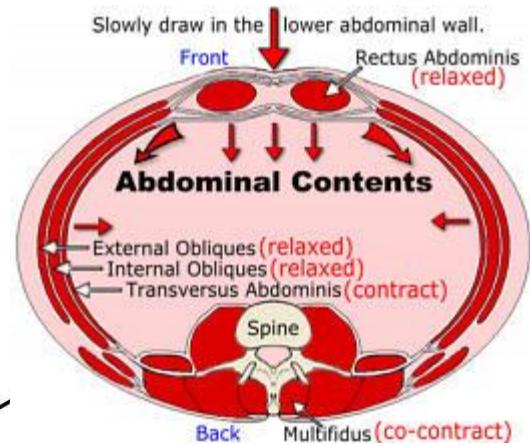
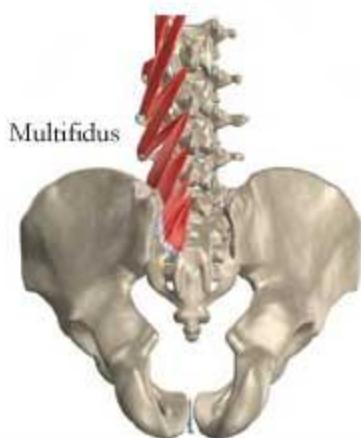
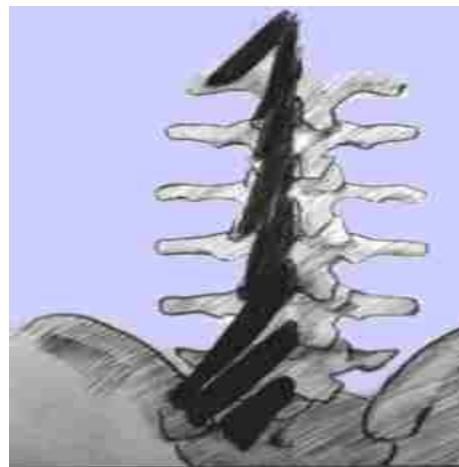
Iliolumbar ligament



The Iliolumbar ligament

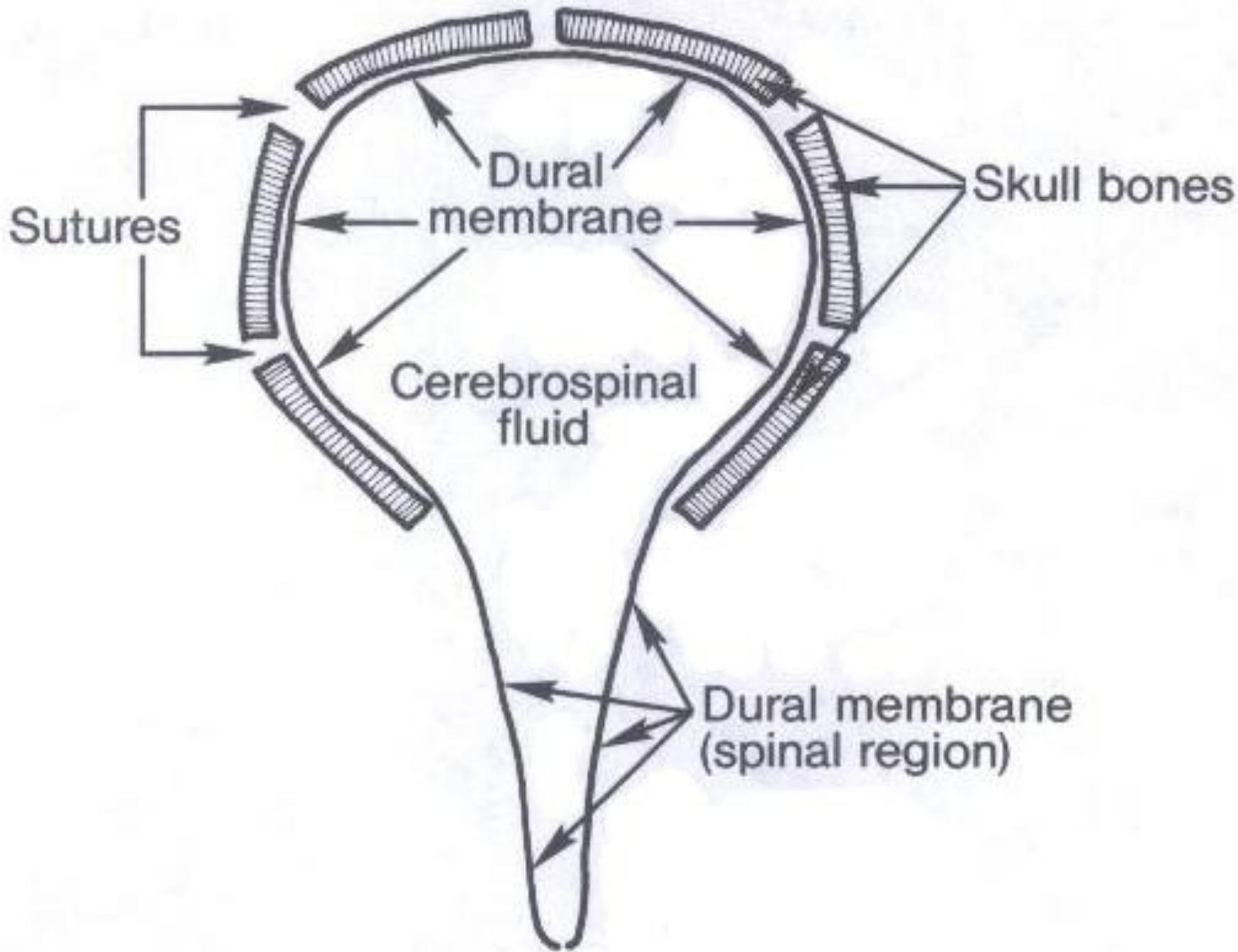


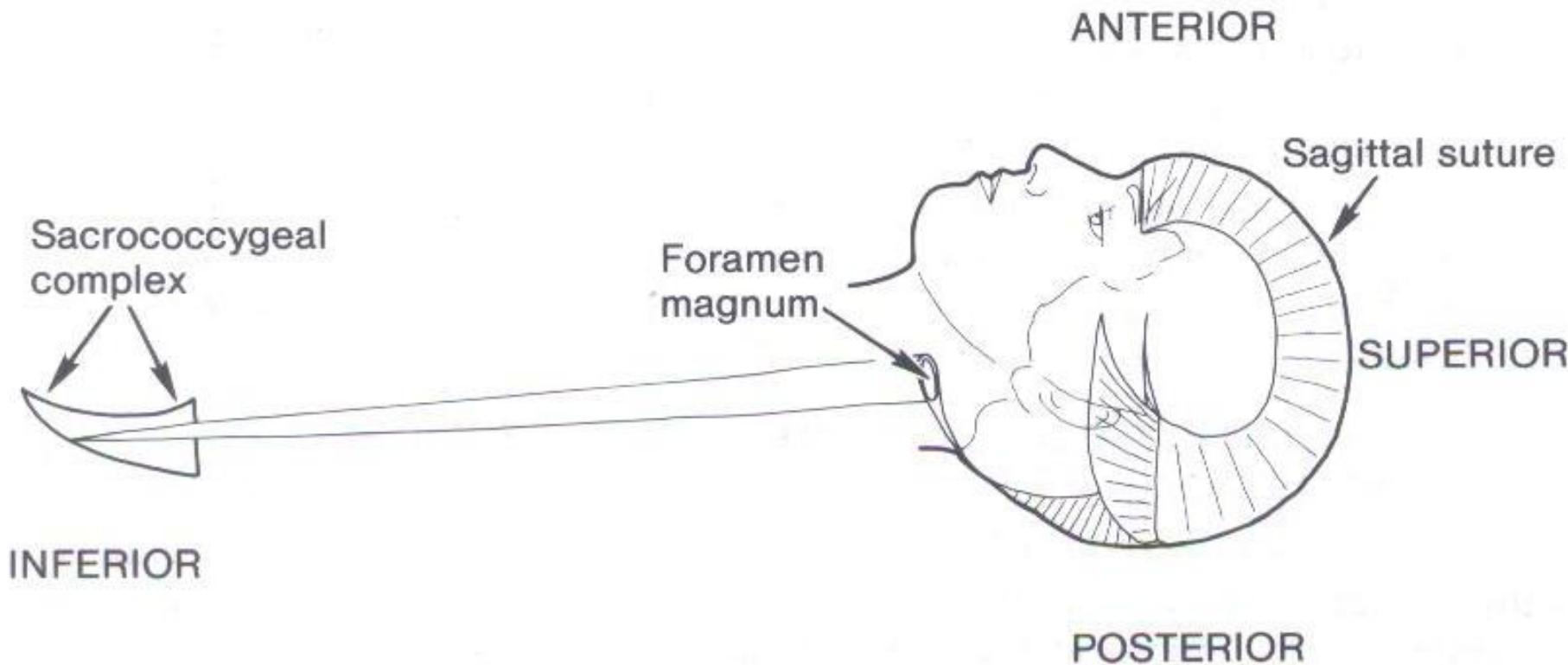
multifidus

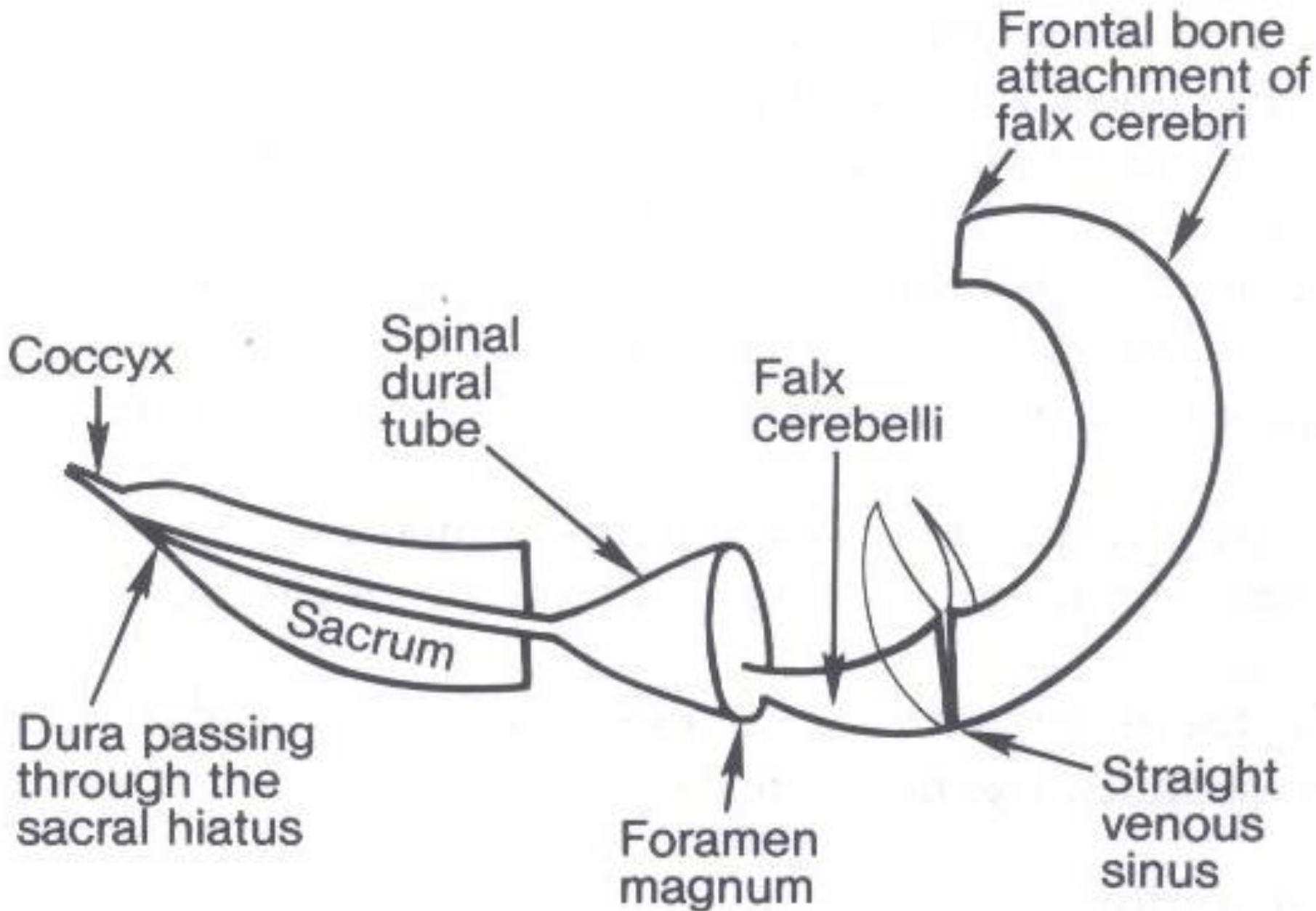


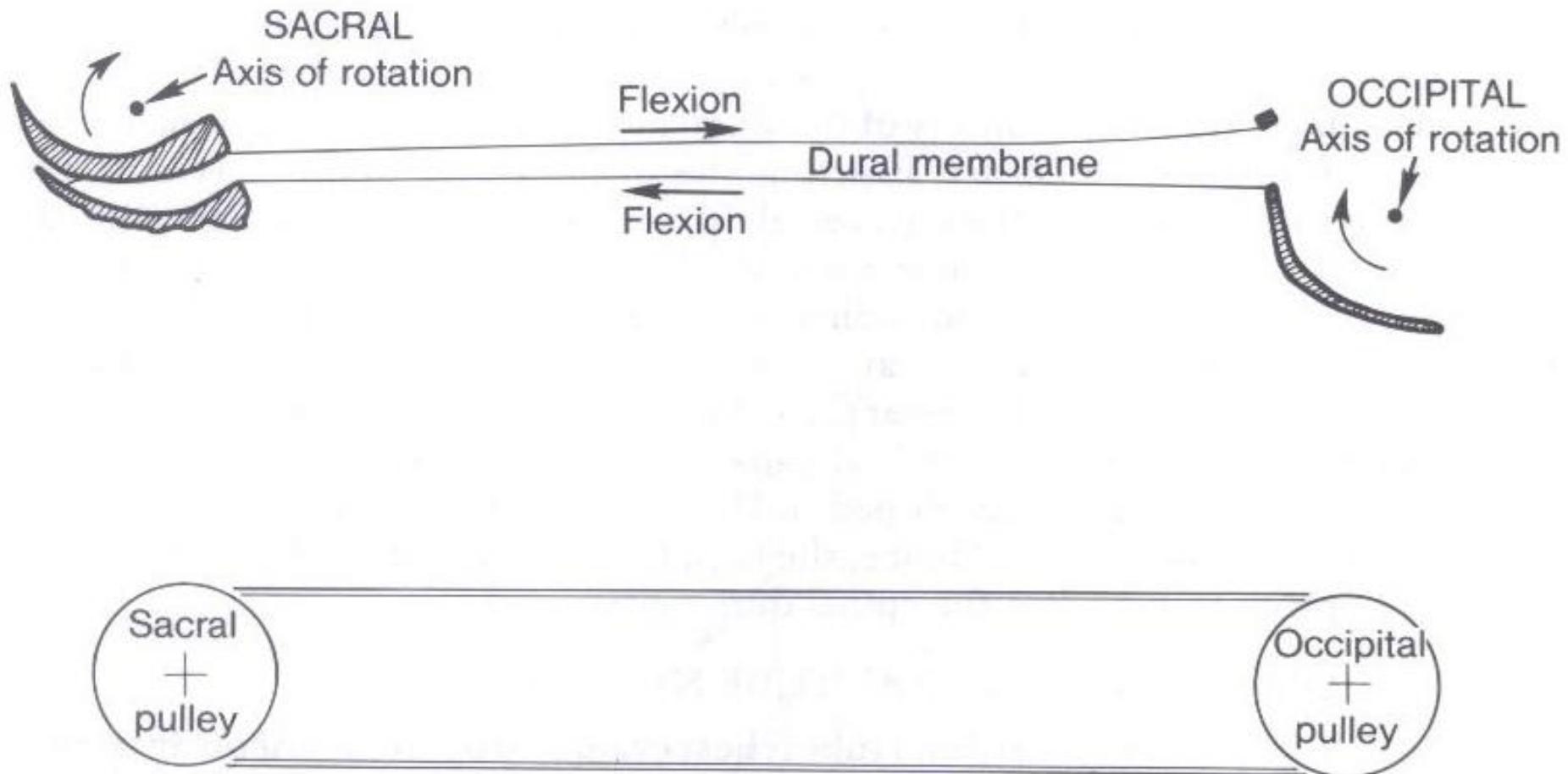
- Thalamus –occipitalis
- Hypothalamus –혀를 입천장에

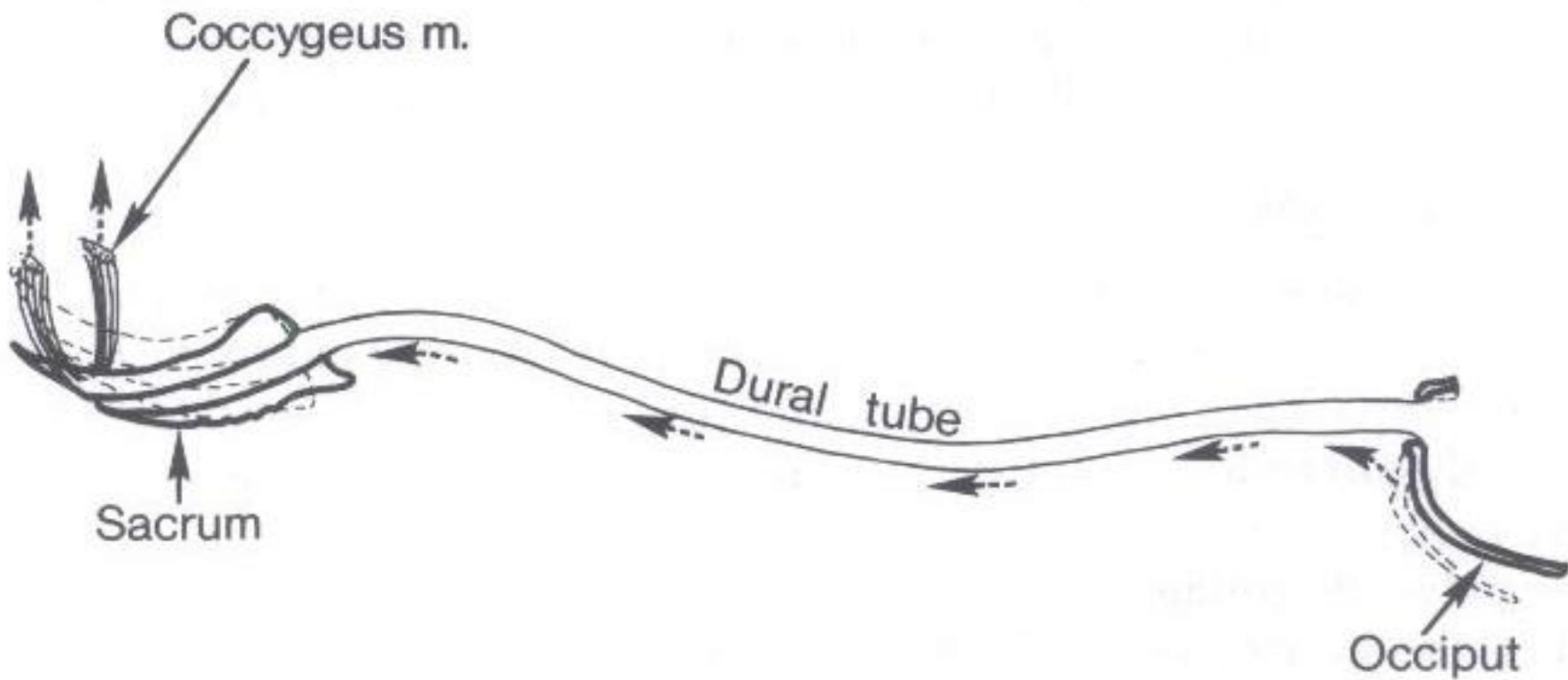
Cranial fault



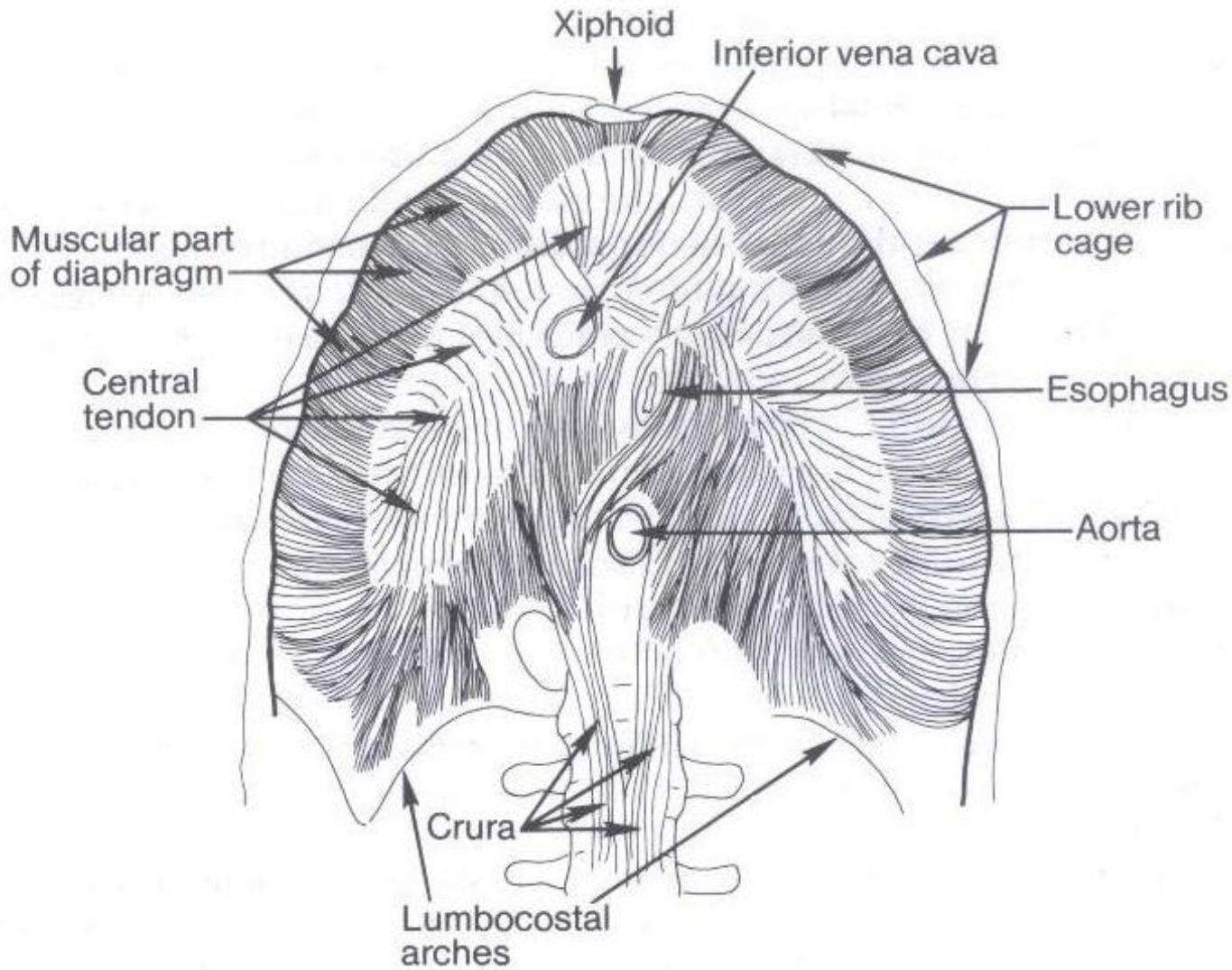




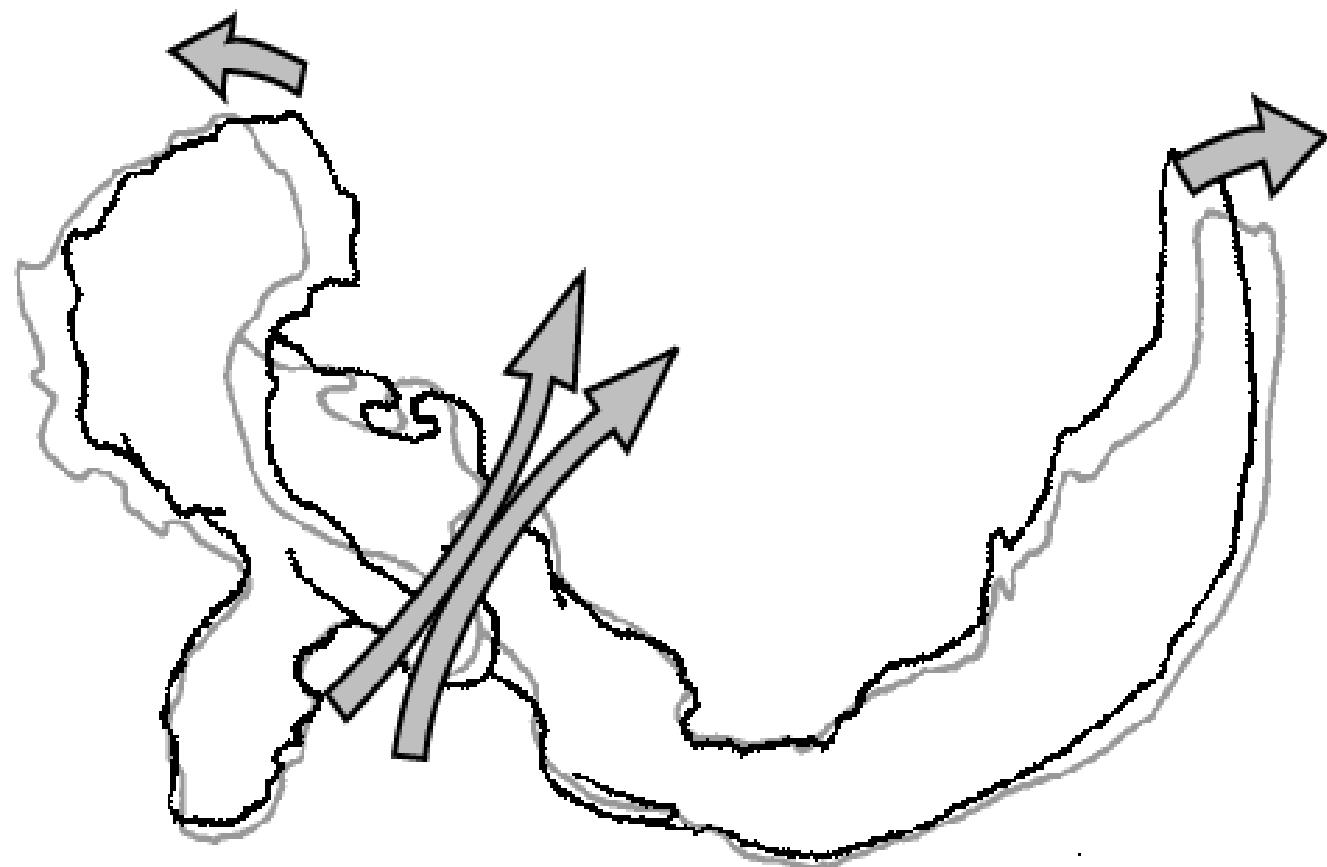


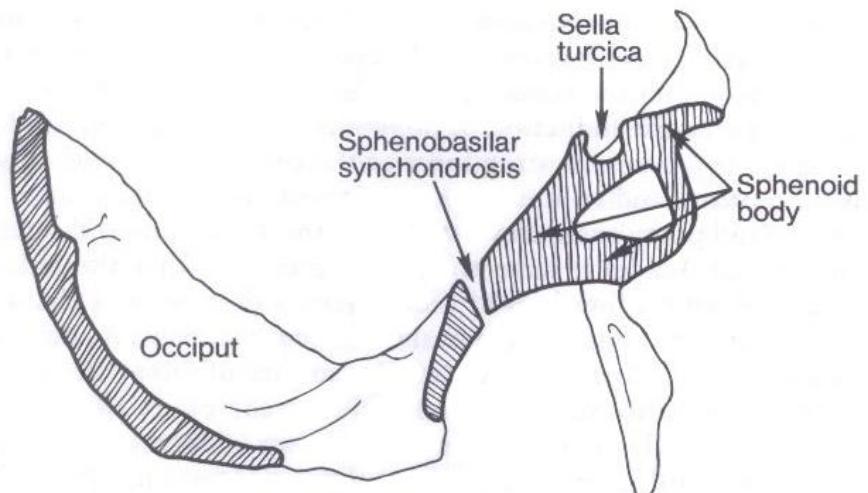


3 diaphragm 관련

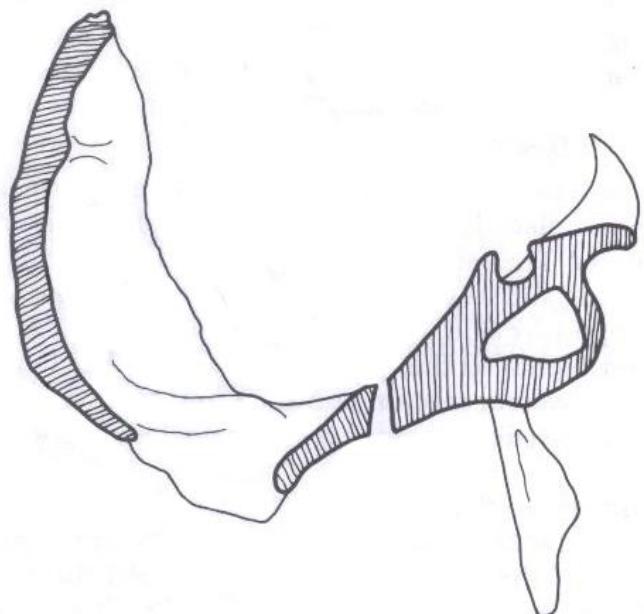


Flexion/extension



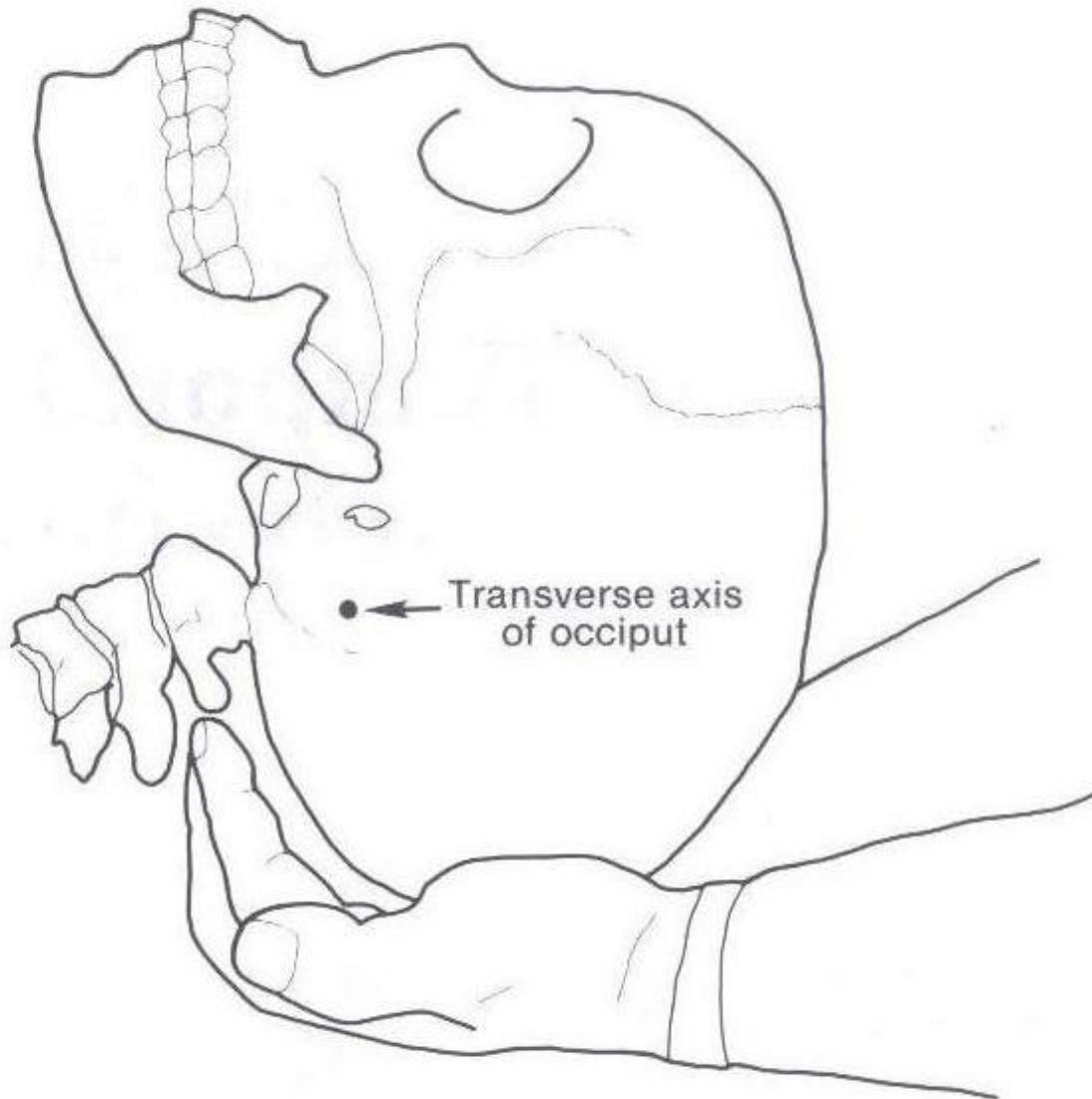


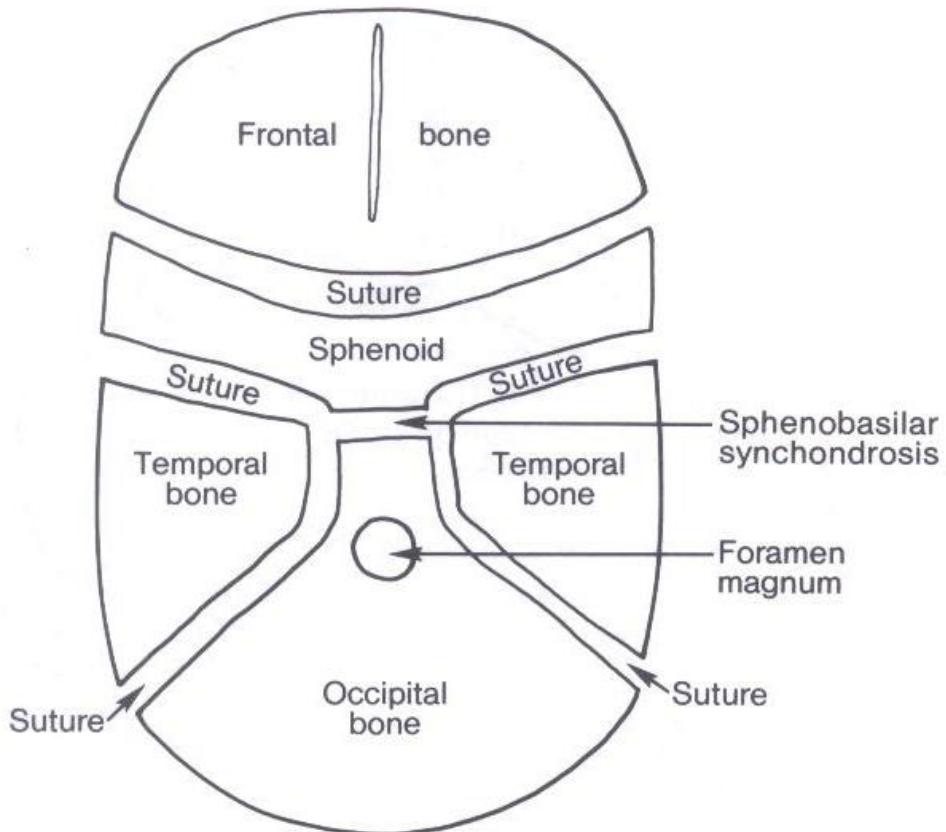
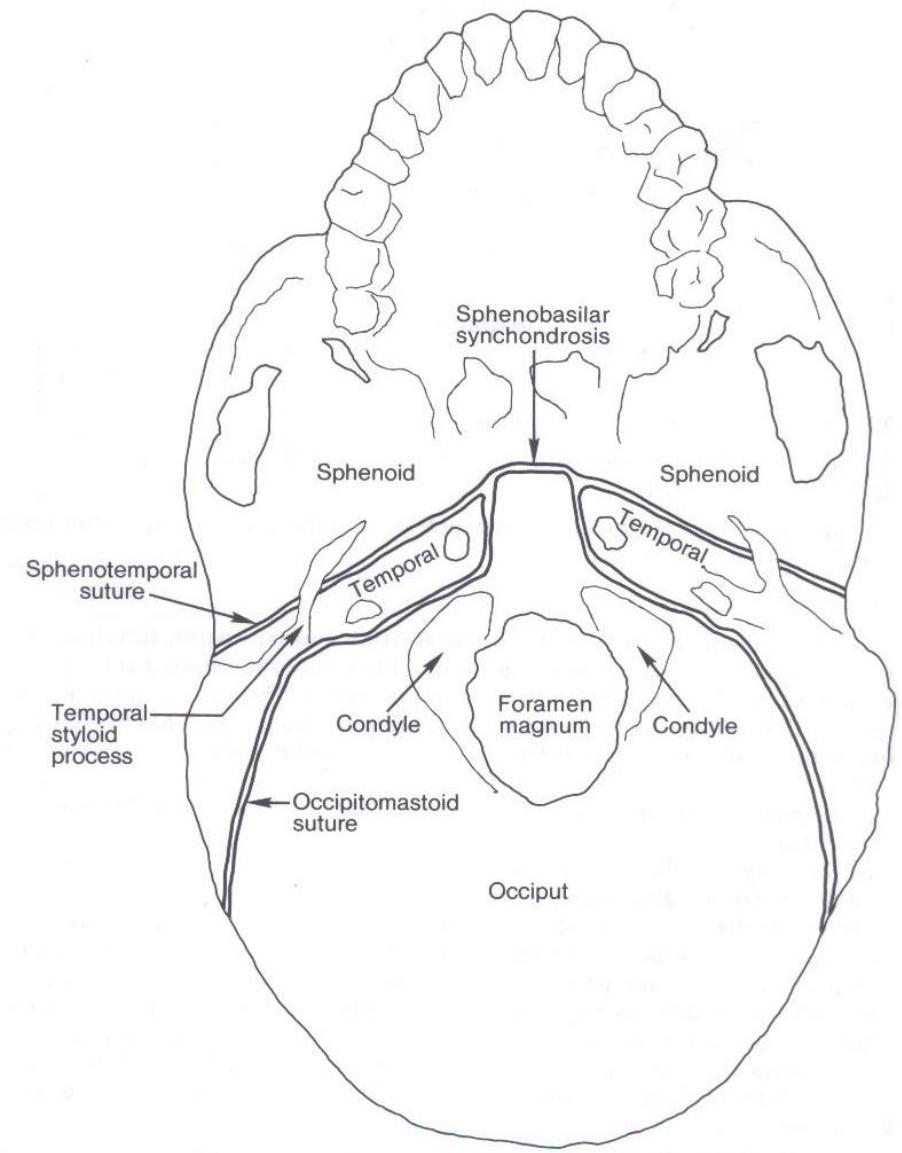
FLEXION

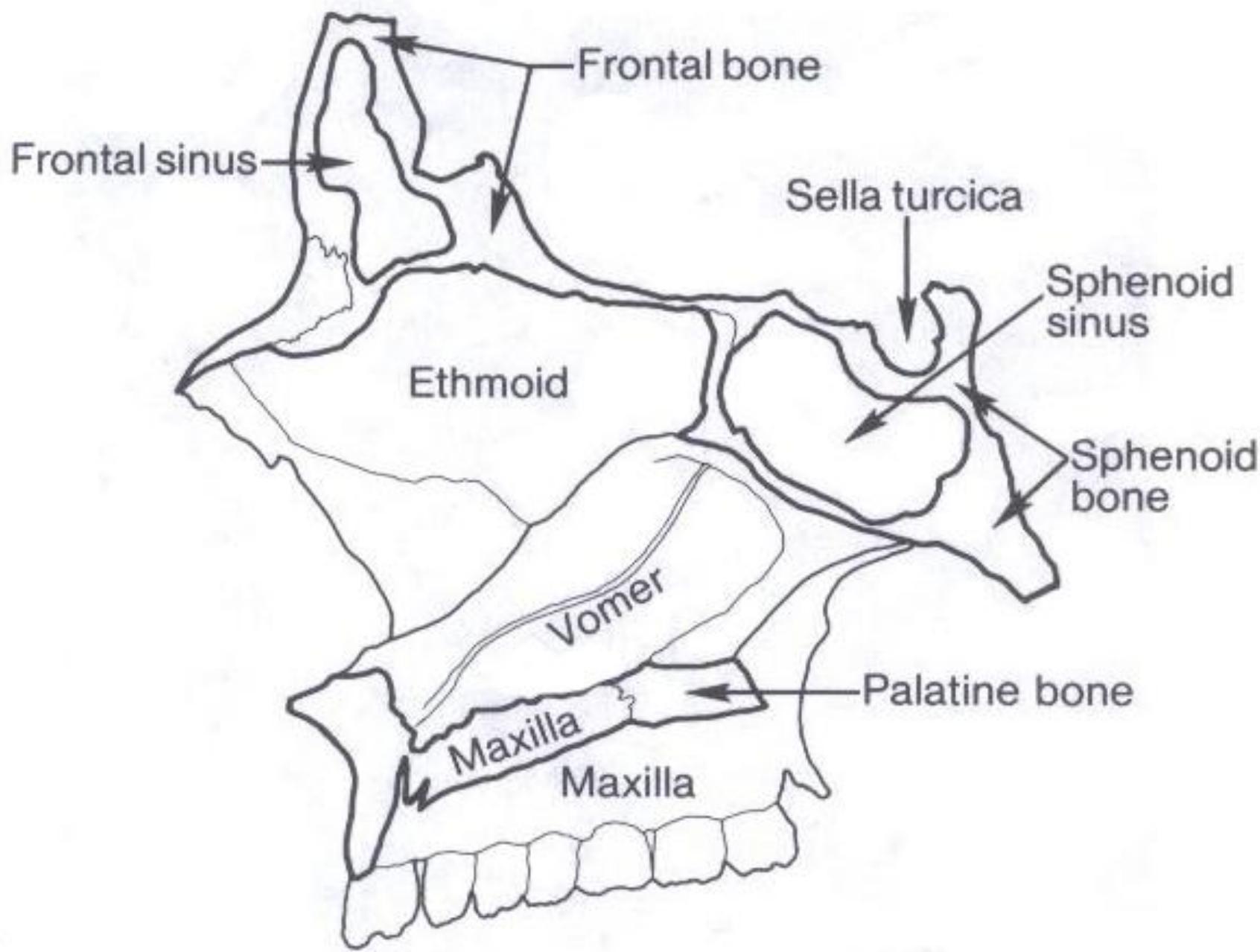


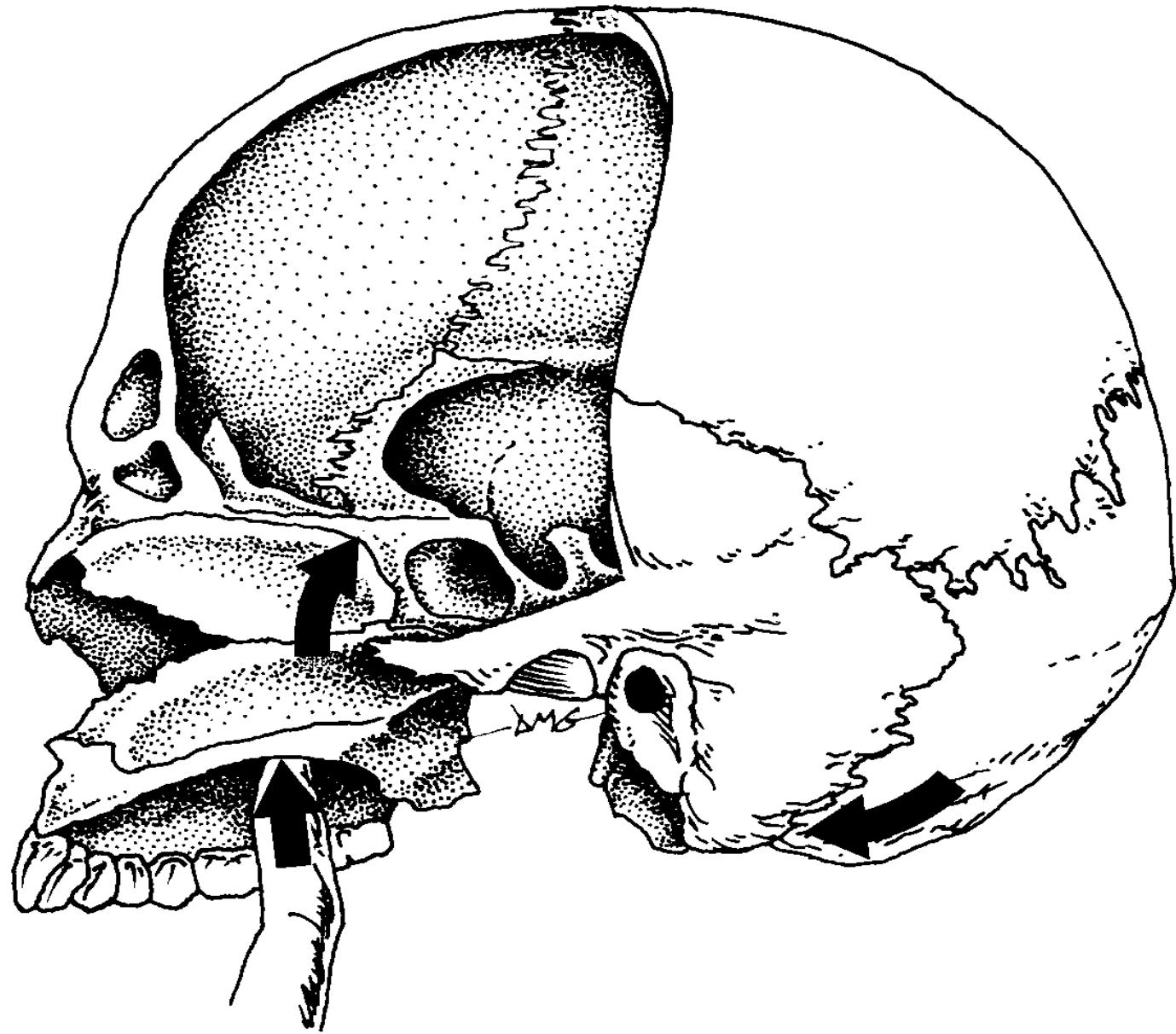
EXTENSION

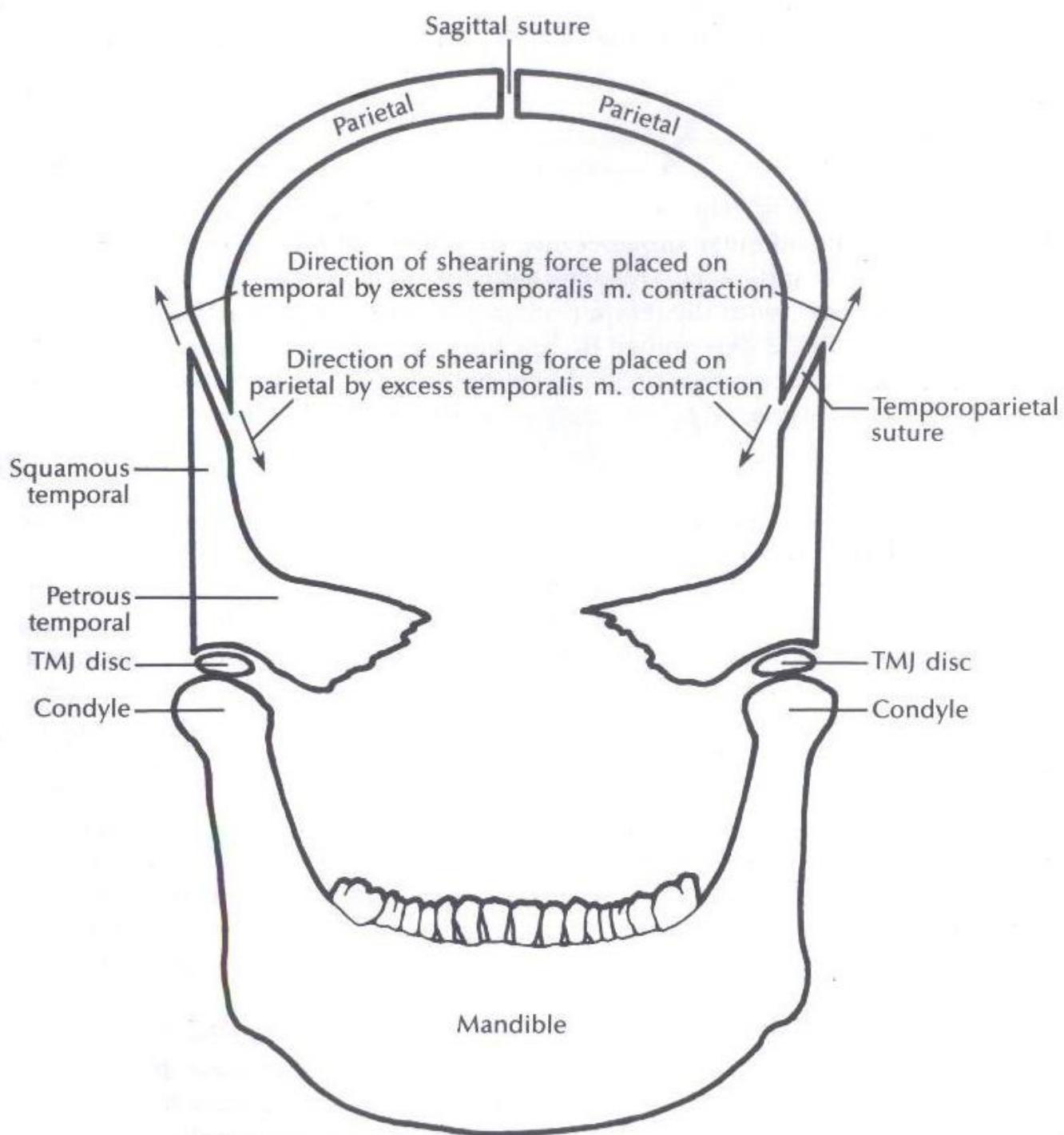
Jugular decompression

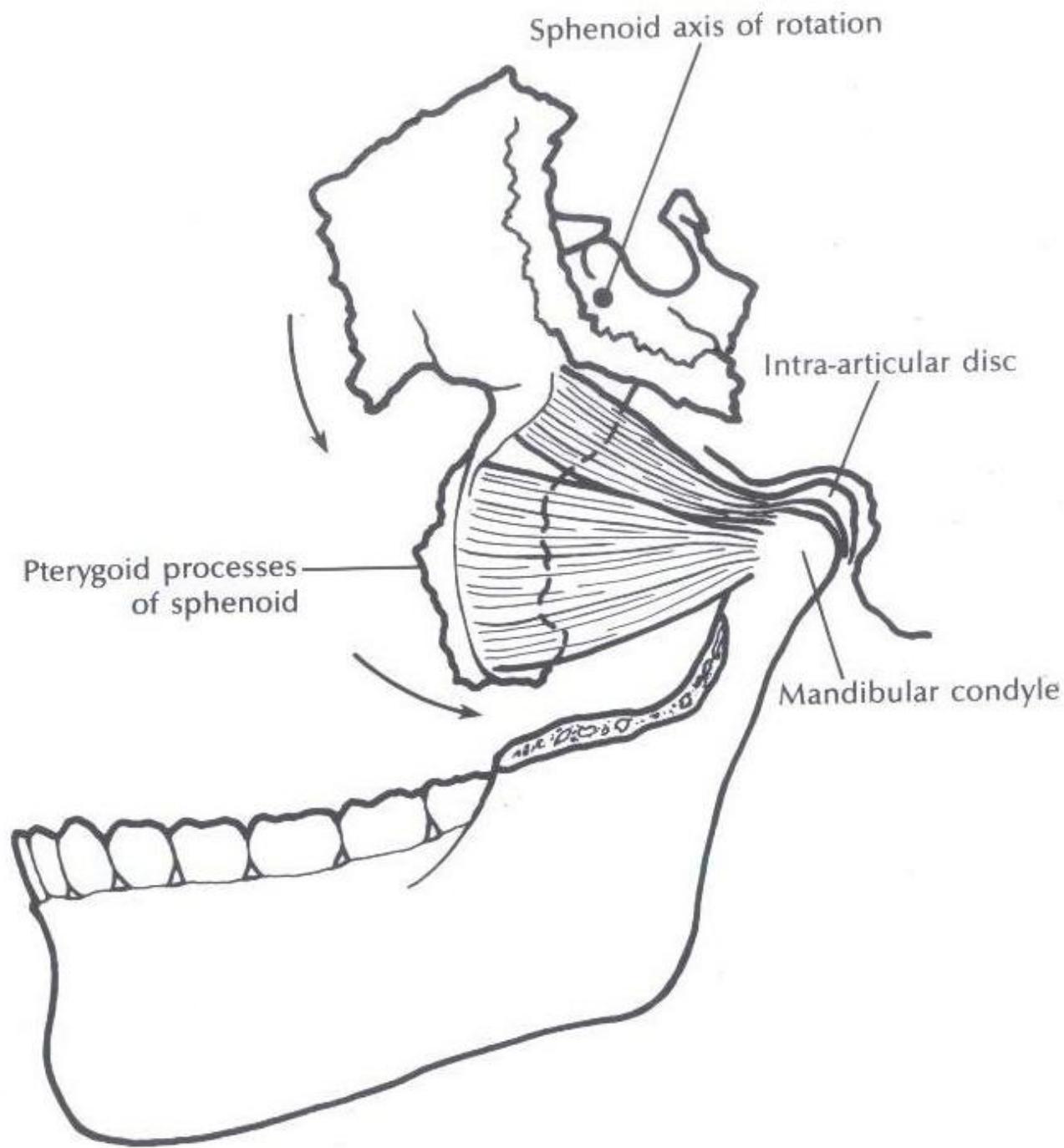




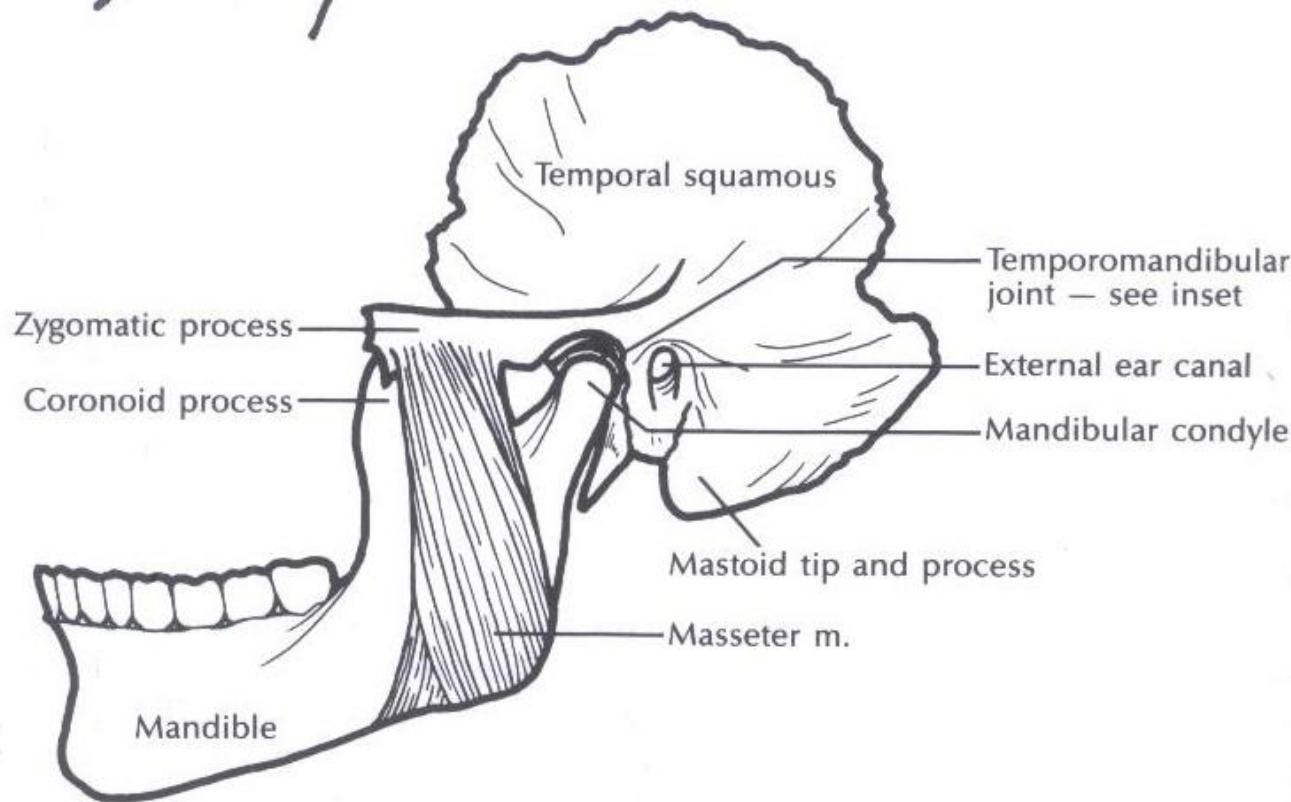
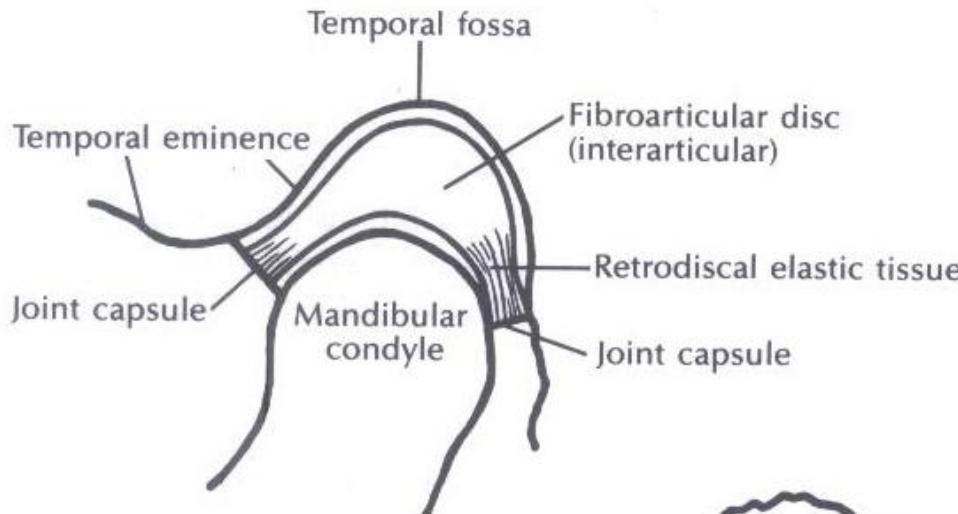


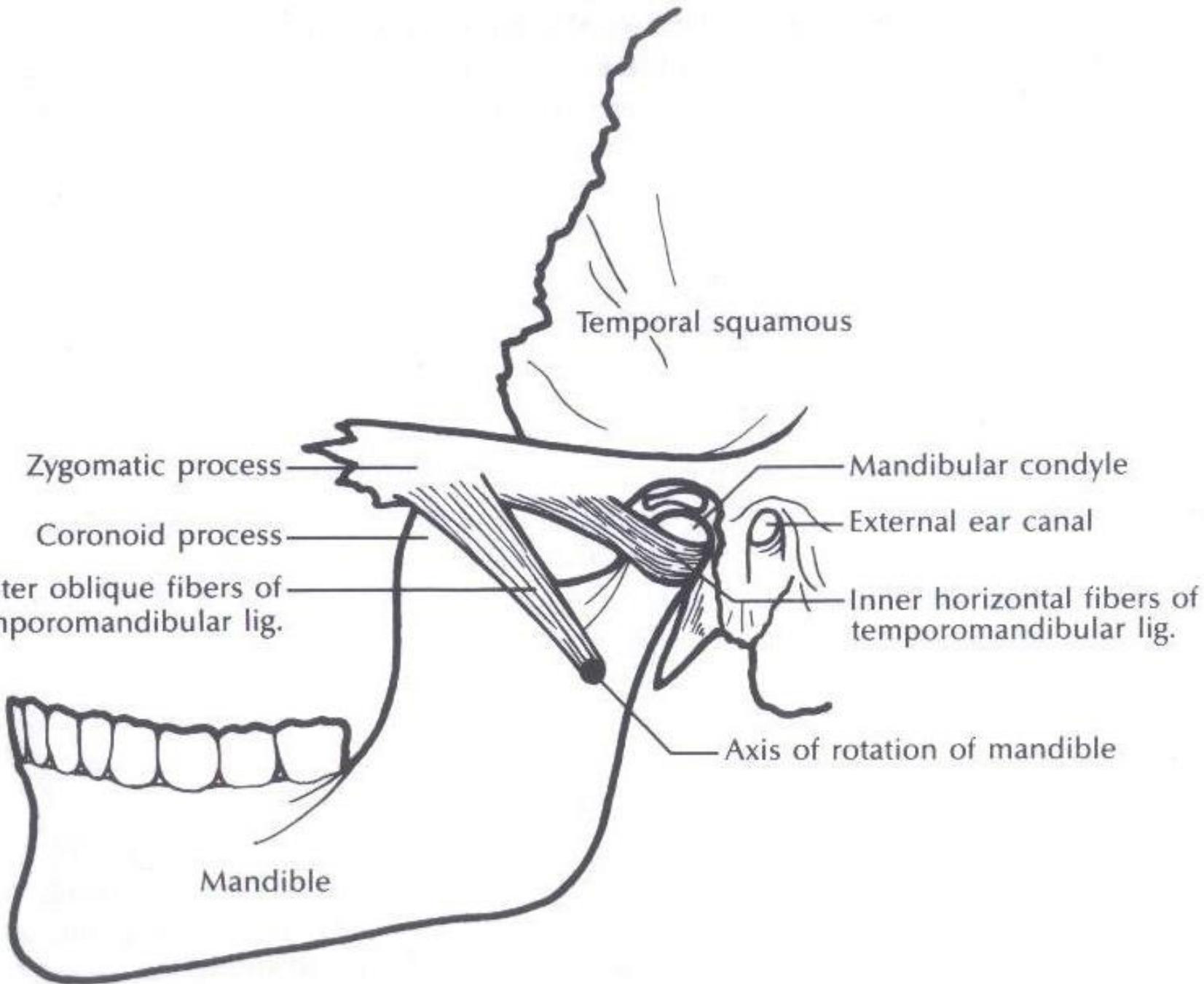


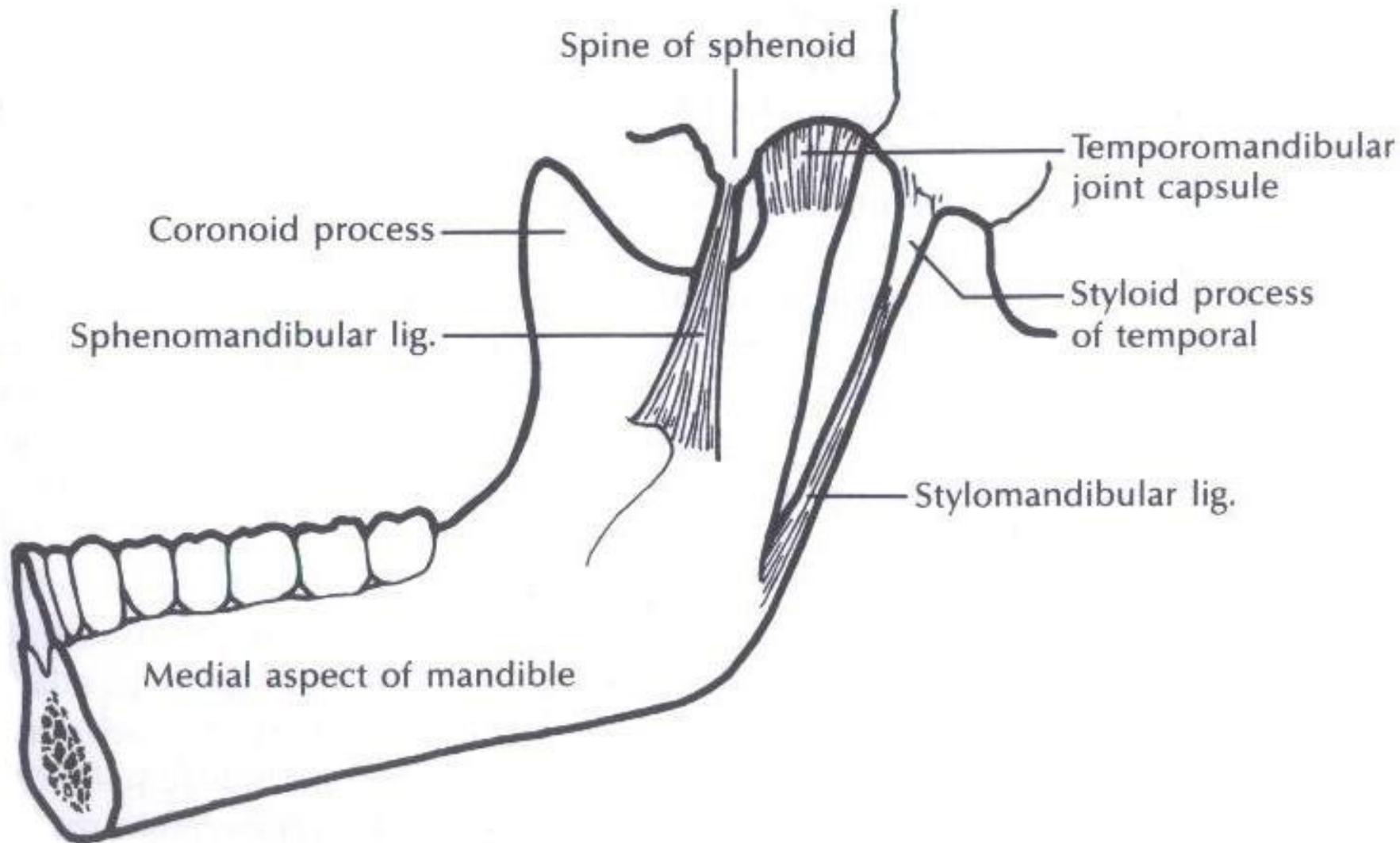




INSET







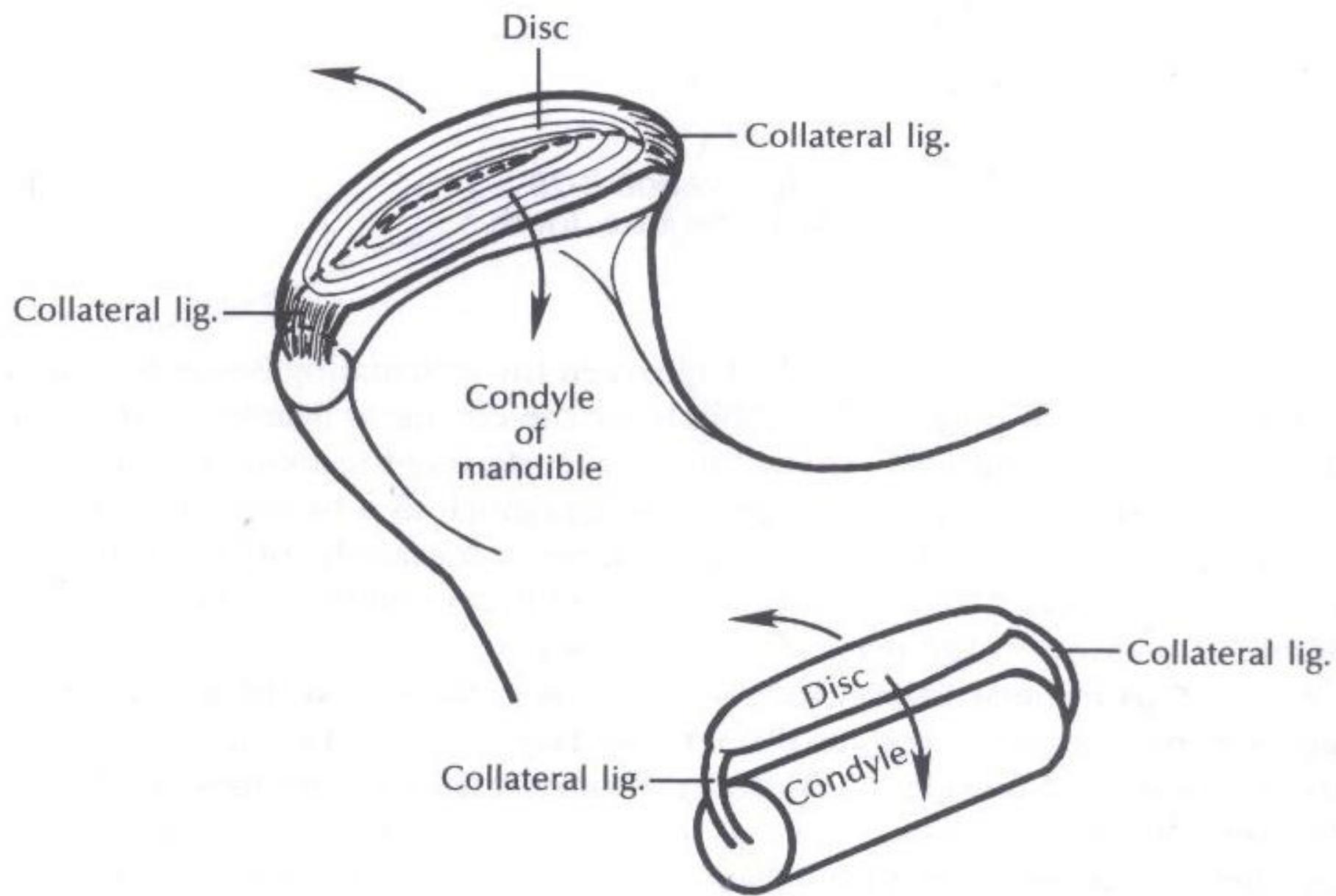
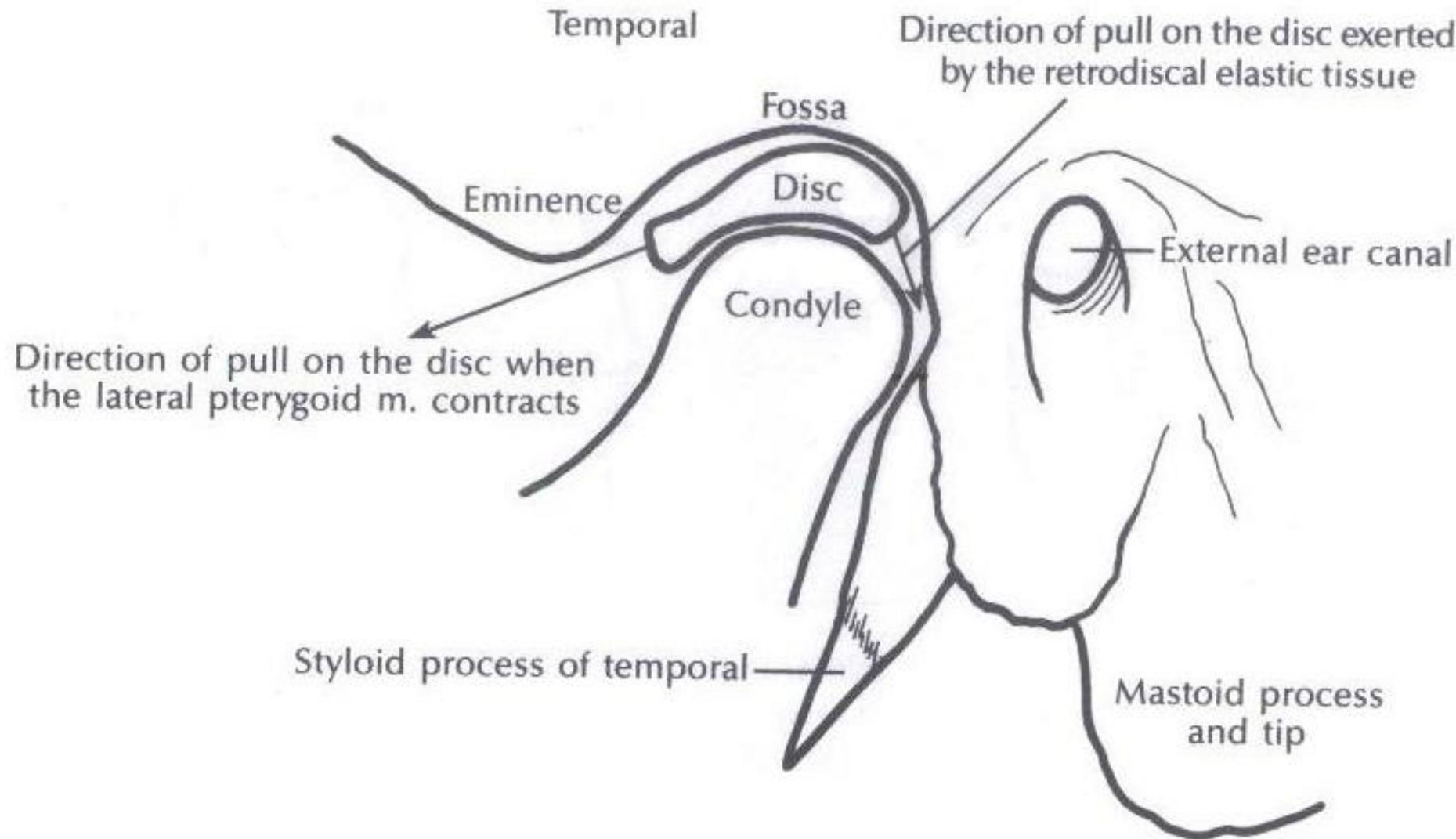


DIAGRAM SHOWING FUNCTION



TL mastoid



TL

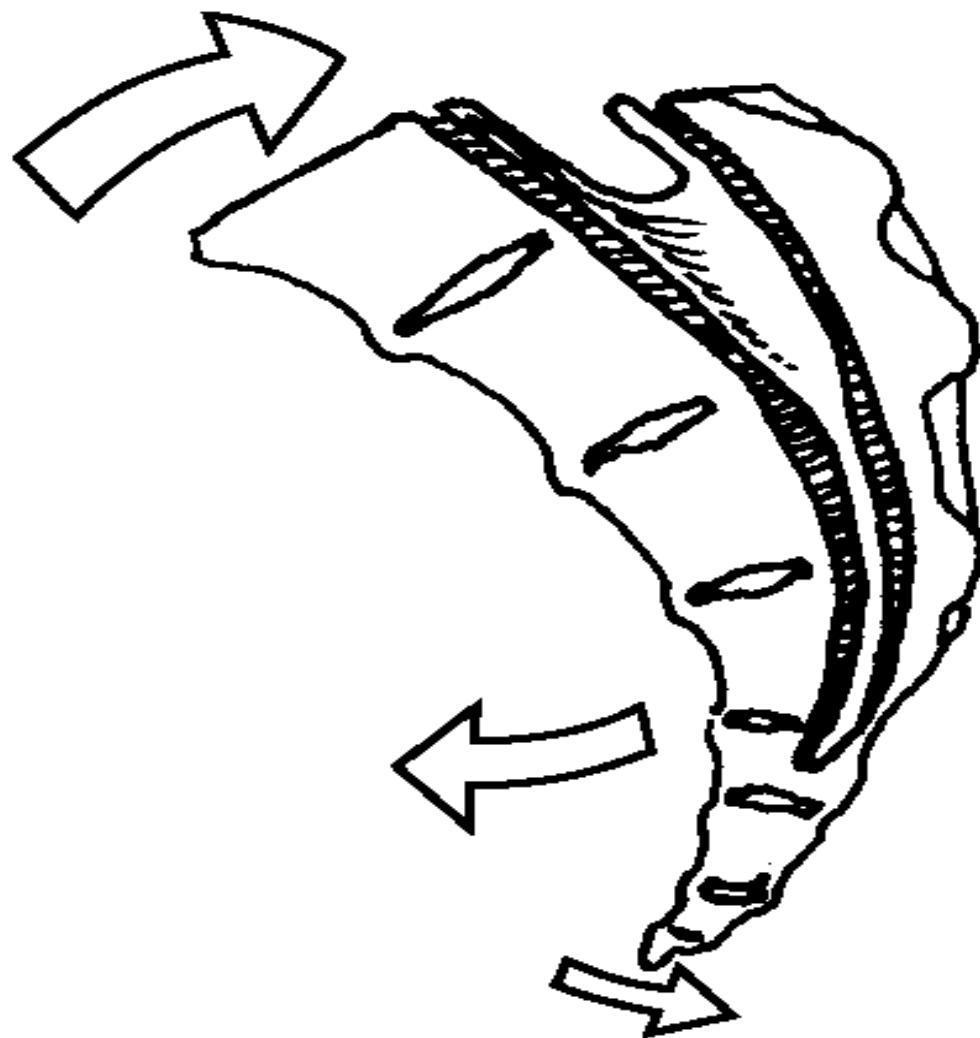
Sphenobasilar fault



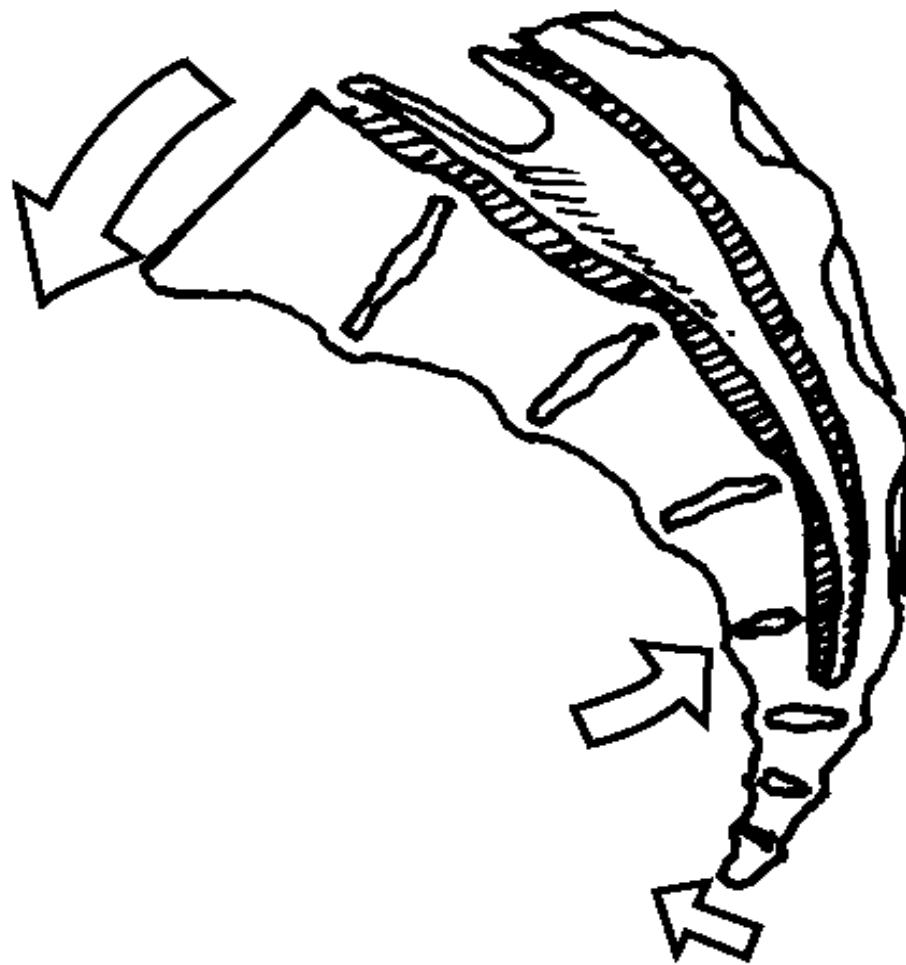
Cruciate fault

- Temporomandibular joint involvement
- Failure to swallow with the mouth partially open.
- The patient may complain of decreased mouth opening or of constant neck tightness

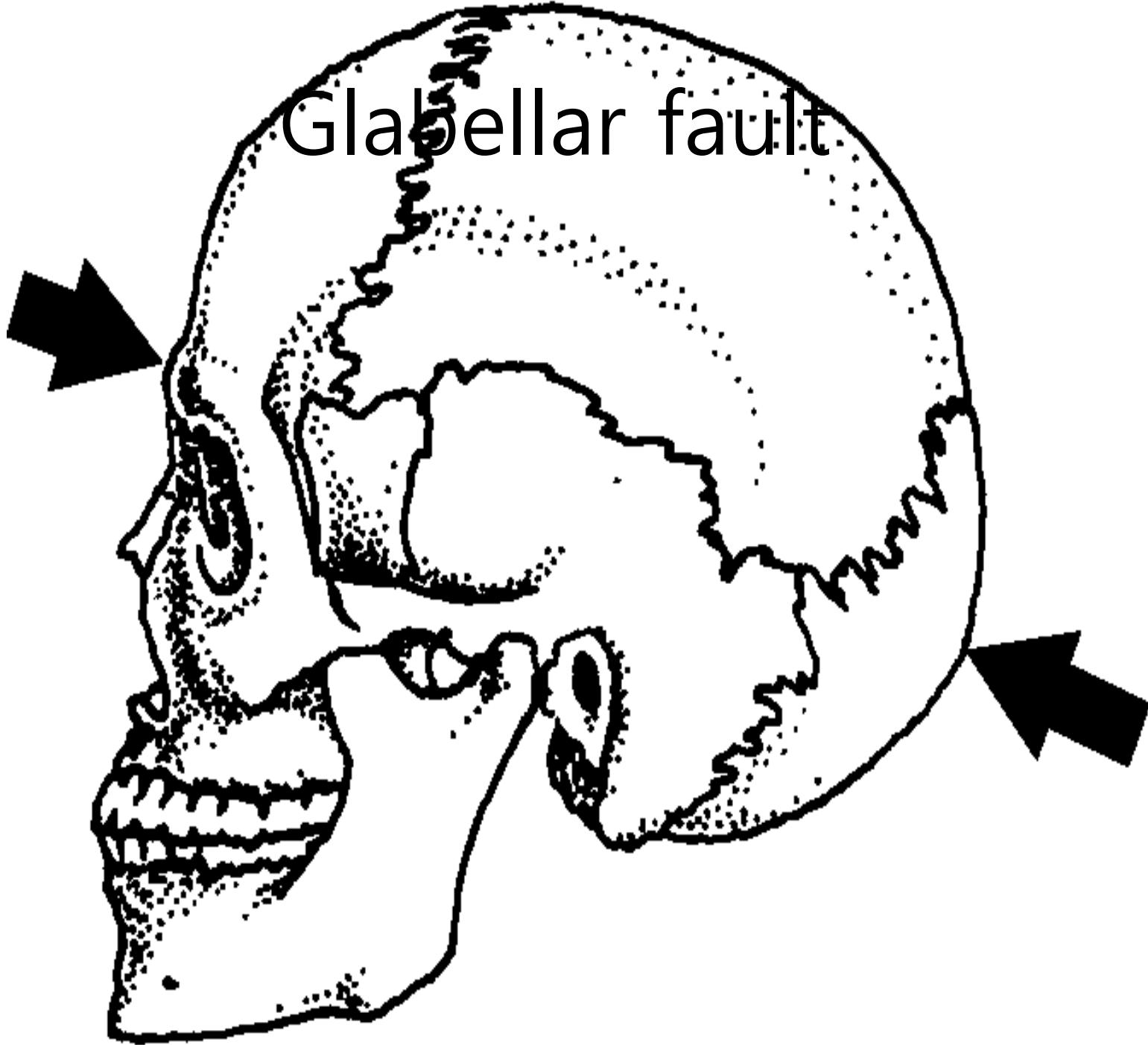
Sacral movement in inspiration

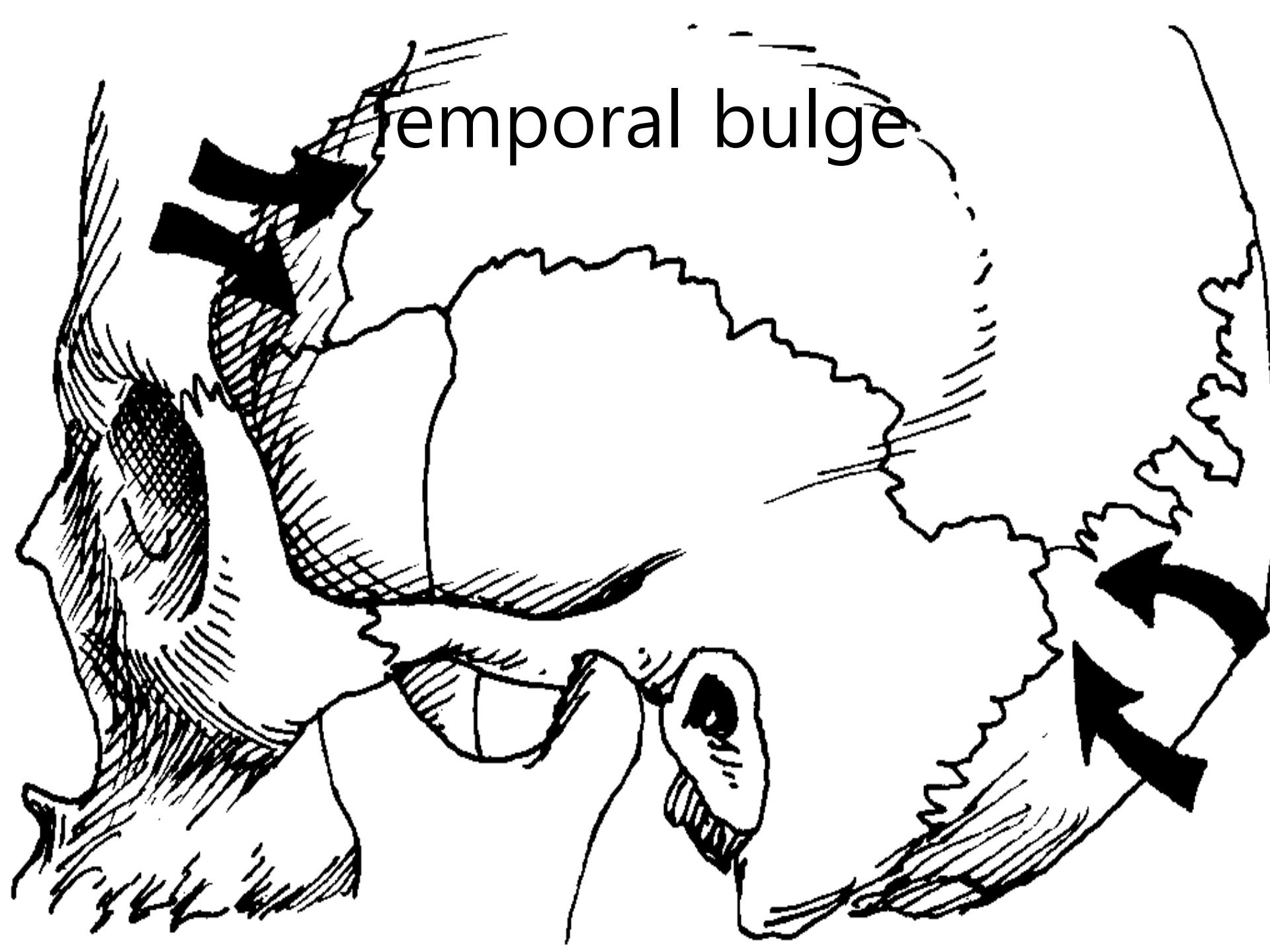


Sacral movement in expiration



Glabellar fault

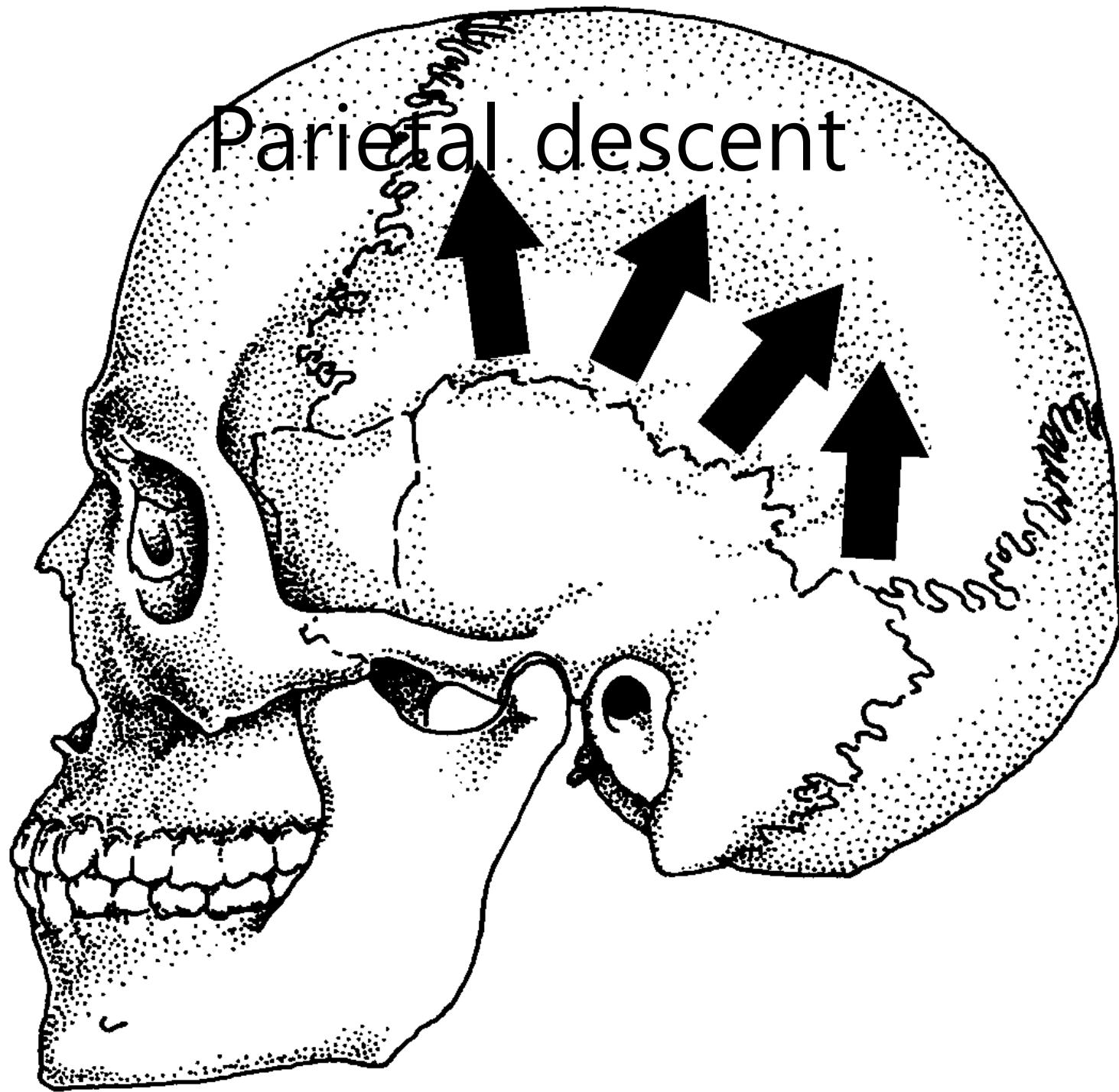




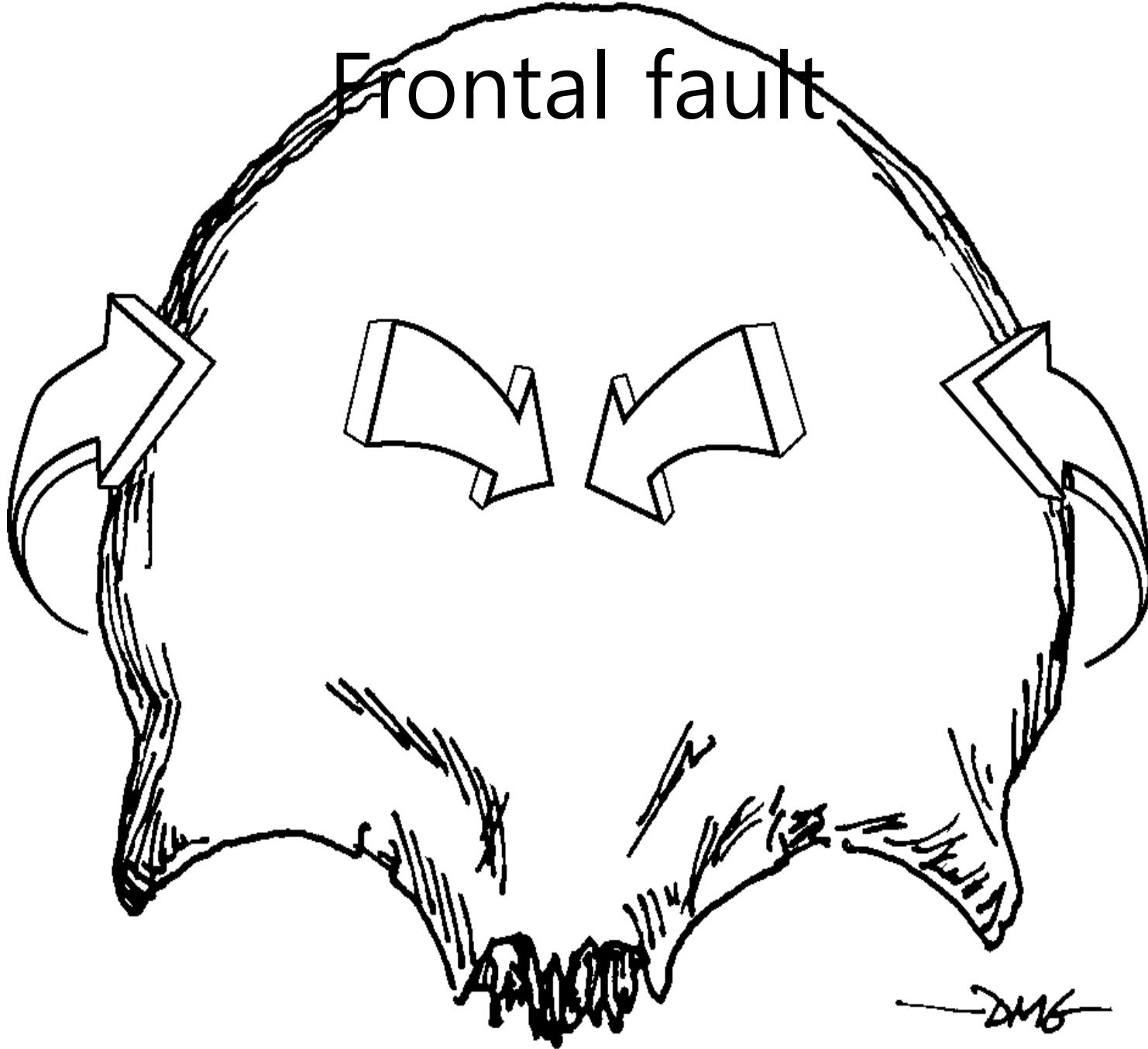
A detailed line drawing of a bird's head in profile, facing left. The drawing highlights various anatomical features with different patterns: the top of the head and a large area behind the eye are shaded with horizontal lines; the side of the head, from the eye to the back, is shaded with vertical lines; and the lower jaw and gape are filled with a dense cross-hatch pattern. The eye is depicted with a dark oval and a small white highlight. A thick black arrow points upwards and to the right from the bottom right corner of the drawing, indicating the direction of gaze or movement. The text 'temporal bulge' is written in a large, bold, sans-serif font across the top right of the drawing.

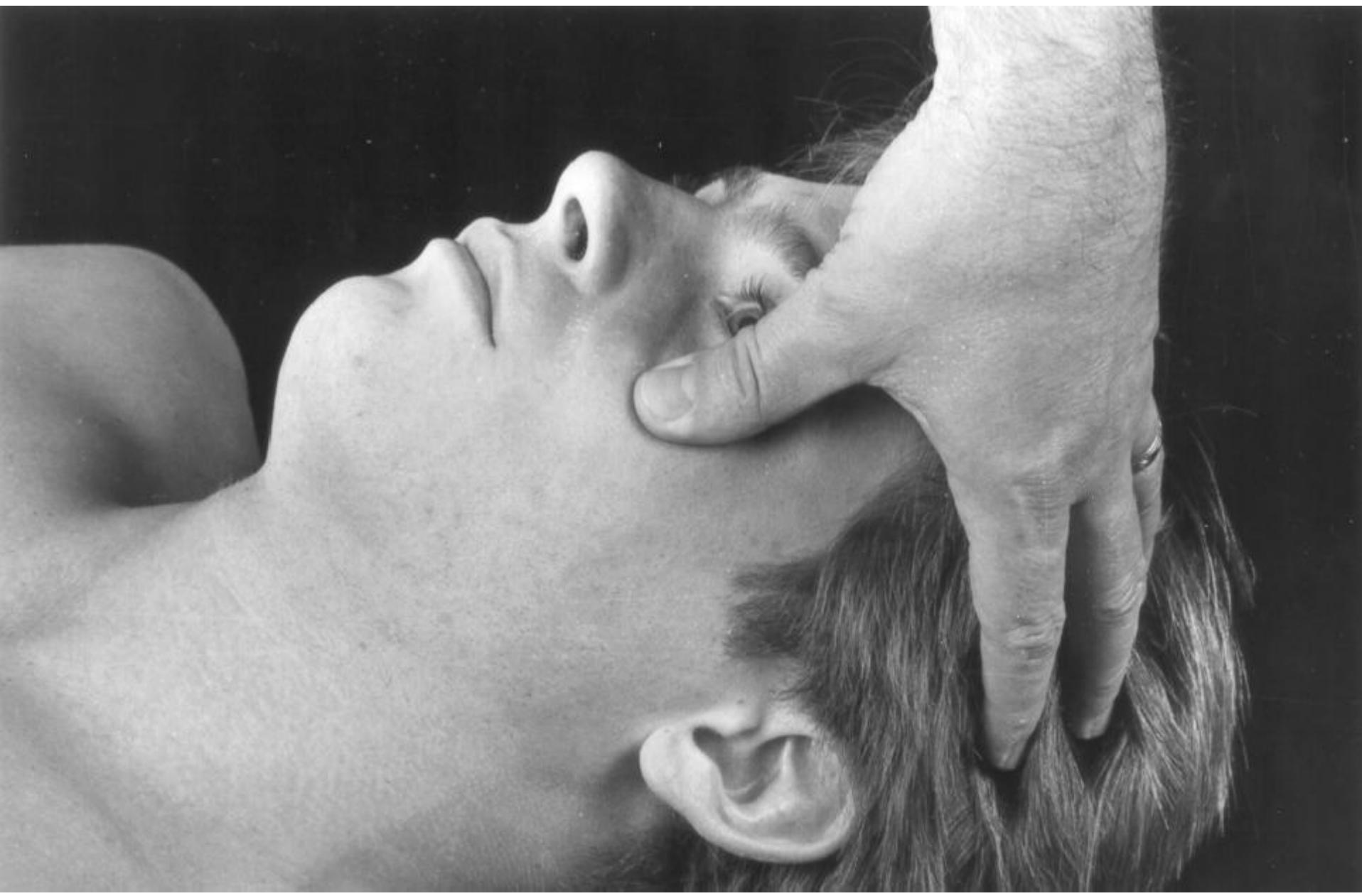
temporal bulge

Parietal descent



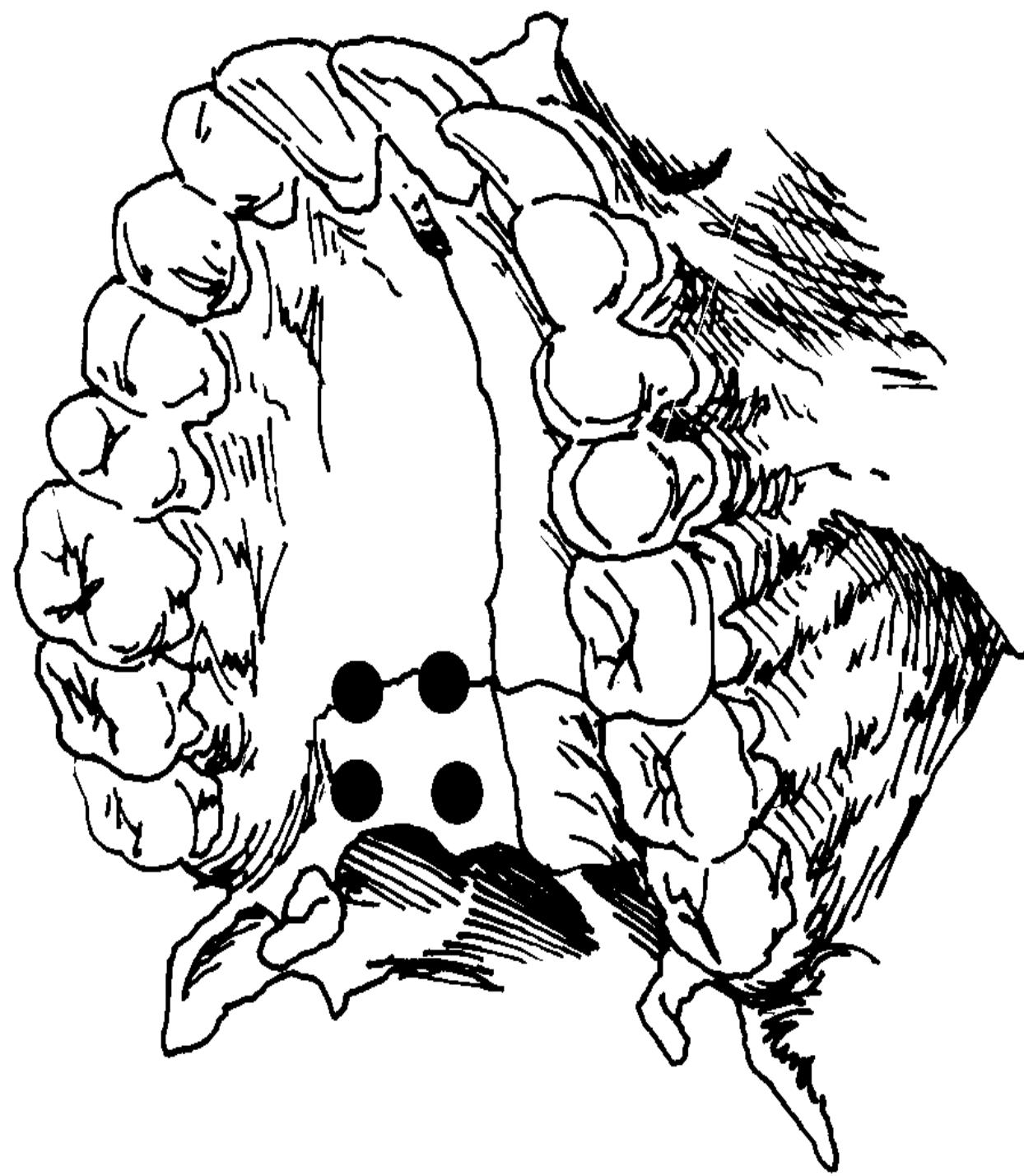
Frontal fault

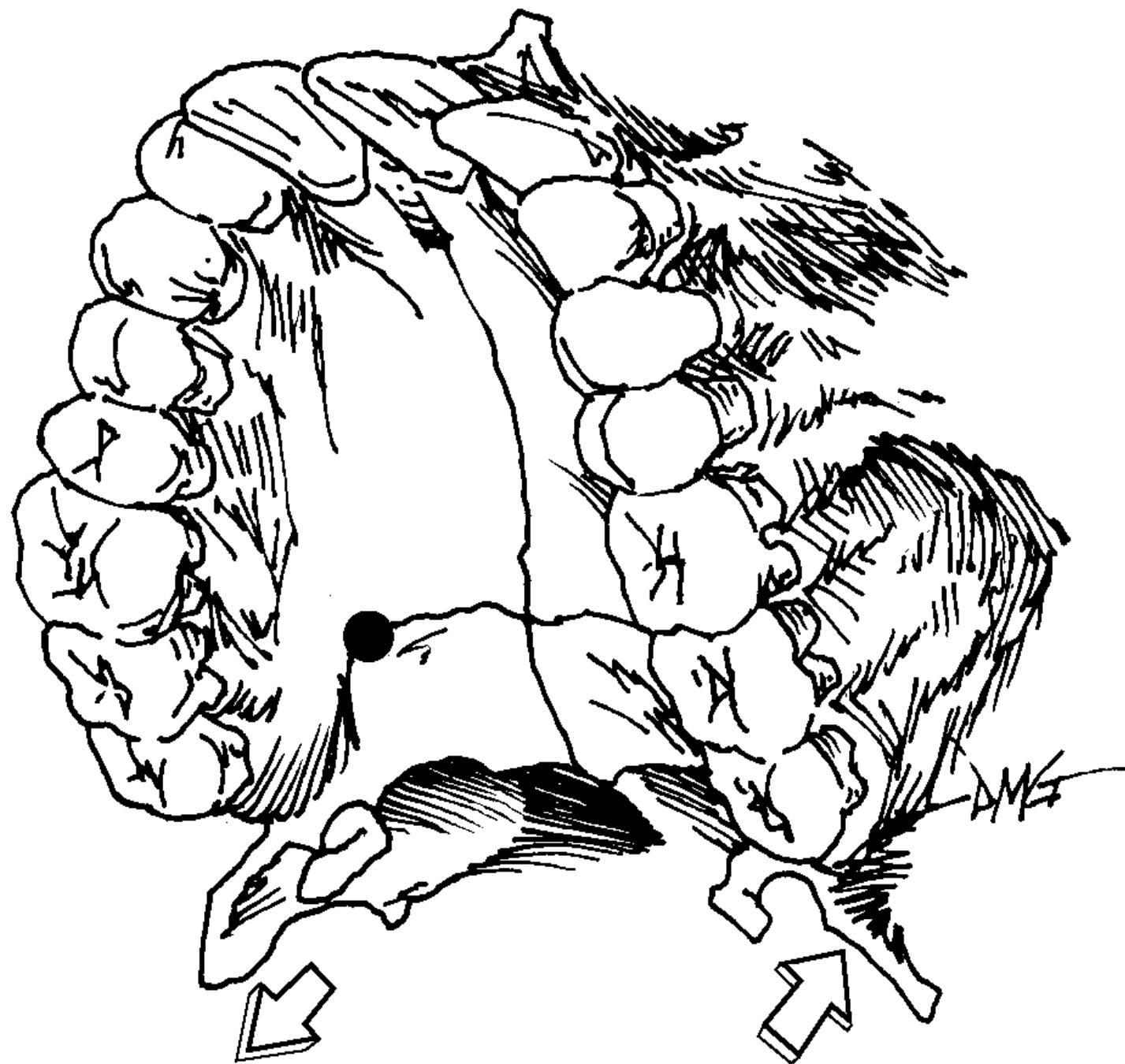


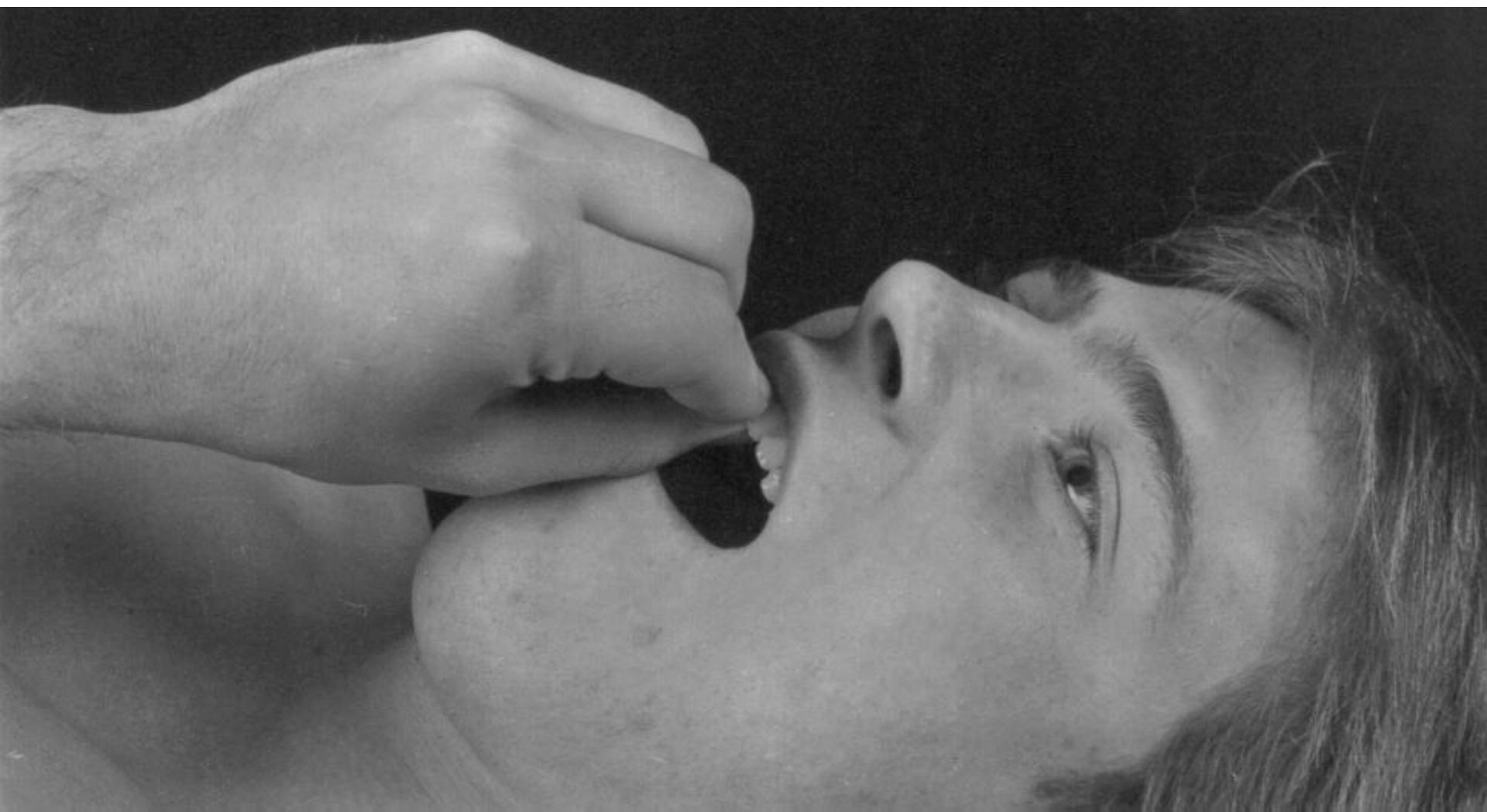


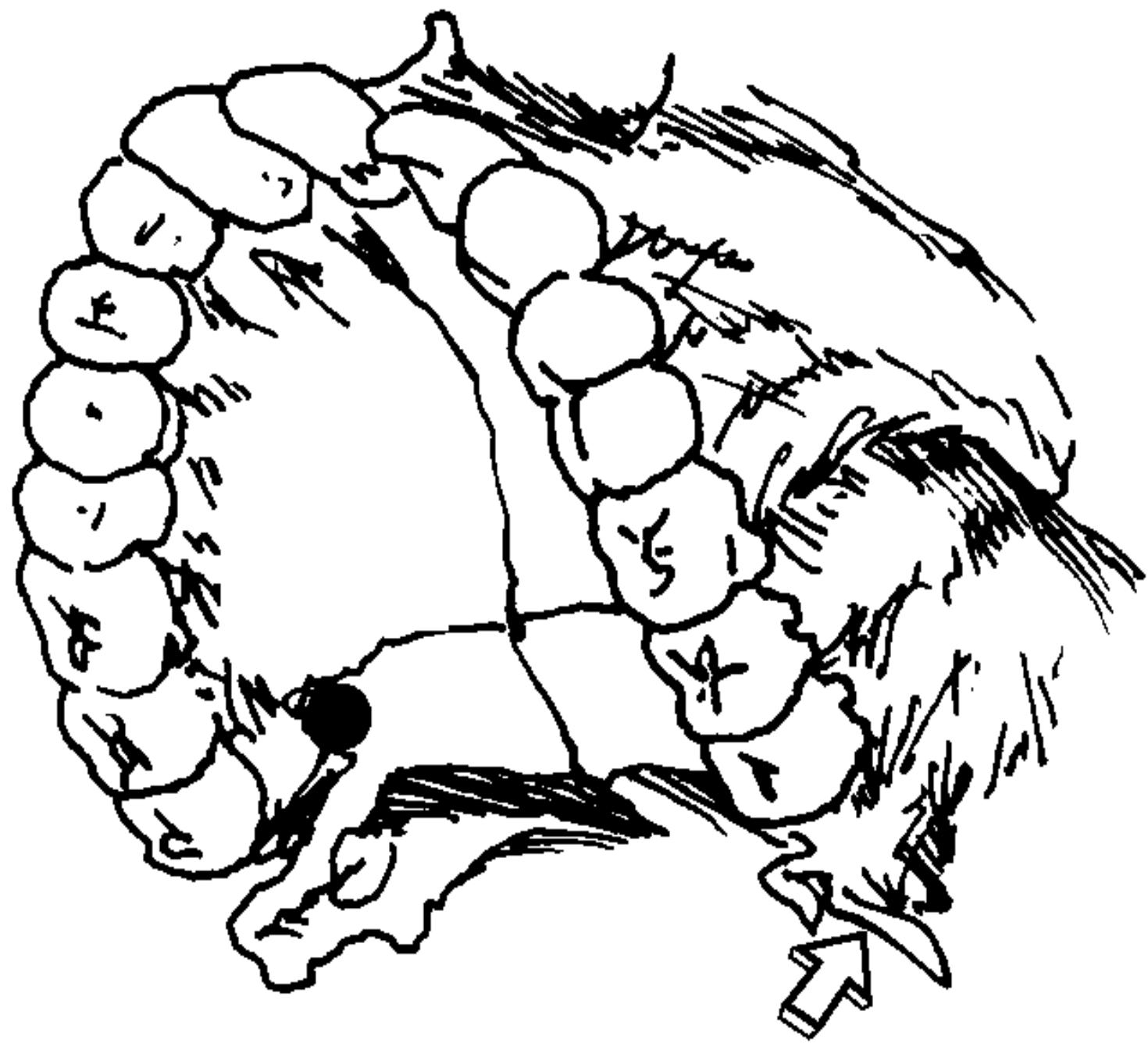
3 steps to correction

- Laterally and slightly inferiorly 20-40초간
–통증이 좋아지지 않으면 방향을 전방 혹은 후방으로 바꿀 것
- Gum in post molar: 10-20초
- Push on the opposite side of pterygoid process: 10-20초

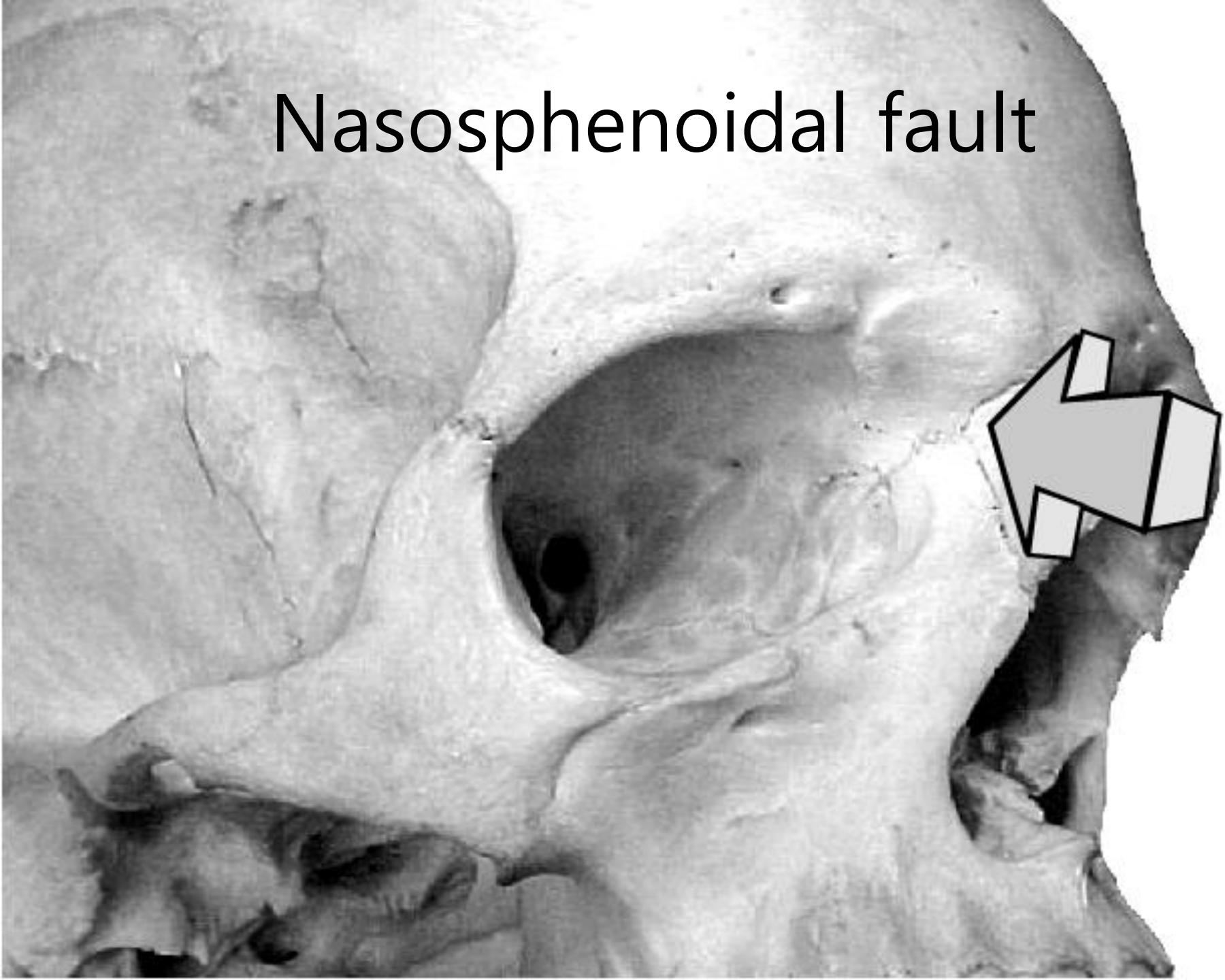


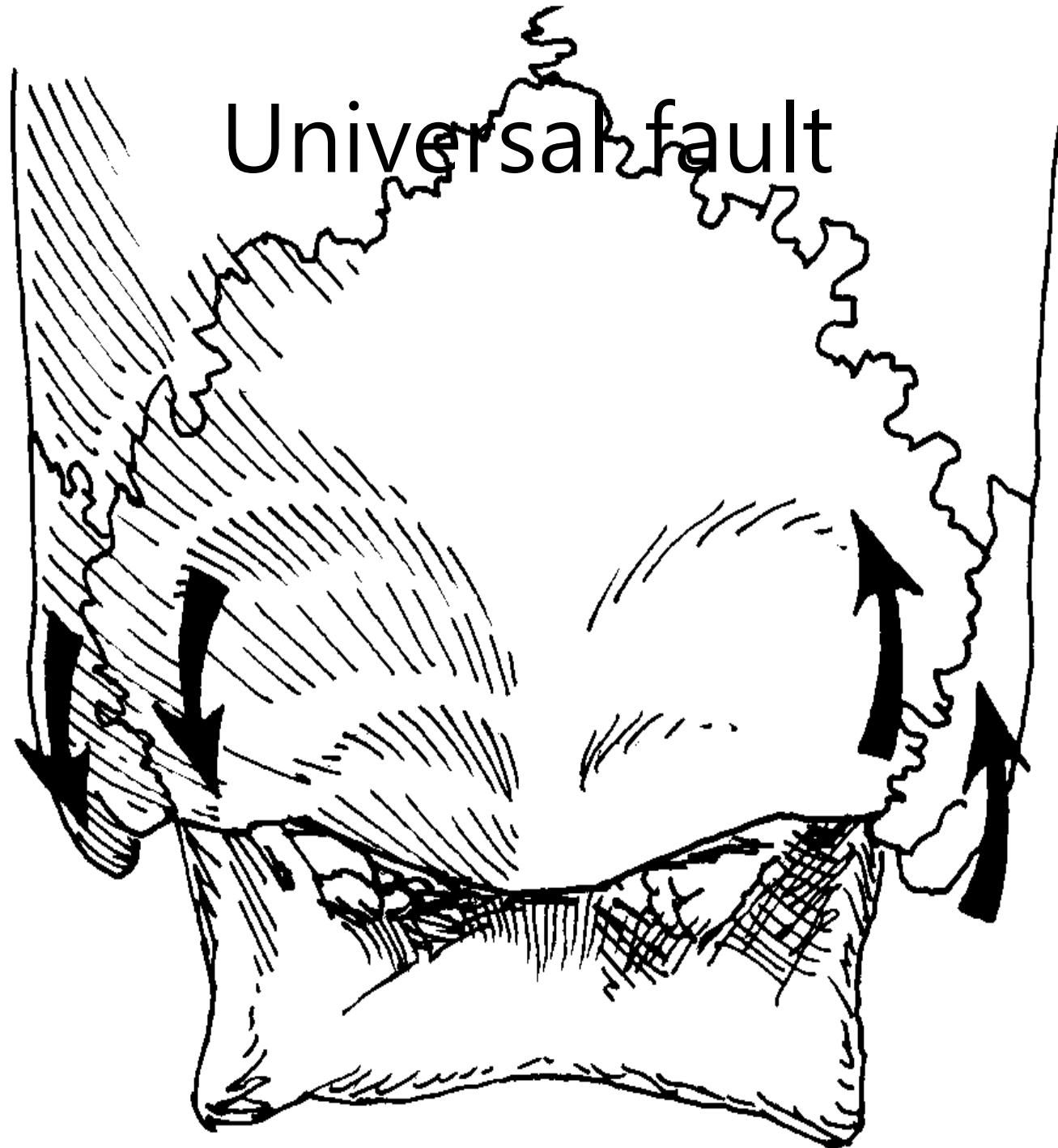






Nasosphenoidal fault



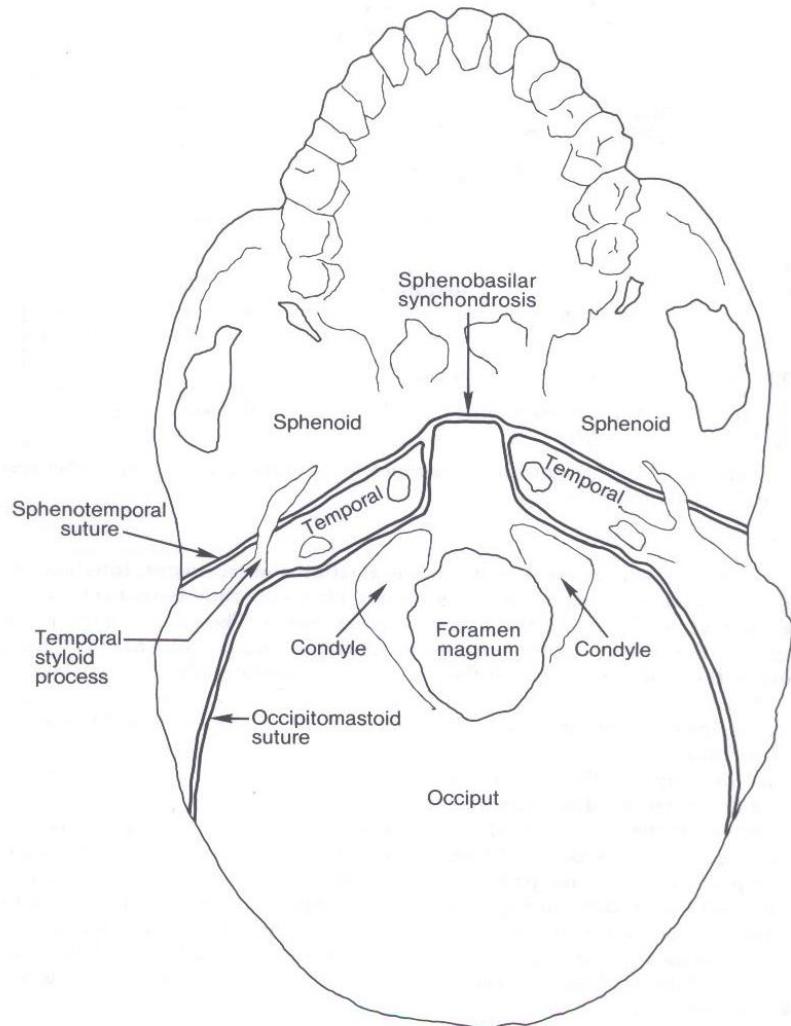


Check for pineal gland

- Great wing of sphenoid 누르기
- Neurolink 방식: 혀를 soft palate에

Maxilla-palatine complex

- Flexion/ extension movement
- Torsion: torsion to the R/L
- Shear
- Compression: hard palate-sphenoid decompression



Vomer

- Flexion/ extension movement
- Torsion: torsion to the R/L
- Shear
- Compression: decompression ant inf with stabilizing sphenoid

