



O Exame Neurológico

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Neurologia/Semiologia - HUAP

Qual caminho seguir?



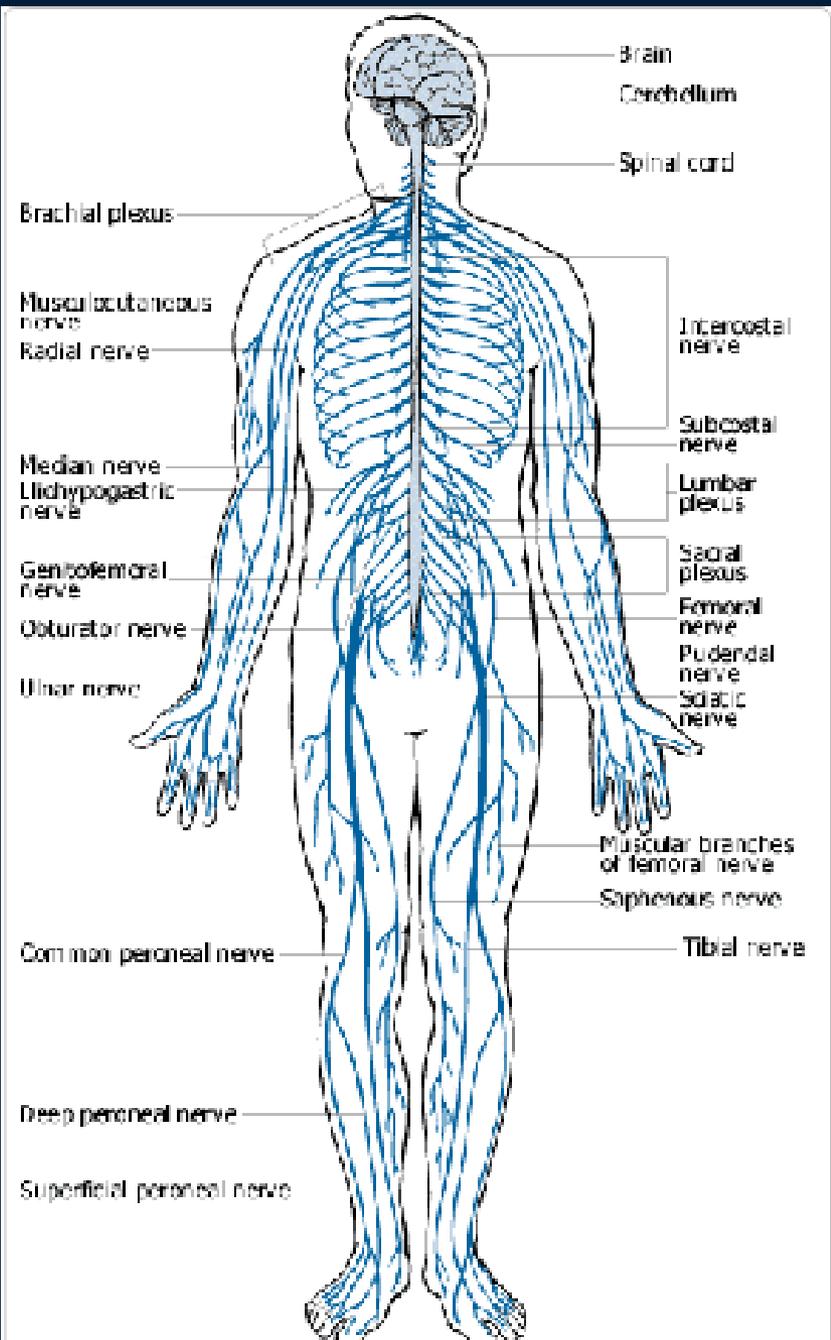
Objetivos:

- **Topografar a lesão;**
- **Definir diagnóstico etiológico;**
- **Avaliar prognóstico;**
- **Orientar tratamento específico.**

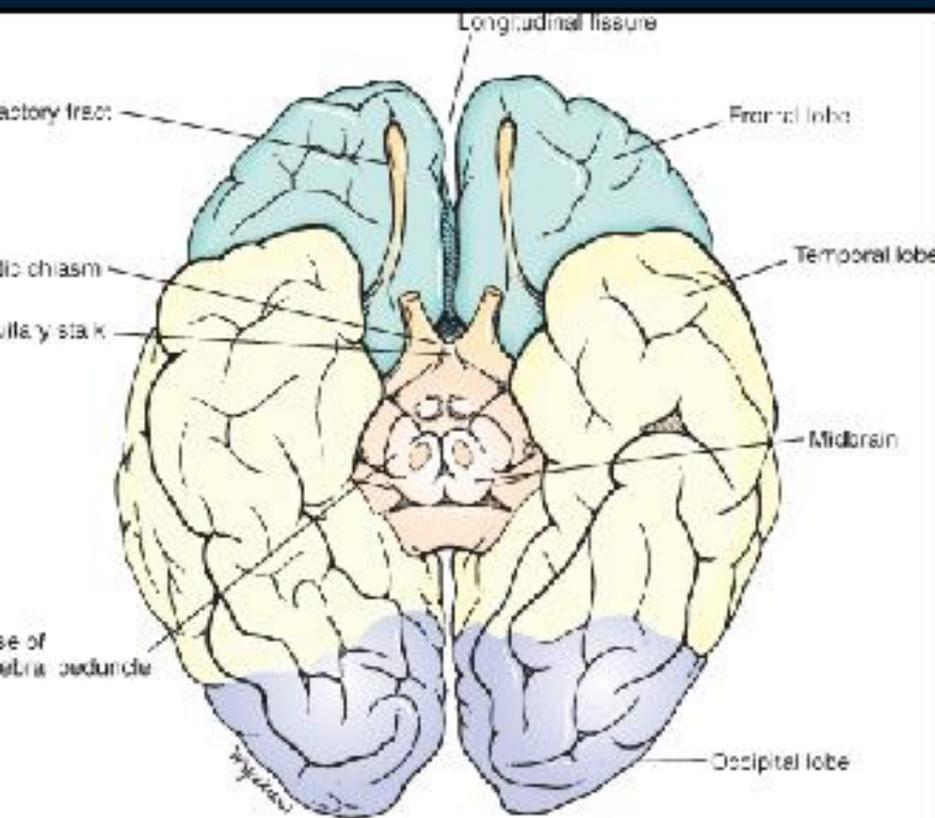
Materiais básicos para o exame:

- Lanterna**
- Martelo**
- Agulha**
- Algodão / Gaze**
- Diapasão 128 HZ**
- Tubos com água quente e fria**
- Oftalmoscópio**

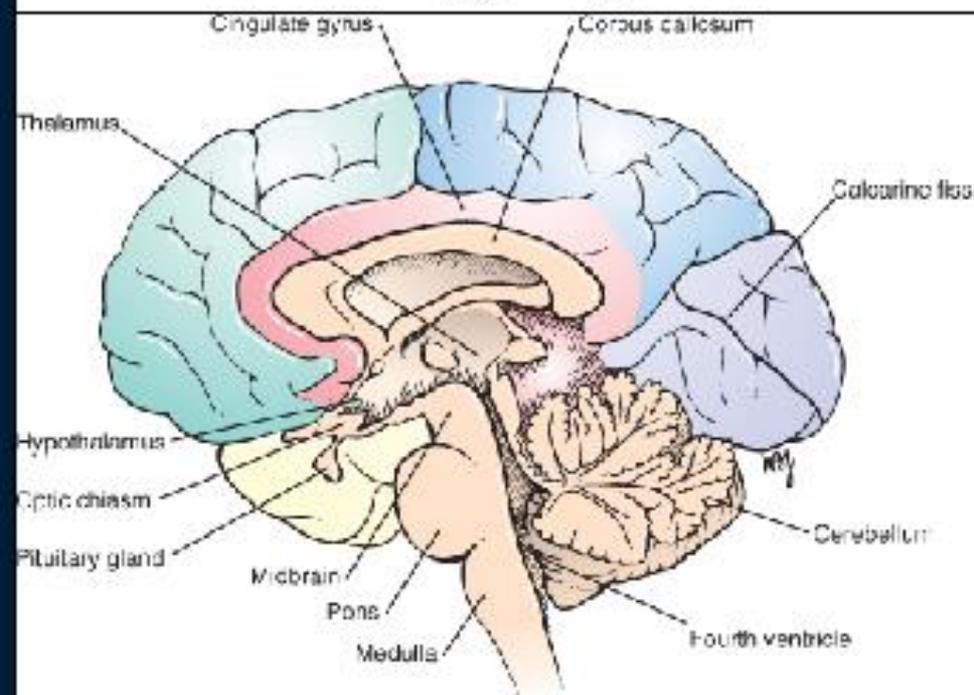
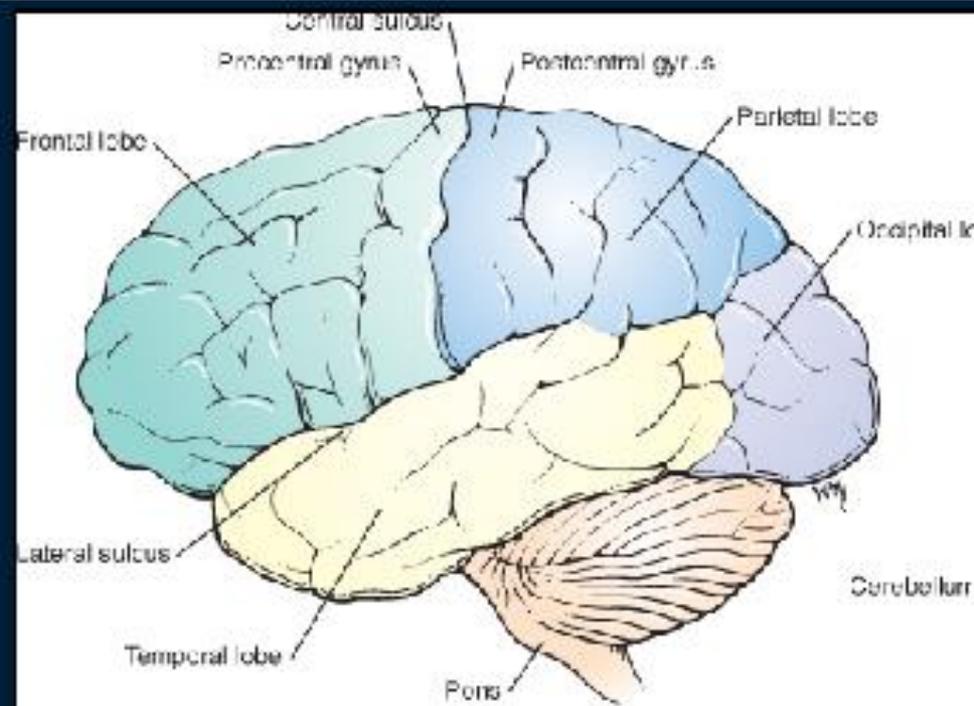
Anatomia



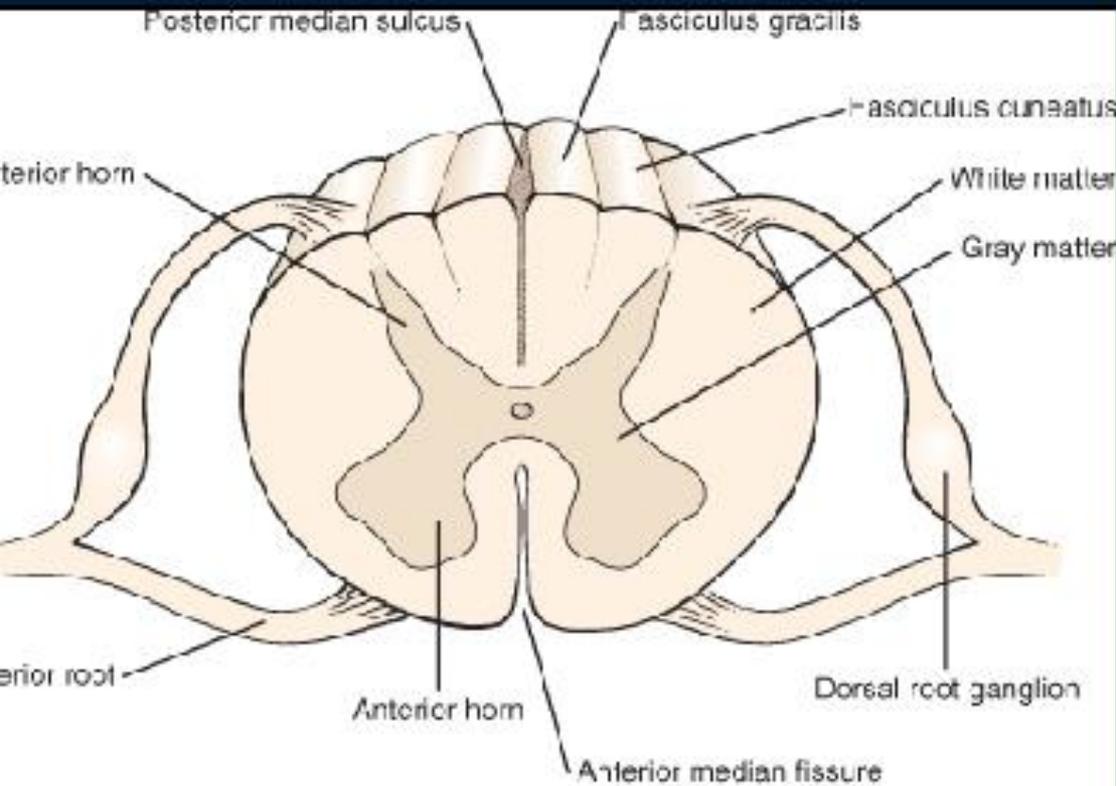
Anatomy



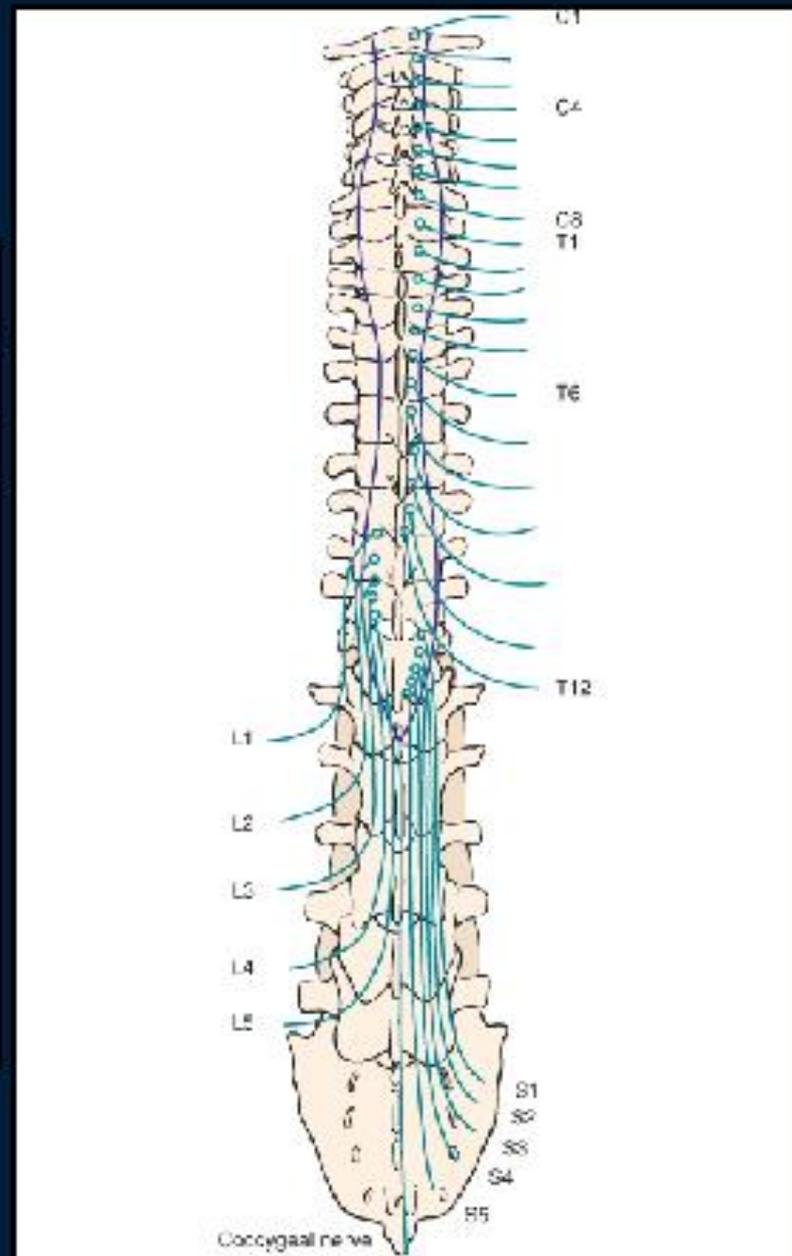
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Anatomy

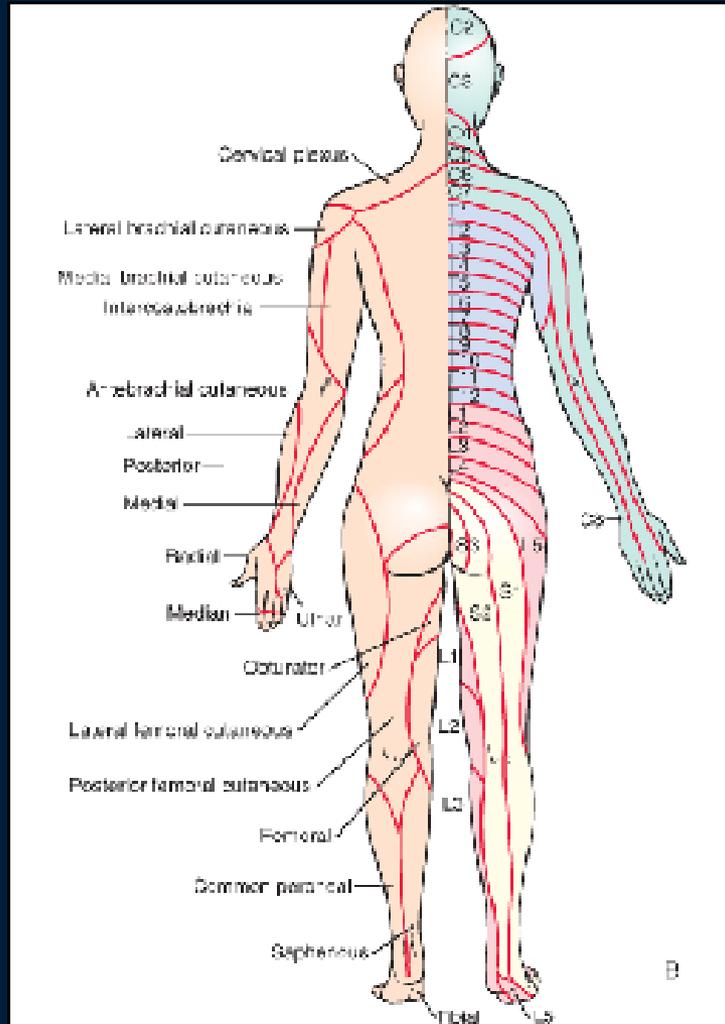
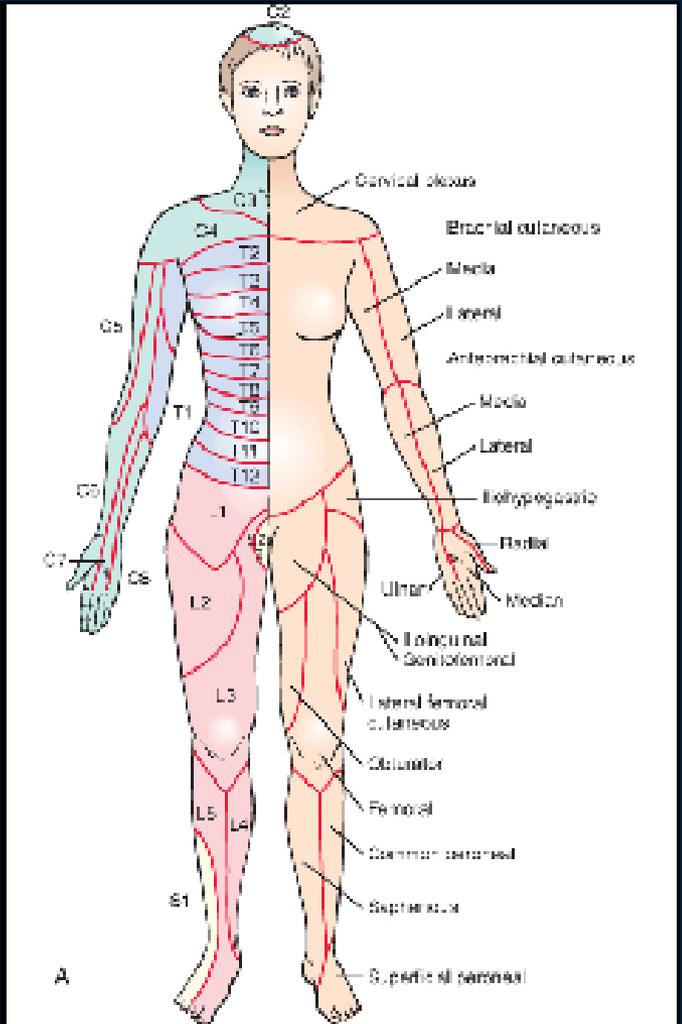


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Anatomia



Mas antes..... Lembre-se:

- Nunca dispense uma boa anamnese e o exame clínico. O exame neurológico só deve ser realizado após esses passos.**
- Sempre veja o paciente como um todo e não por partes.**
- Examine o paciente despido.**

Roteiro do exame dos pacientes sem alteração do nível de consciência

- **Inspeção**
- **Estado de consciência e cognição**
- **Marcha e estática ***
- **Nervos cranianos**
- **Força e tônus muscular**
- **Reflexos superficiais e profundos**
- **Coordenação**
- **Sensibilidades superficiais e profundas**
- **Irritação meníngea / radicular**

Inspeção

- **Etapa primordial do exame neurológico**
- **Se inicia no primeiro contato com o paciente**
- **Condições importantes para a inspeção:**
 - **DESPIR O PACIENTE**
 - **Boa relação médico-paciente**
 - **Iluminação adequada**
 - **Ambiente com privacidade**

Inspeção

- Estática

- Dinâmica

Marcha

**Movimentos
Involuntários**

Automatismos

Crises convulsivas

ESTÁTICA

- **Estado geral**
- **Estado da consciência**
- **Estado mental**
- **Estado emocional**
- **Estado de higiene**

ESTÁTICA

- **Estado nutricional/hidratação**
- **Biotipo**
- **Postura/atitude**
- **Fácies**
- **Pele, mucosas, anexos e fâneros**

Herpes zoster



Radicular sensory disturbances and pain in herpes zoster

Estado da consciência

- **Alerta**
- **Sonolência**
- **Torpor**
- **Coma superficial**
- **Coma profundo**

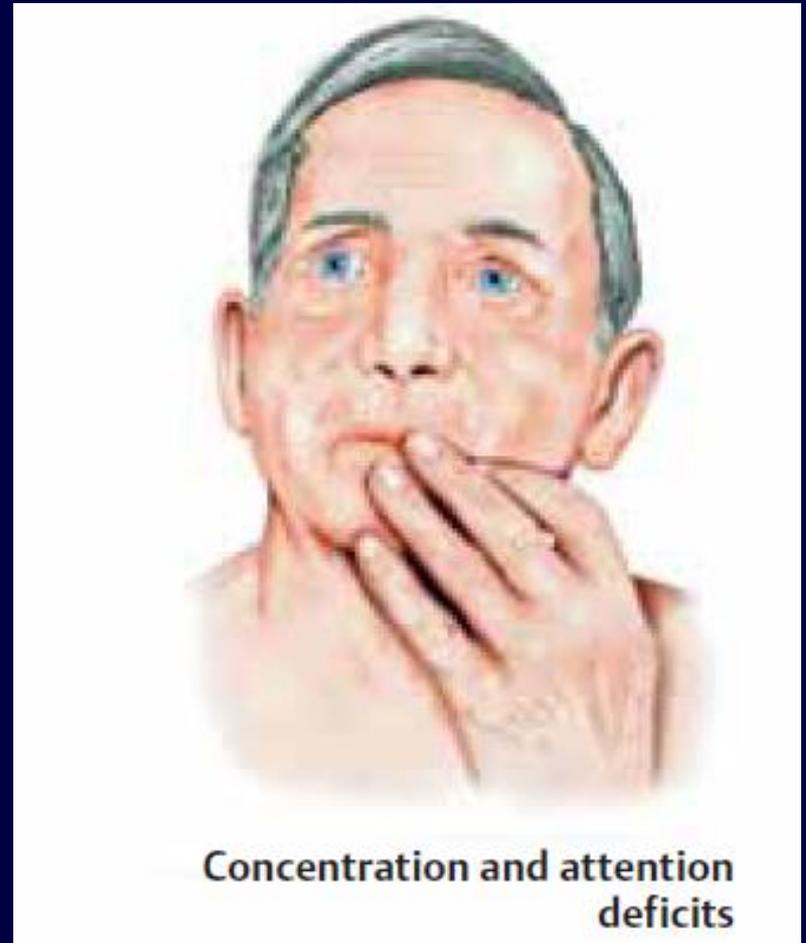
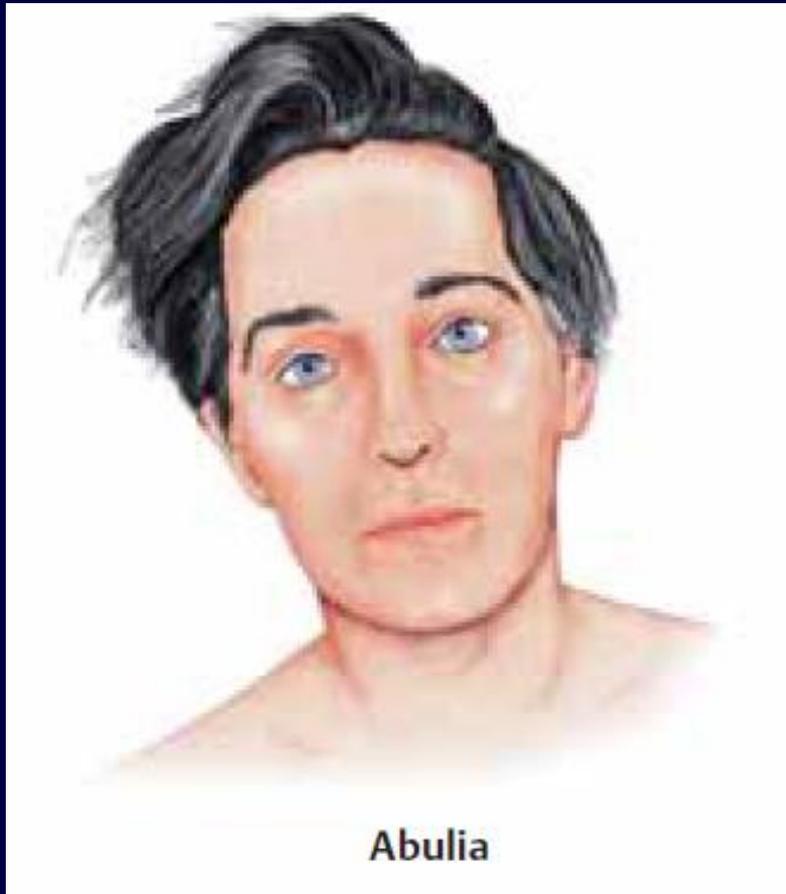
Estado mental

- **Orientação auto e alopsíquica.**
- **Atenção.**
- **Memória (fixação, conservação, evocação).**
- **Afetividade.**
- **Associação de idéias.**
- **Raciocínio.**
- **Alucinação e ilusão**

Estado emocional

- **Apatia,**
- **Depressão,**
- **Ansiedade,**
- **Hiperemotividade.**

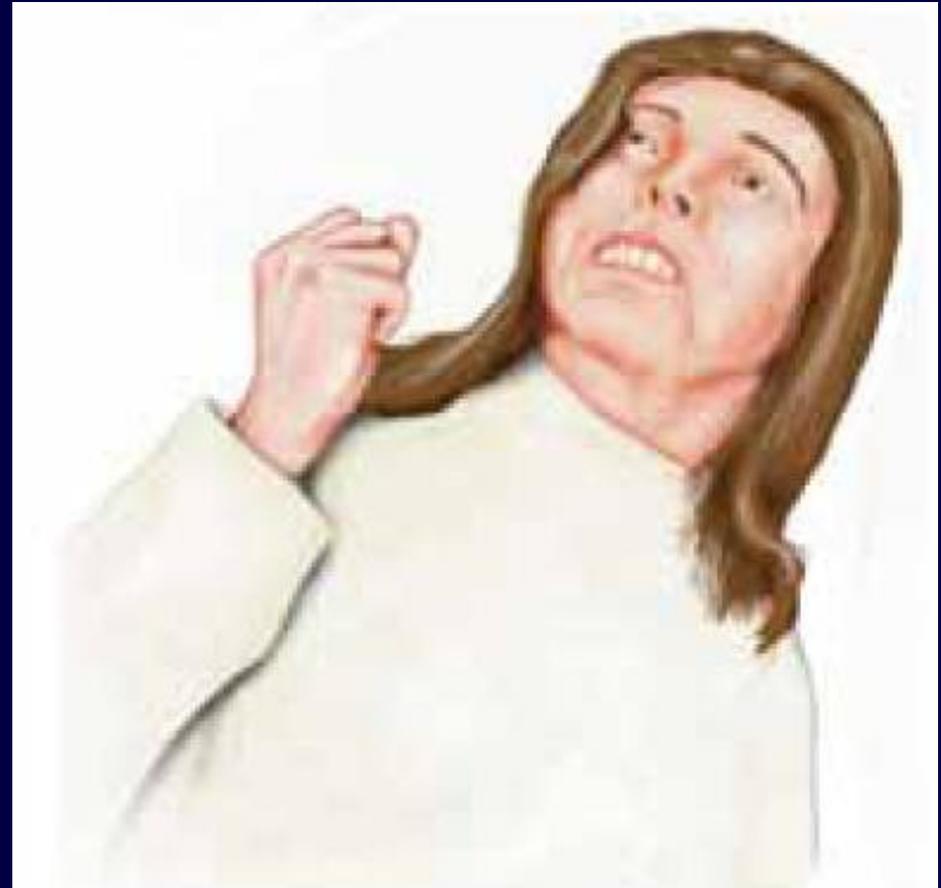
Estado emocional



Estado emocional

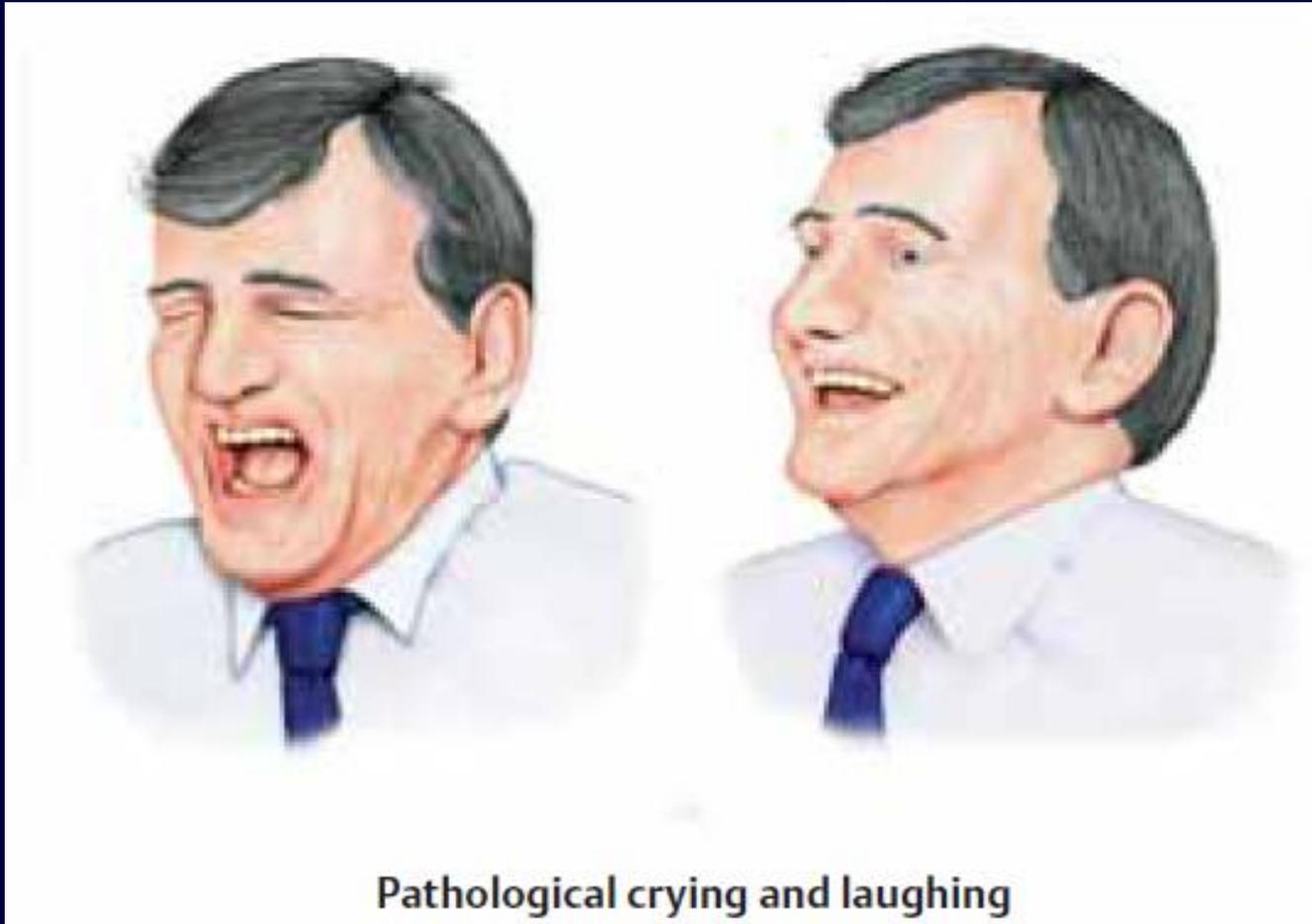


Anxiety, misperceptions



Defensiveness, irritability,
psychomotor agitation

Estado emocional



Pathological crying and laughing

Estado de consciência e cognição

Discurso e linguagem

- **Qualidade da voz (Disfonia)**
- **Articulação das palavras (Diasartria)**
- **Compreensão**
- **Coerência**
- **Afasia (Motora, sensitiva, mista, transcortical)**

Estado de consciência e cognição

Escala de Coma de Glasgow

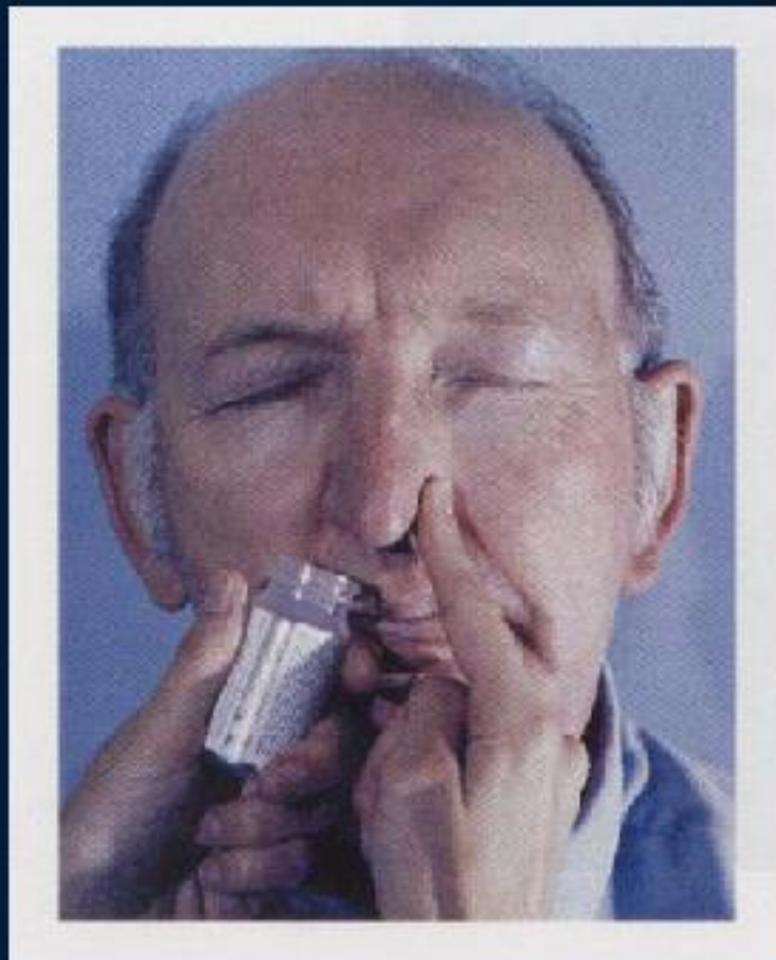
		Pontuação
Resposta ocular	Abertura espontânea	4
	A estímulos verbais	3
	A estímulos dolorosos	2
	Nenhuma	1
Resposta verbal	Orientada	5
	Confusa	4
	Palavras inapropriadas	3
	Incoerente	2
	Nenhuma	1
Resposta motora	Obedece a ordens	6
	Localiza à dor	5
	Fuga à dor	4
	Flexão à dor (descorticação)	3
	Extensão à dor (descerebração)	2
	Nenhuma	1

Nervos cranianos

Cranial Nerve	Function	Clinical Findings with Lesion
I: Olfactory	Smell	Anosmia
II: Optic	Vision	Amaurosis
III: Oculomotor	Eye movements; pupillary constriction; accommodation	Diplopia; ptosis; mydriasis; loss of accommodation
IV: Trochlear	Eye movements	Diplopia
V: Trigeminal	General sensation of face, scalp, and teeth; chewing movements	"Numbness" of face; weakness of jaw muscles
VI: Abducens	Eye movements	Diplopia
VII: Facial	Taste; general sensation of palate and external ear; lacrimal gland and submandibular and sublingual gland secretion; facial expression	Loss of taste on anterior two thirds of tongue; dry mouth; loss of lacrimation; paralysis of facial muscles
VIII: Vestibulocochlear	Hearing; equilibrium	Deafness; tinnitus; vertigo; nystagmus
IX: Glossopharyngeal	Taste; general sensation of pharynx and ear; elevates palate; parotid gland secretion	Loss of taste on posterior one third of tongue; anesthesia of pharynx; partially dry mouth
X: Vagus	Taste; general sensation of pharynx, larynx, and ear; swallowing; phonation; parasympathetic to heart and abdominal viscera	Dysphagia; hoarseness; palatal paralysis
XI: Spinal accessory	Phonation; head, neck, and shoulder movements	Hoarseness; weakness of head, neck, and shoulder muscles
XII: Hypoglossal	Tongue movements	Weakness and wasting of tongue

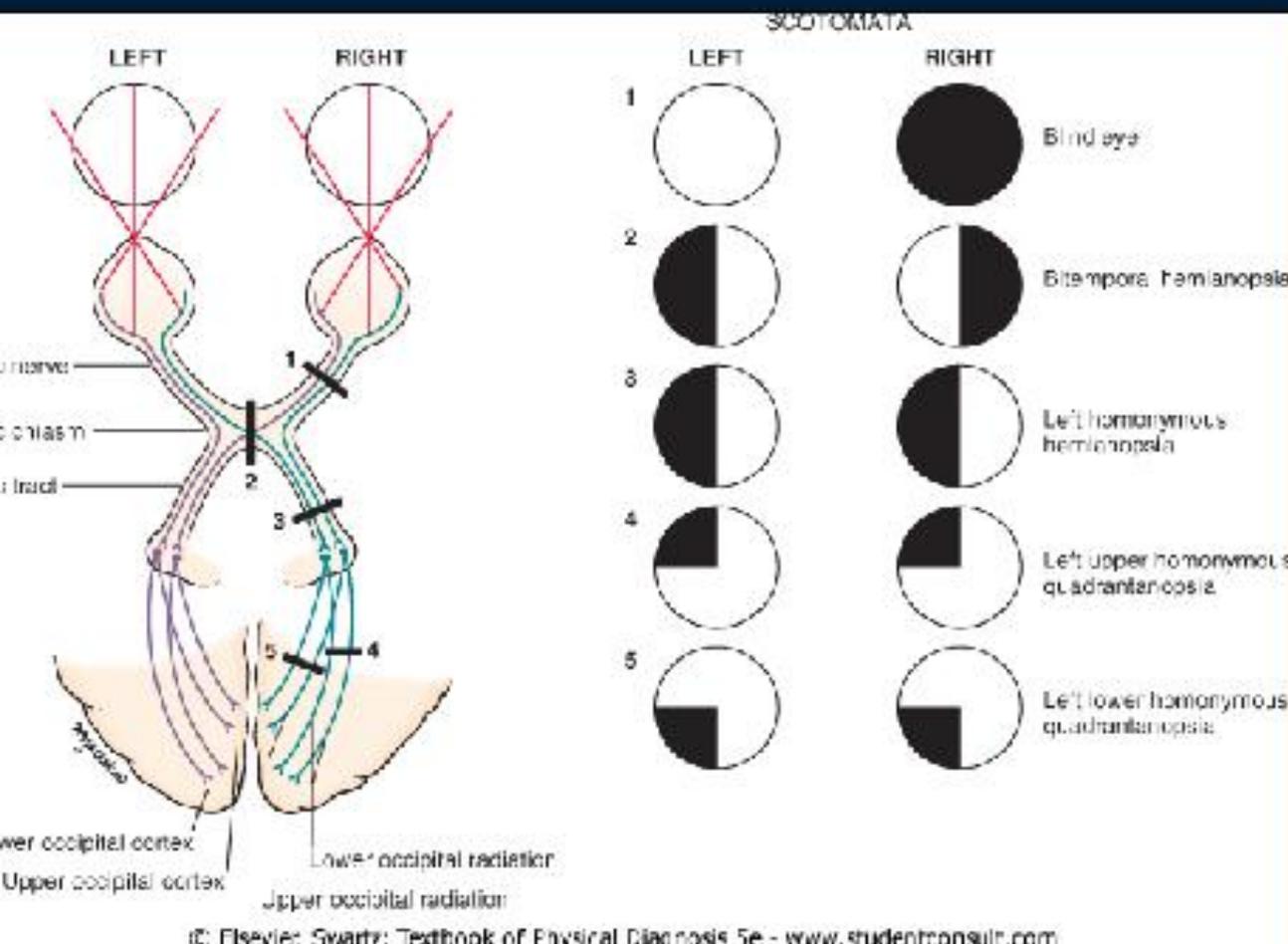
Nervos cranianos

I - Nervo olfativo



Nervos cranianos

II - Nervo óptico



A



B

III- N. oculomotor; IV- N. troclear; VI- N. abducente

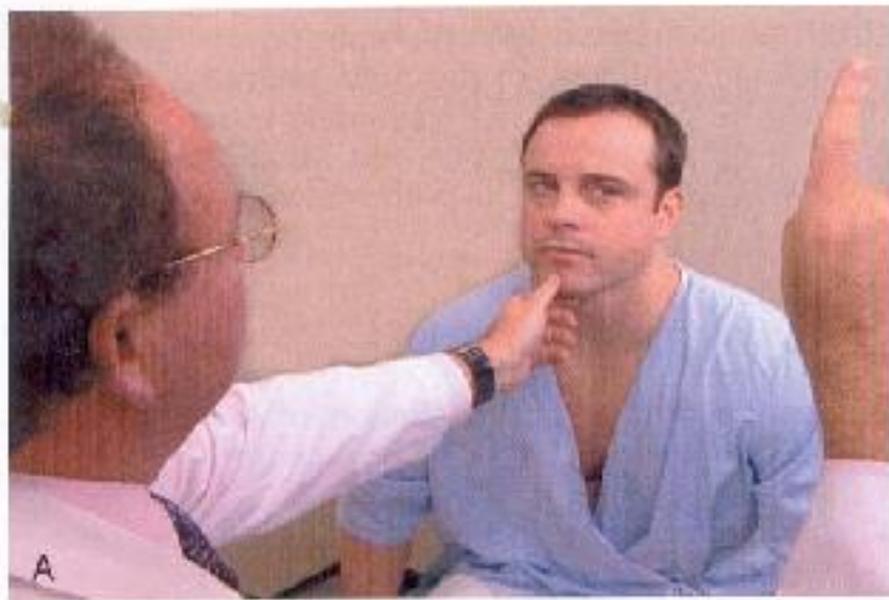
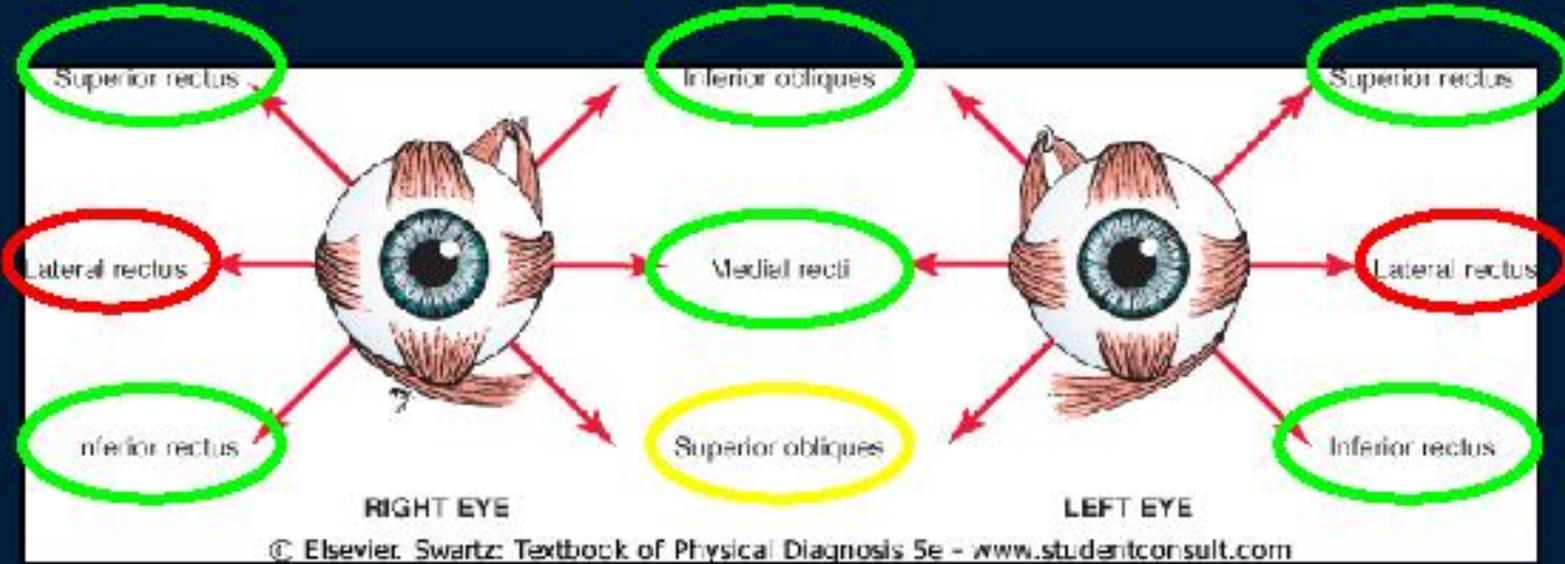


FIGURE 9-13. A and B. Technique for testing ocular motility

Nervos cranianos

III- Nervo oculomotor

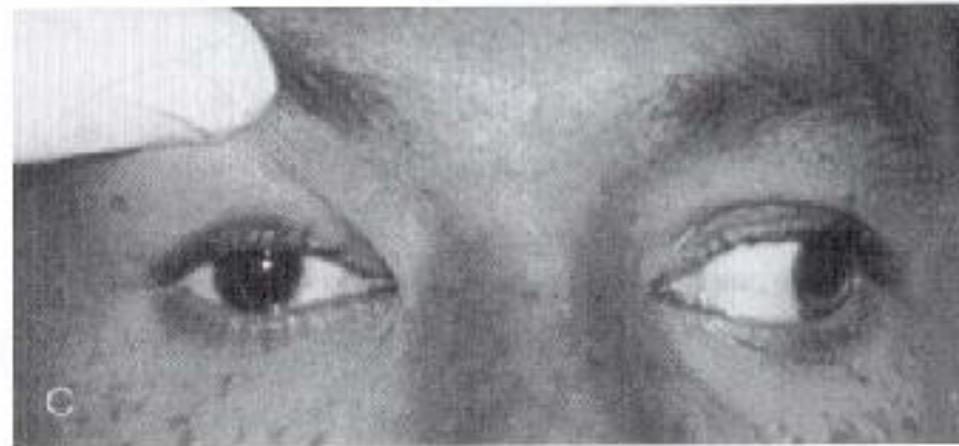


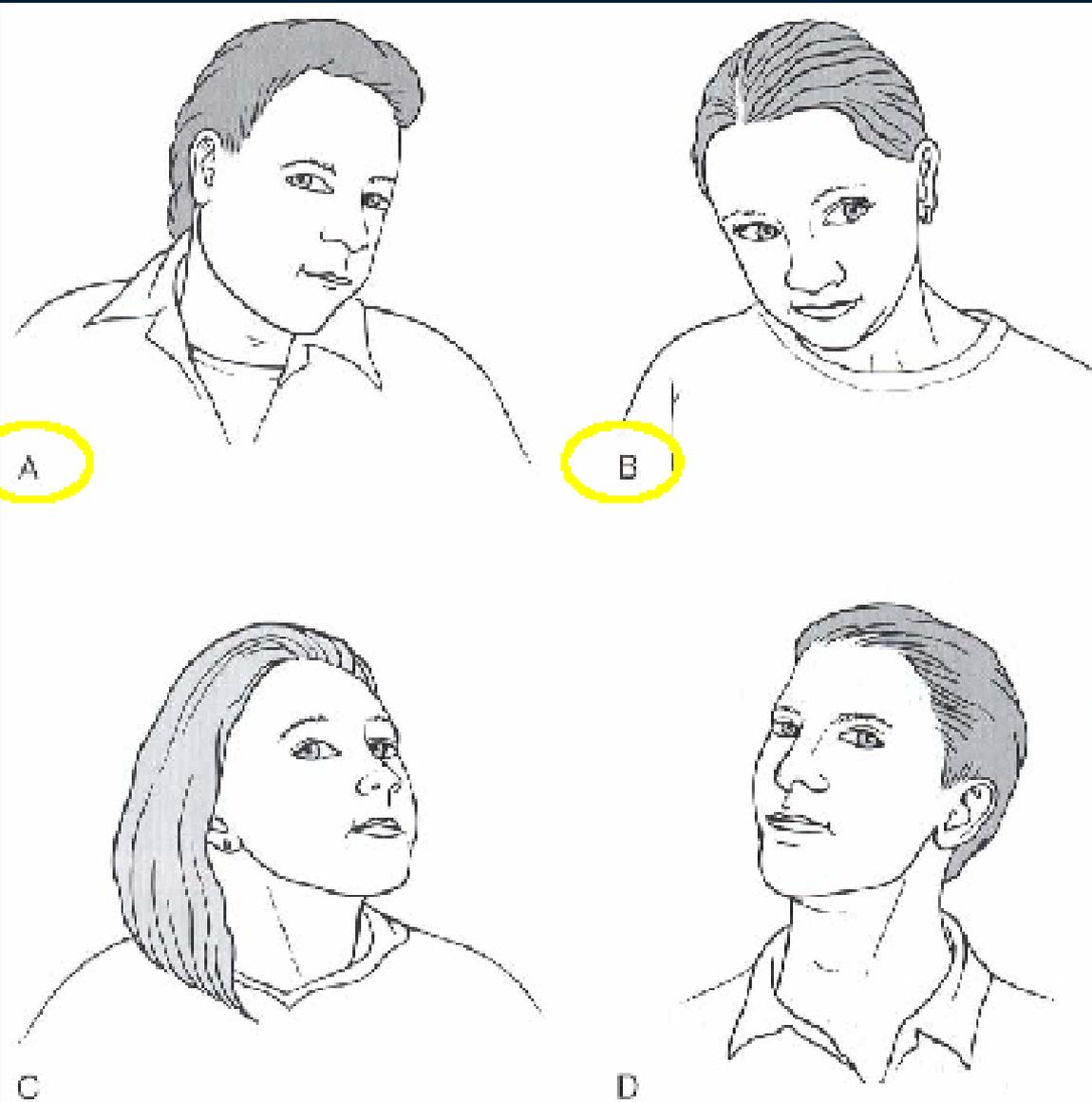
FIGURE 9-113. Acute right oculomotor nerve paralysis. *A*, When the patient is asked to look straight ahead, the right eye is turned laterally (note the position of the corneal light reflexes). The right palpebral fissure is markedly narrowed, requiring the eyelid to be elevated to visualize the position of the eye. *B*, When the patient is asked to look to the far right, both eyes are able to move in that direction. Note the marked ptosis of the right eyelid. *C*, When the patient is asked to look to the far left, the right eye cannot cross the midline.



- **Reflexo pupilar (directo e consensual)**

- **Acomodação**

Nervos cranianos



IV- Nervo troclear

FIGURE 9-115. Classic head tilt positions in patients with palsies of the oblique muscles. *A*, Right superior oblique; *B*, left superior oblique; *C*, right inferior oblique; *D*, left inferior oblique.

Nervos cranianos

VI- Nervo abducente

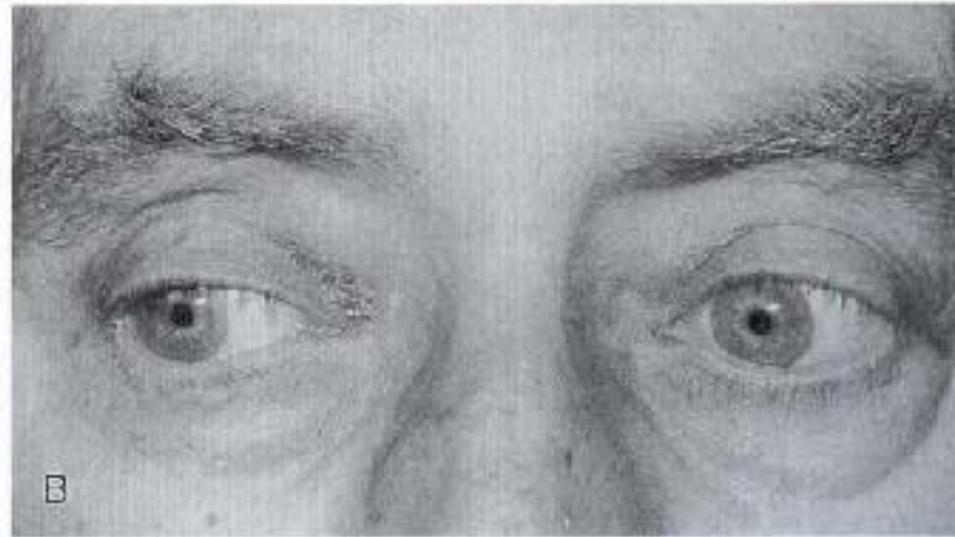
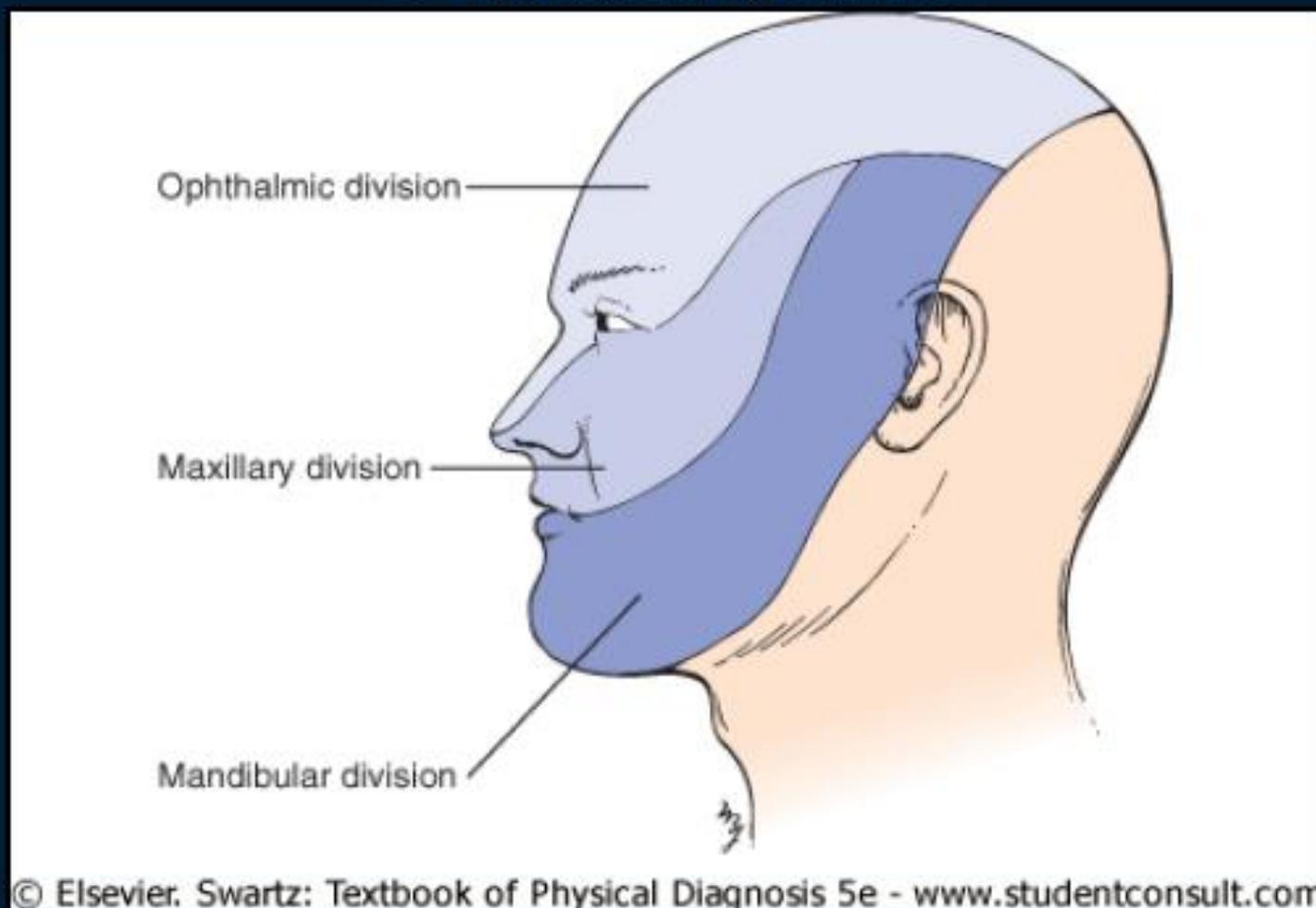


FIGURE 9-114. Acute left abducens paralysis. *A*, When the patient is asked to look straight ahead, both eyes are straight. *B*, When the patient is asked to look to the right, both eyes turn normally. *C*, When the patient is asked to look to the left, the left eye cannot cross the midline, indicating left abducens palsy.

Nervos cranianos

V- Nervo trigémio



- **Músculos da mastigação**

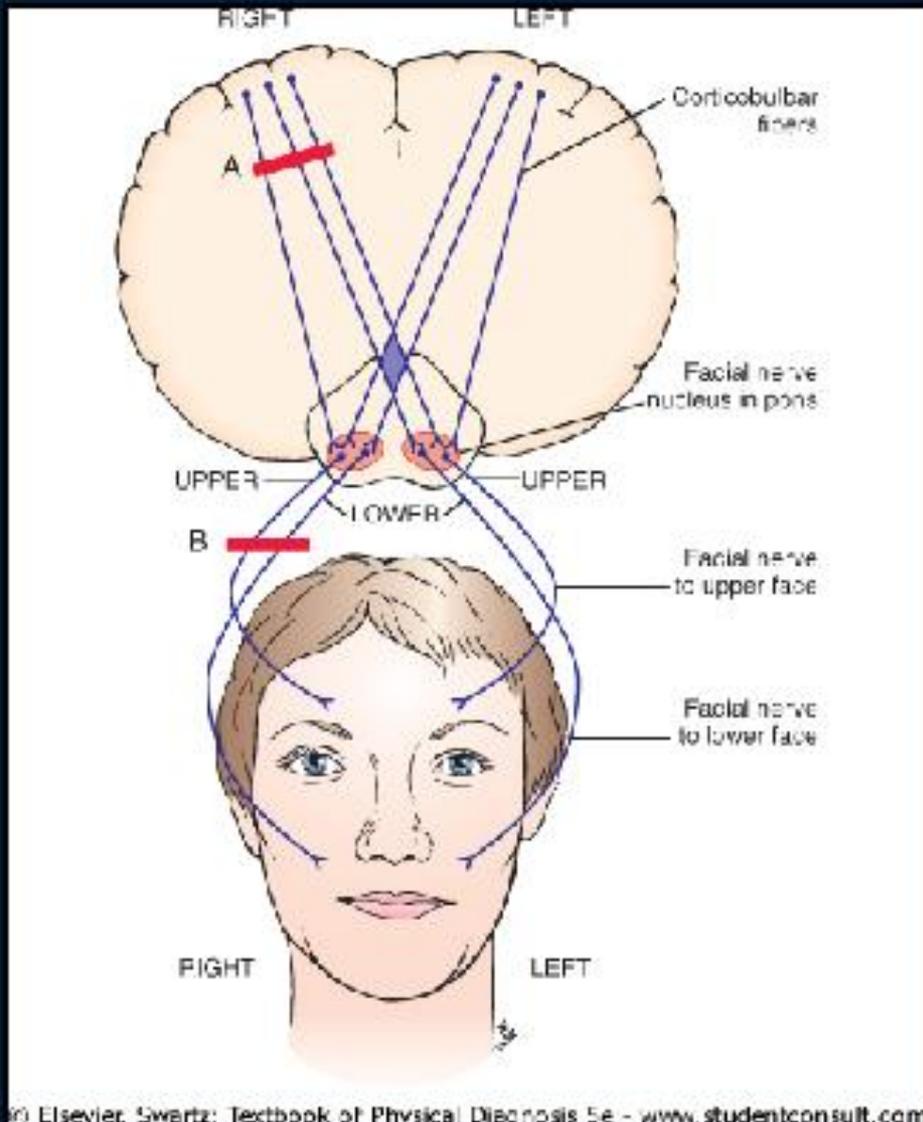
- **Reflexo corneano**

Nervos cranianos

VII- Nervo facial

- **Músculos faciais**

- **Paladar nos 2/3 anteriores da língua**



Nervos cranianos

VII- Nervo facial



A



C



B

Nervos cranianos

VII- Nervo facial

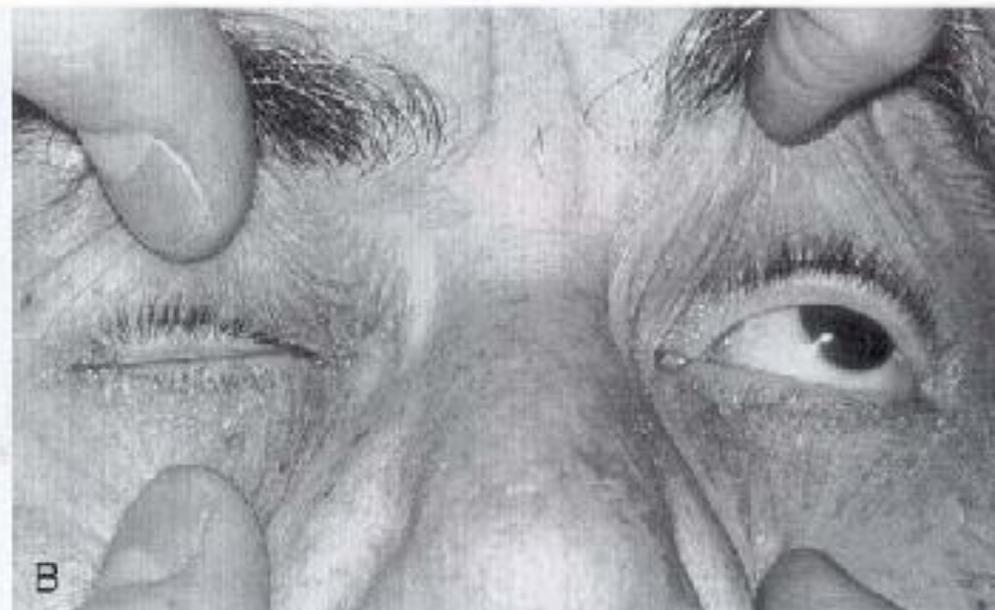
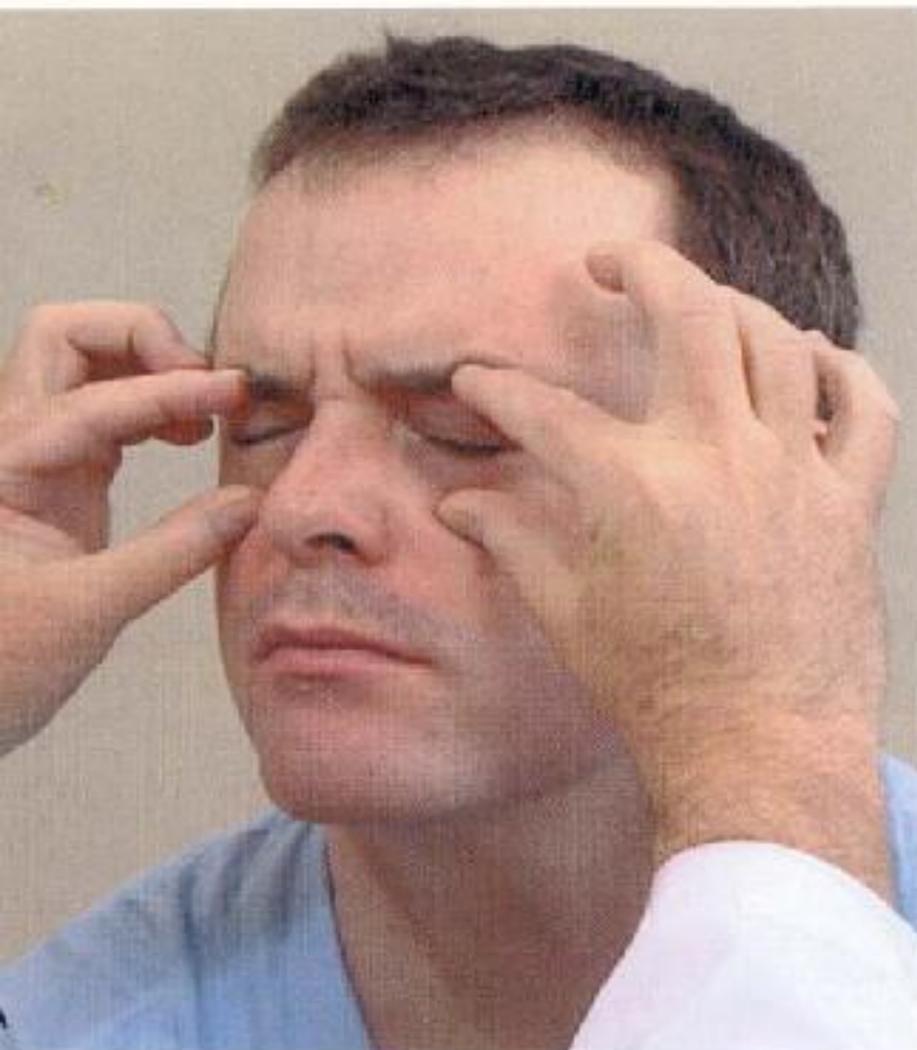
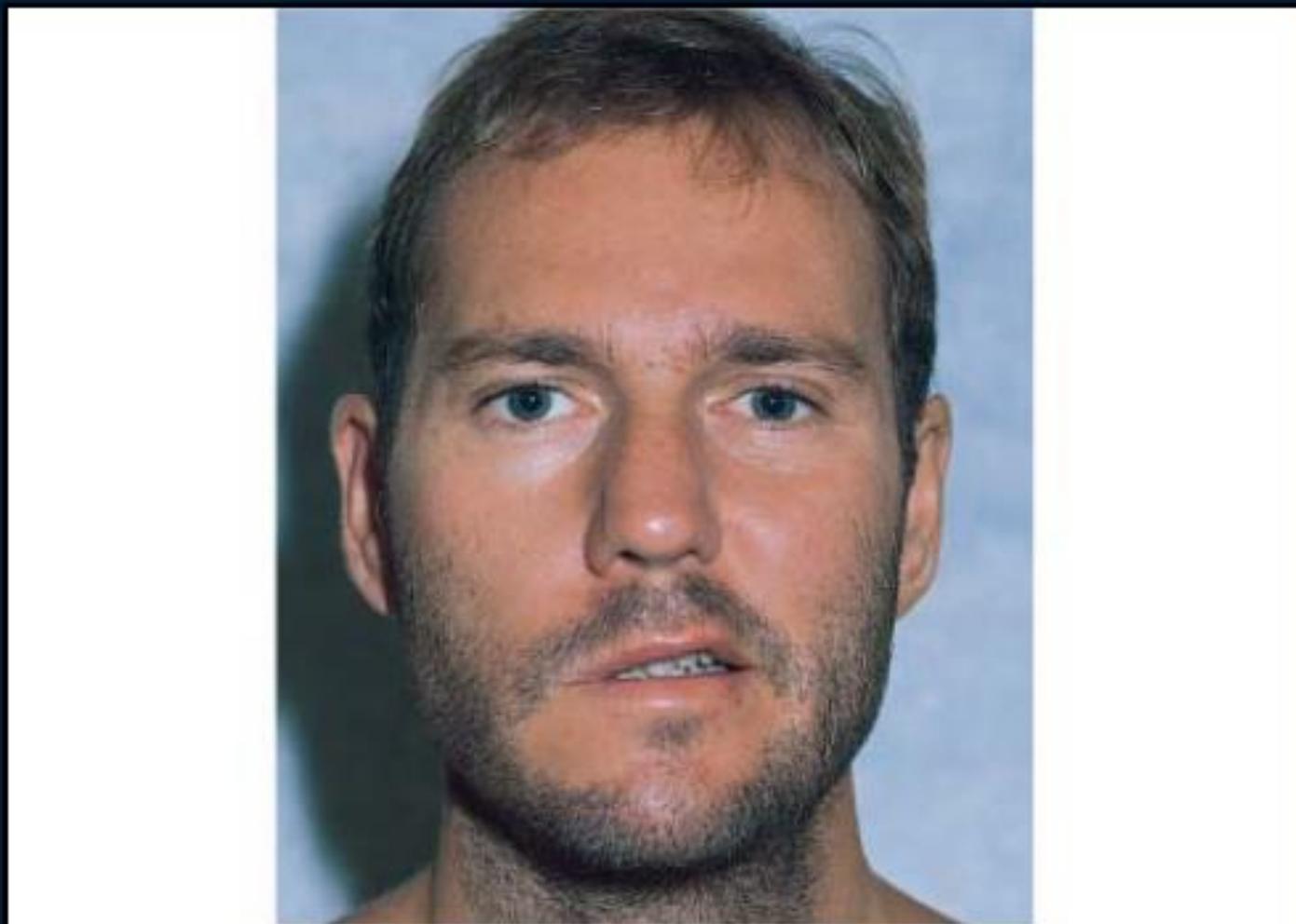


FIGURE 20–15. Testing the strength of eyelid closure. *A*, Normal response. Note that the eyelids cannot be opened by the examiner. *B*, Test in a patient with a stroke that involved the facial nerve nucleus. Note the less in strength of the muscles around the left eye.

Nervos cranianos

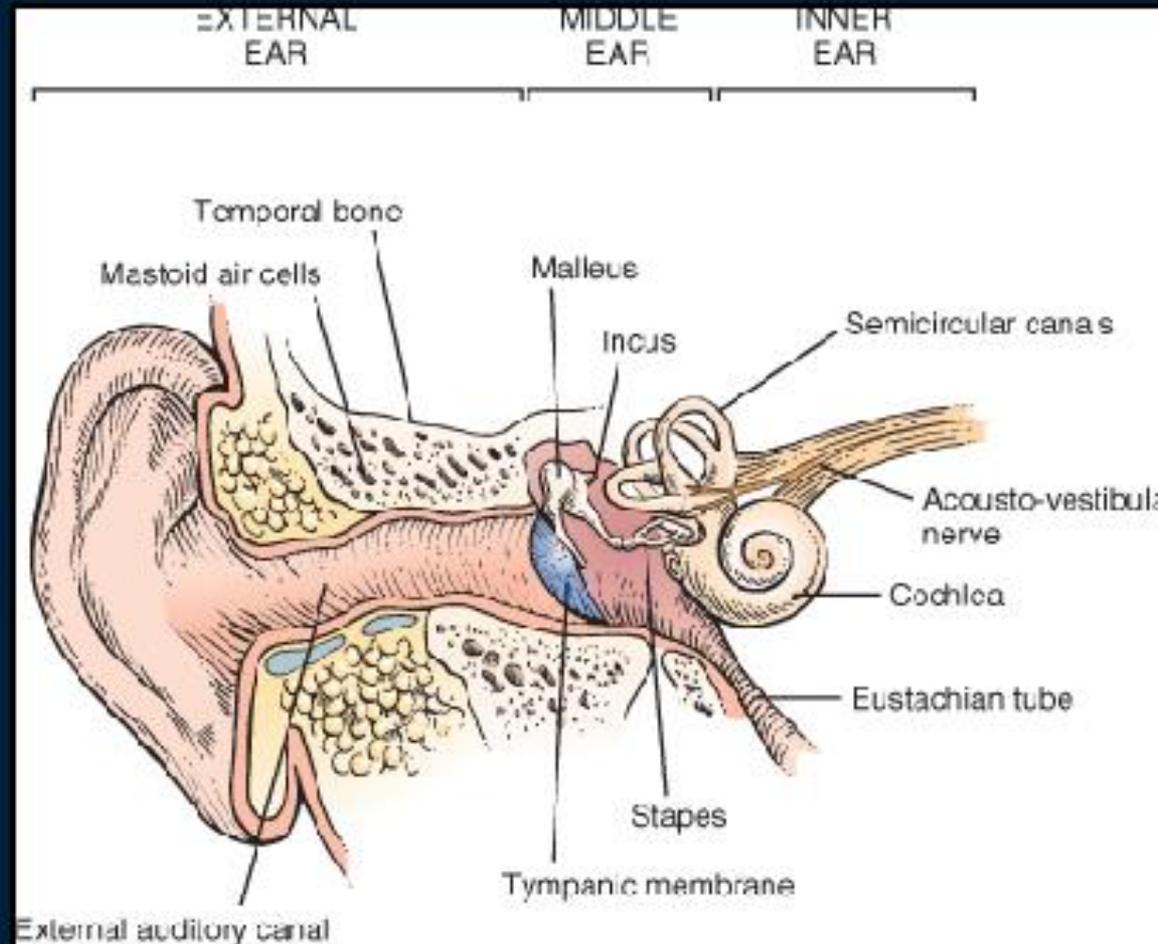
VII- Nervo facial



Nervos cranianos

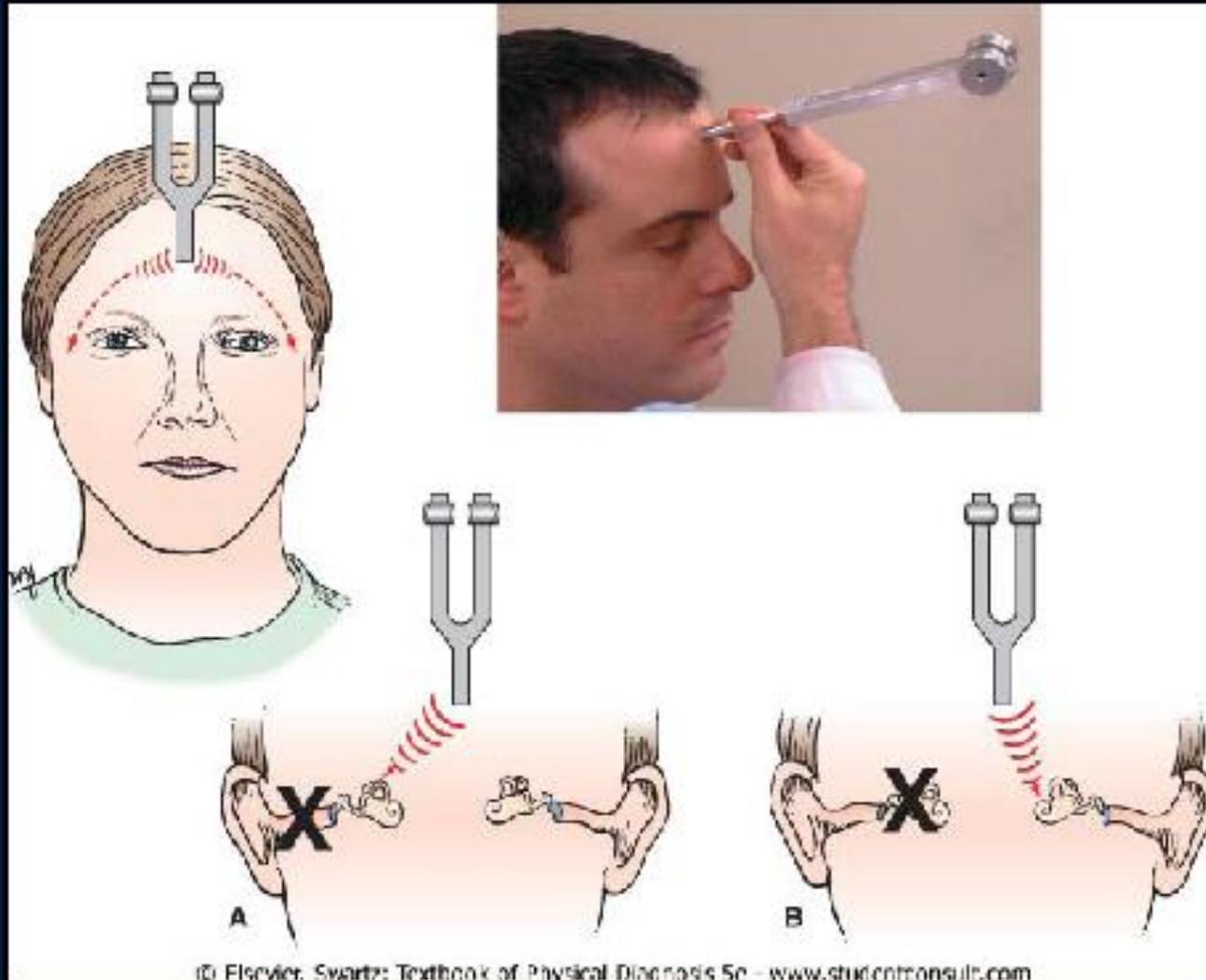
VIII- Nervo vestibulococlear

- **Audição**
- **Equilíbrio**
- **Propriocepção**



Nervos cranianos

VIII- Nervo vestibulococlear



Teste de Weber

Nervos cranianos

VIII- Nervo vestibulococlear



A

B

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Teste de Rinne

Nervos cranianos

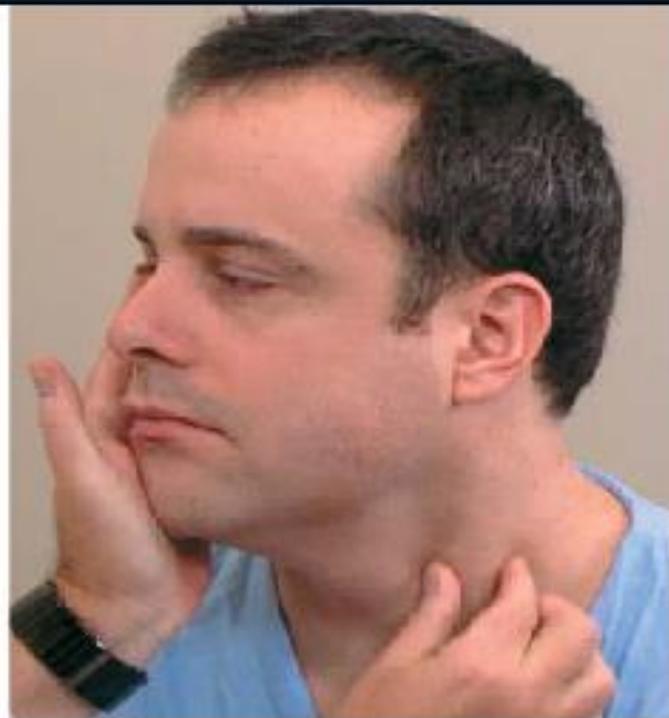
IX- Nervo glossofaríngeo

X- Nervo vago

- **Sensibilidade da faringe, 1/3 posterior da língua**
- **Reflexo do vômito**
 - **Sensibilidade - glossofaríngeo**
 - **Motor - vago**
- **Diga “aaaahhh” - elevação simétrica do palato**
 - **úvula na linha média**
- **Disfonia, disartria**

Nervos cranianos

XI- Nervo acessório



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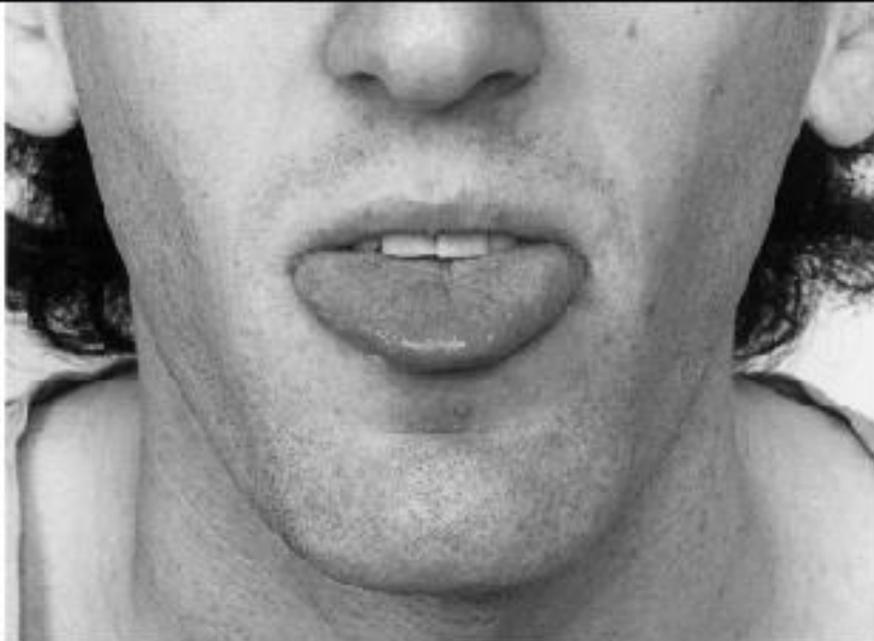
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Nervos cranianos

XII- Nervo hipoglosso



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Força e tônus muscular

Massa muscular

- **atrofia muscular**
- **fasciculações**

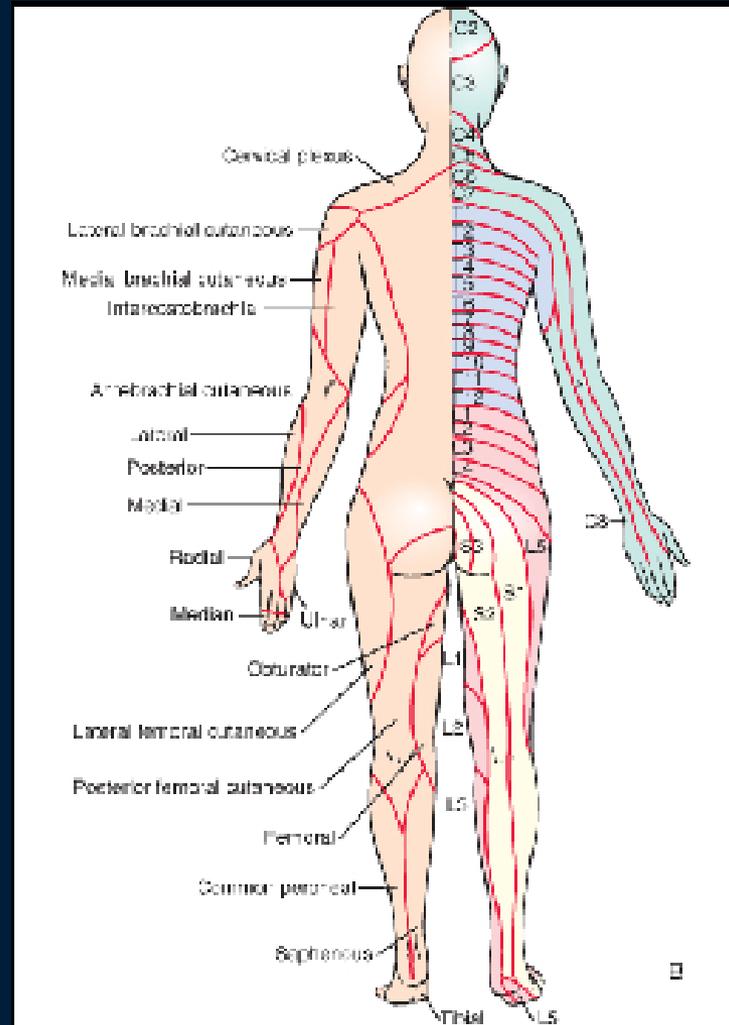
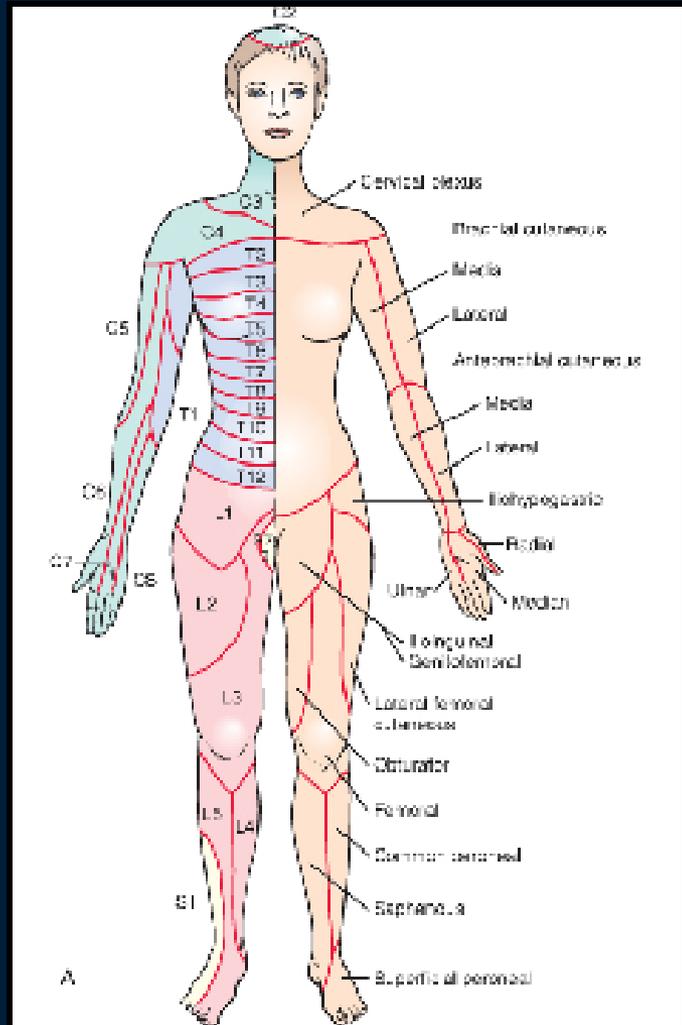
Força muscular

- 0 - sem contracção**
- 1 - detecta-se ligeira contracção**
- 2 - movimento é eliminado pela gravidade**
- 3 - move-se contra a gravidade**
- 4 - move-se contra pequena resistência**
- 5 - move-se contra forte resistência**

Tônus muscular

- **tensão residual no músculo relaxado**
- **resistência ao movimento passivo**

Força e tónus muscular



Trofismo Muscular

- Hipotrofia

- **Por desuso**
- **Miopatias**
- **Doença do segundo neurônio motor**

- Hipertrofia

- **Miotonia de Thonson**
- **Distrofia muscular progressiva**

Tonus Muscular

-Hipotonias:

- **Central (Cerebelar, extra-piramidal)**
- **Periférica (Miopatias, neuropatias periféricas)**

-Hipertônias:

- **Elástica (lesão do primeiro neurônio motor)**
- **Plástica (lesão extra'piramidal)**

Manobras deficitárias

- **Manobra dos braços estendidos**
- **Manobra de Mingazzini**
- **Manobra de Barré**
- **Prova da queda do membro inferior em abdução**