



Secteur des Sciences de la santé

Faculté de Médecine

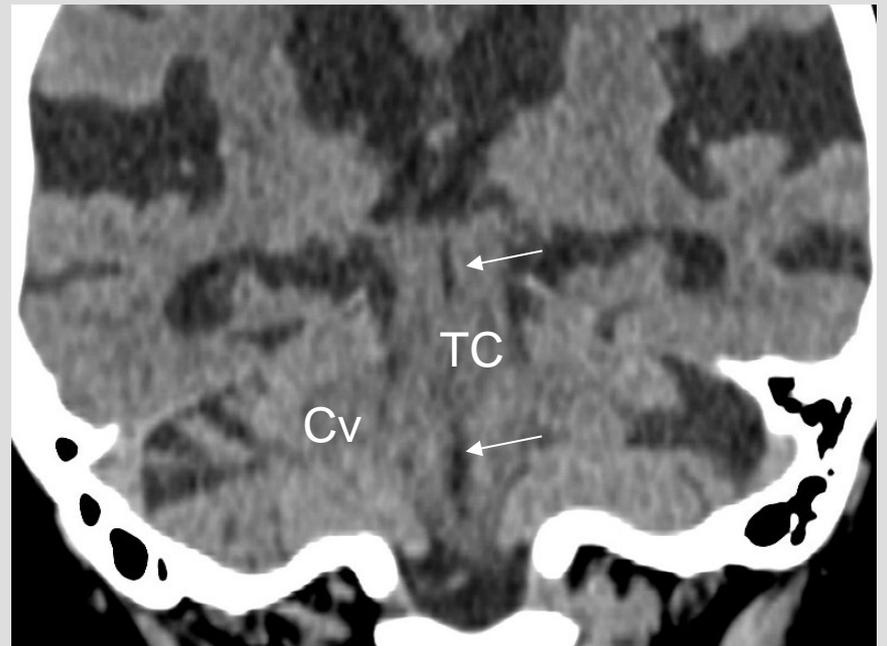
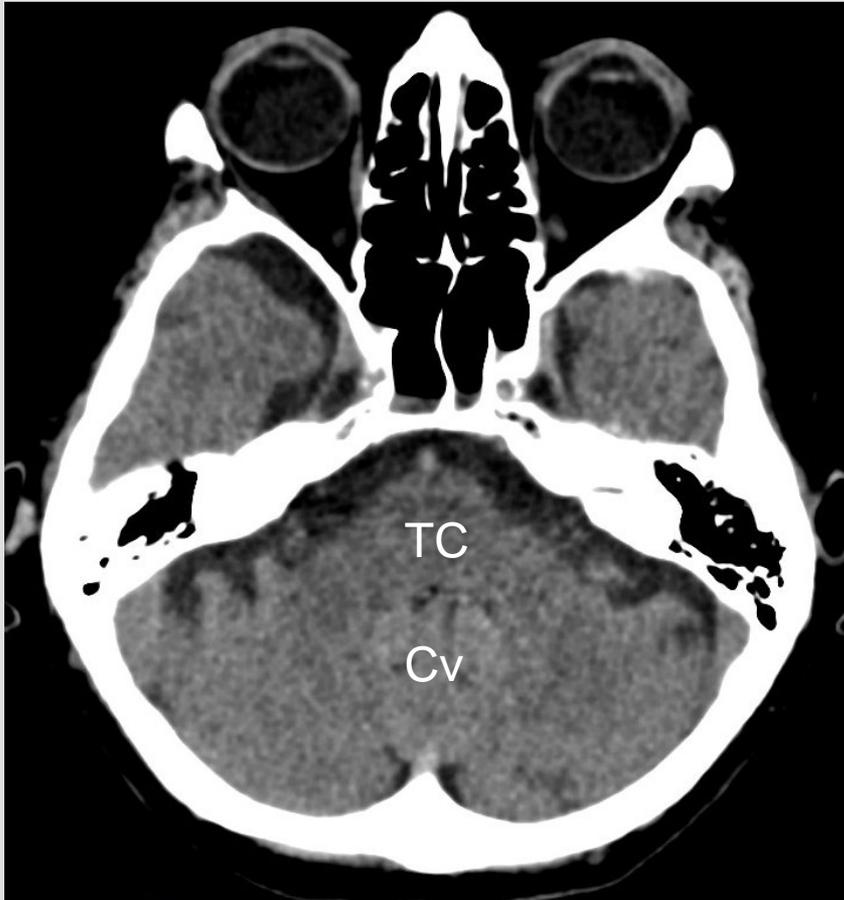
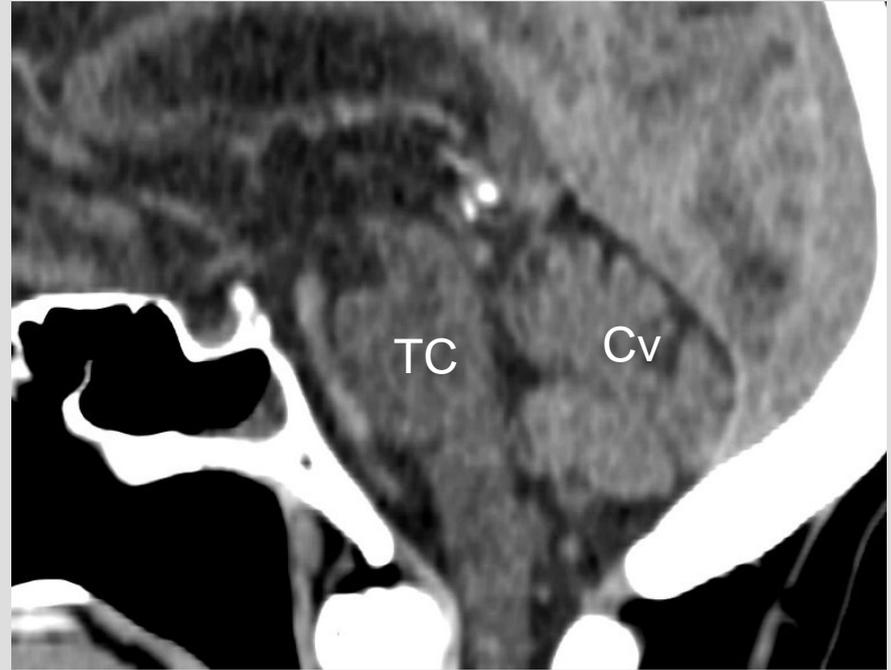
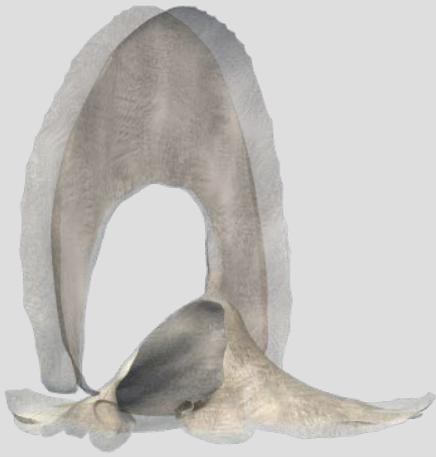
Cours WMDSANAT 1311 (BAC13)

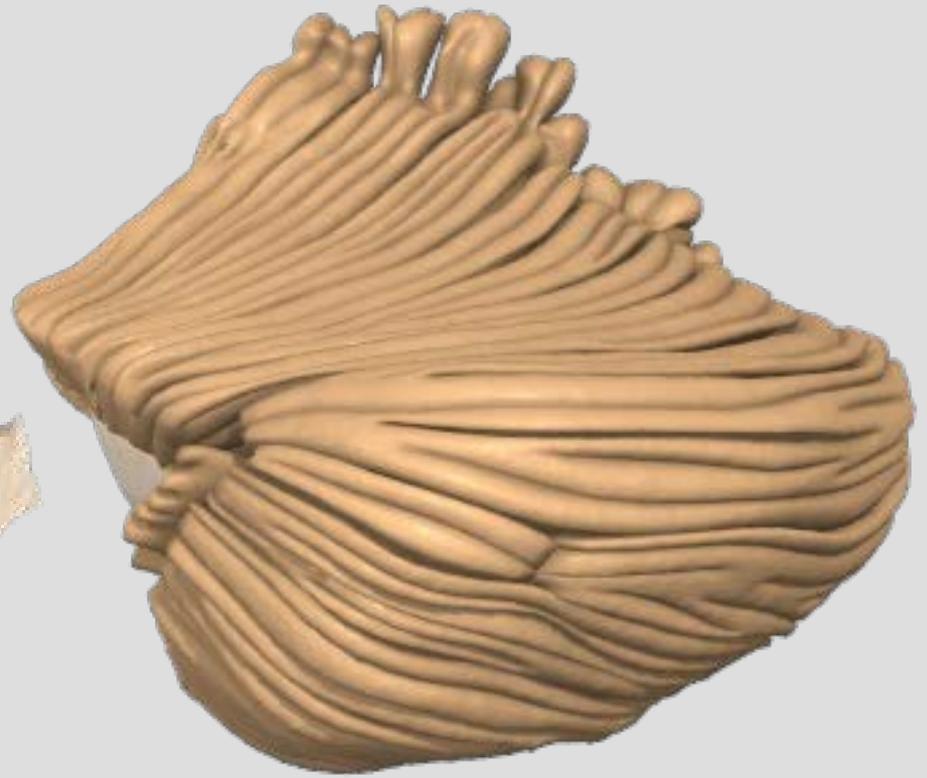
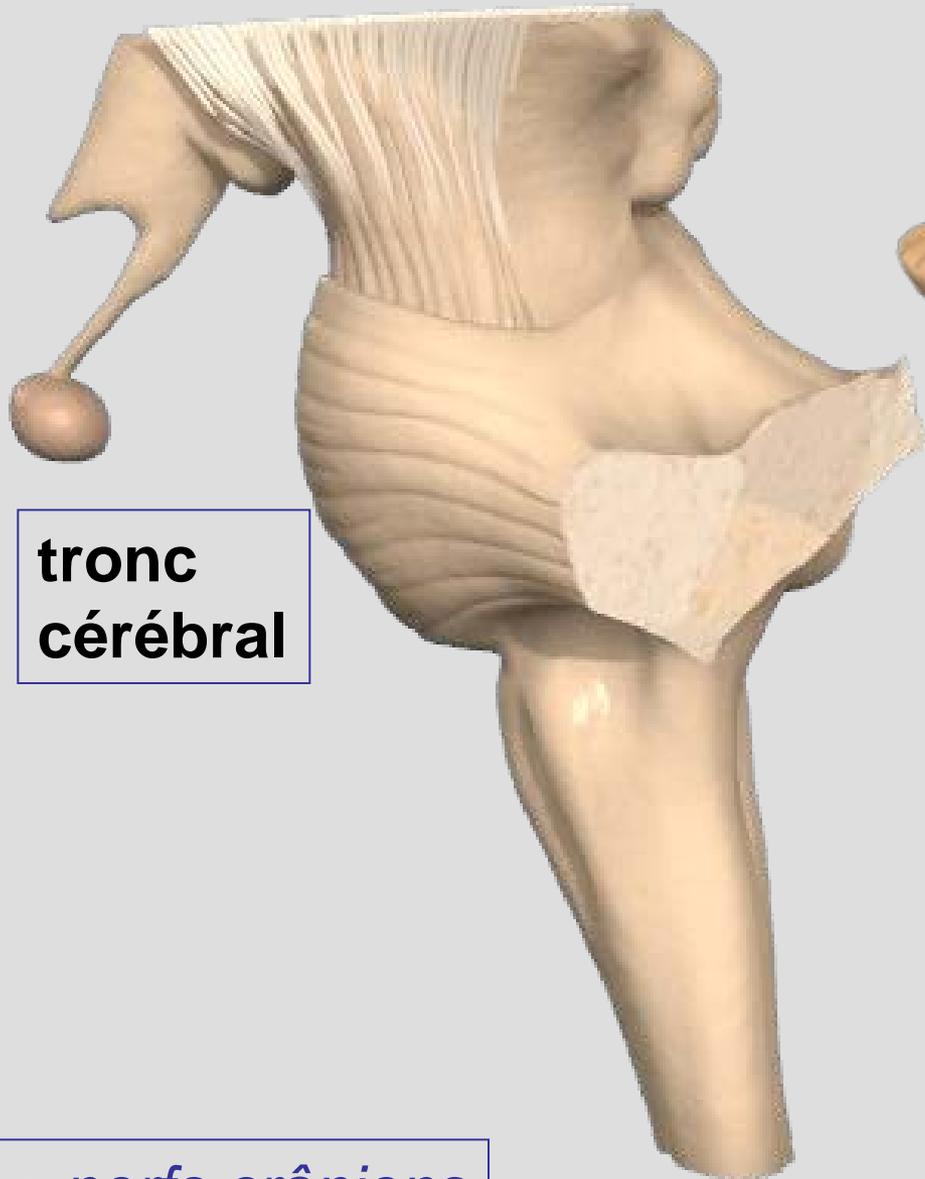
Année académique 2019-2020

Neuroanatomie radiologique

Pr. Thierry DUPREZ

Module 5: fosse postérieure & nerfs crâniens



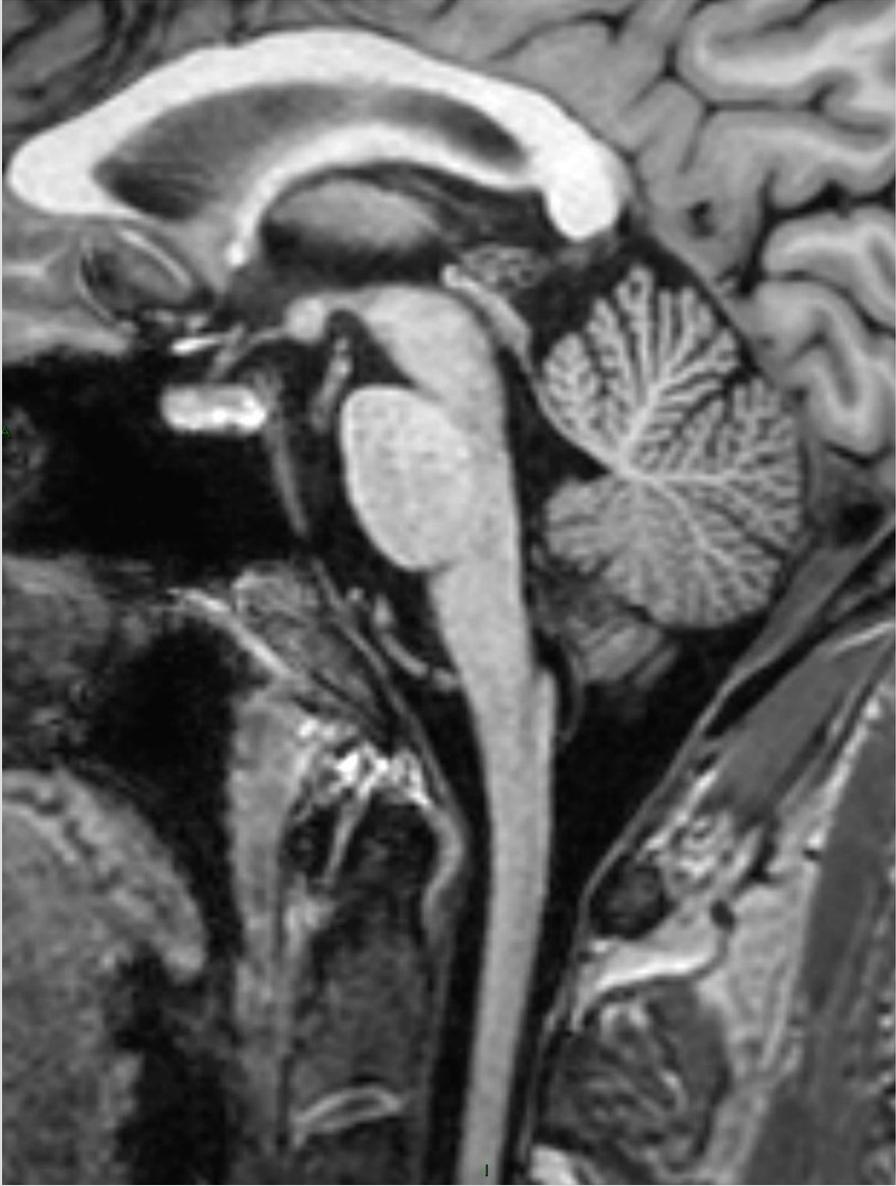
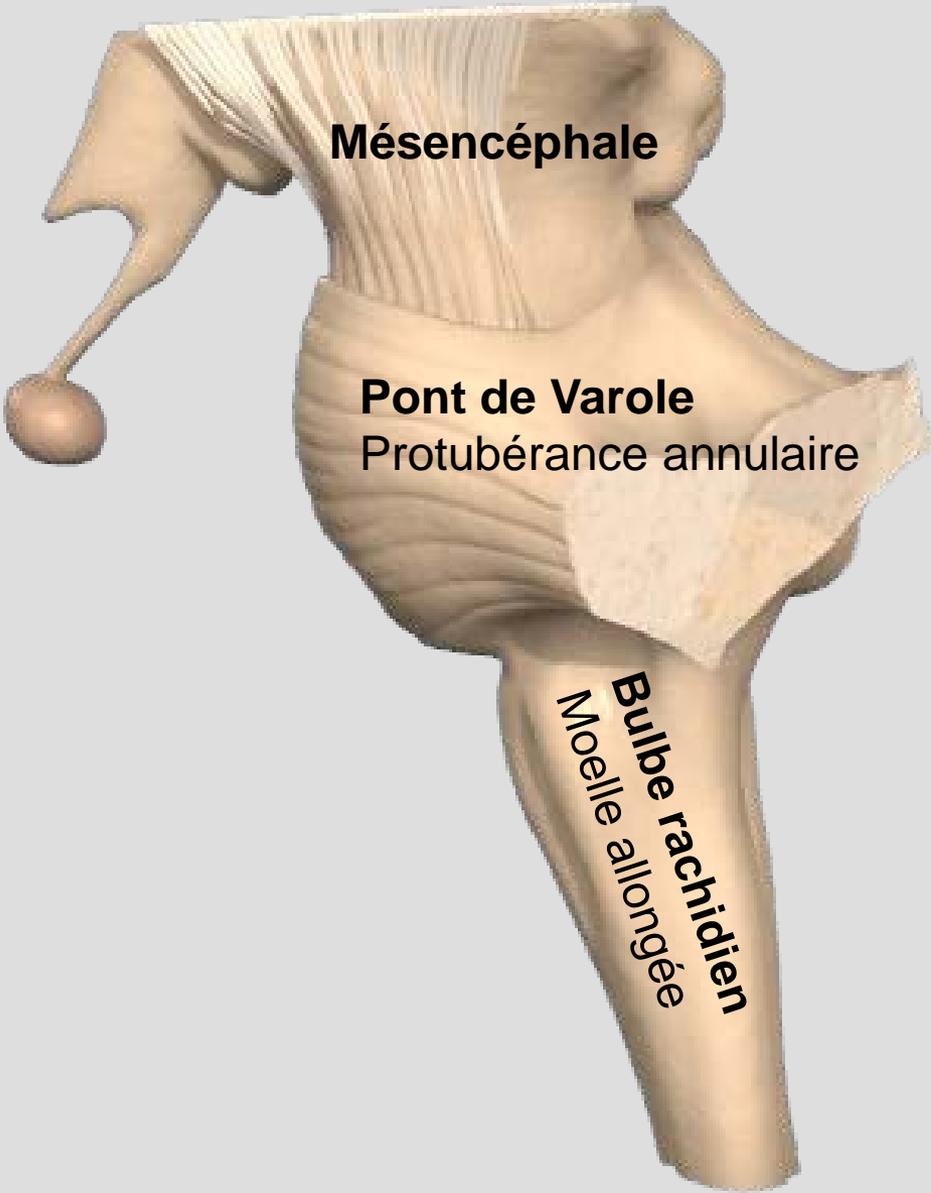


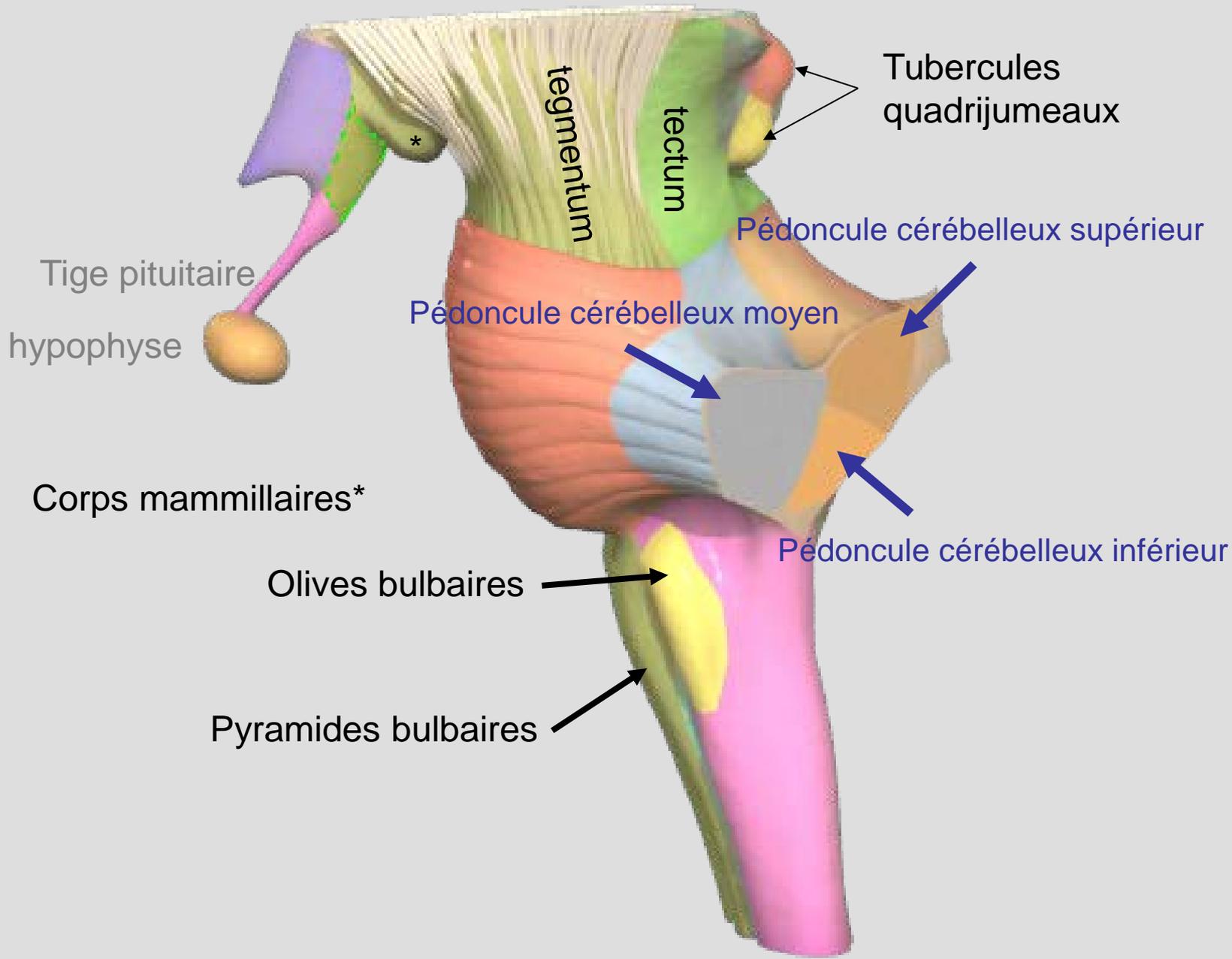
**tronc
cérébral**

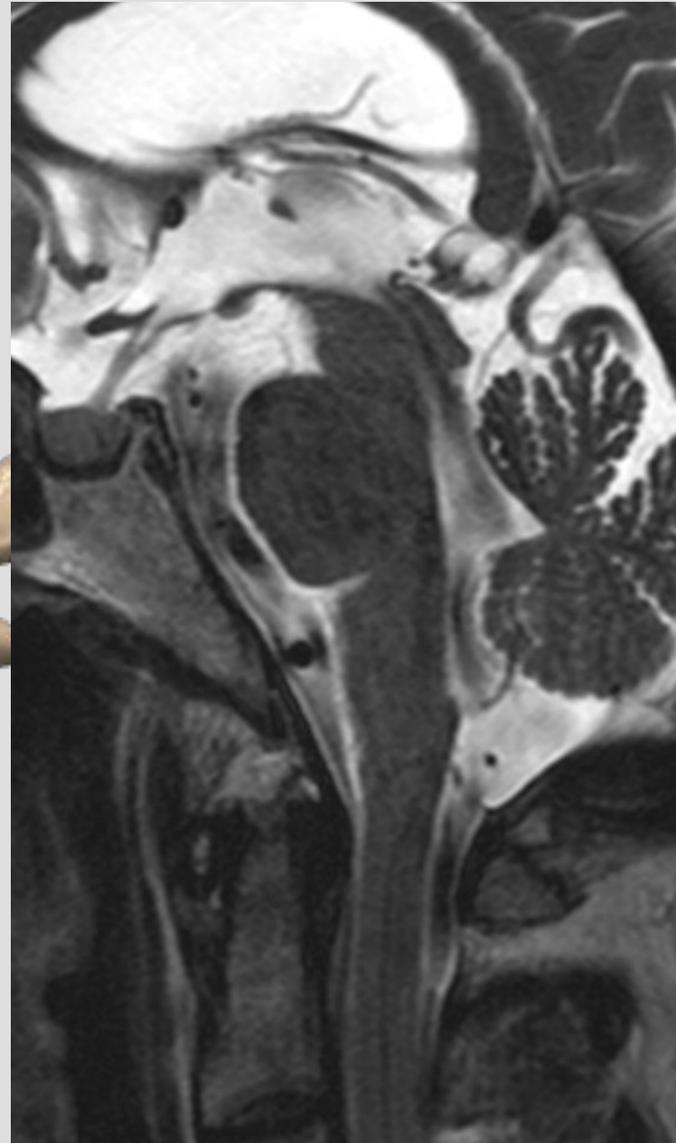
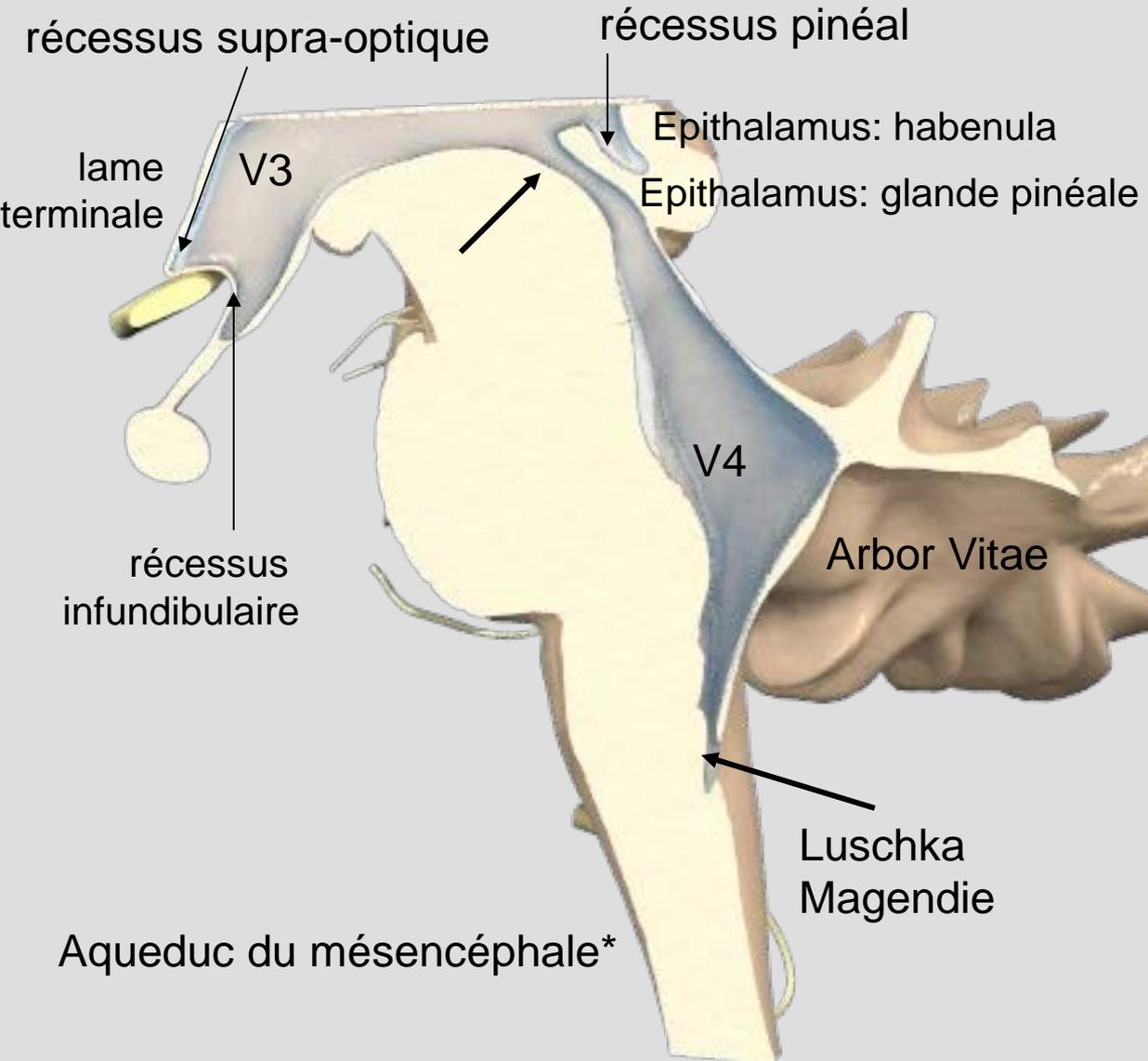
cervelet

+ nerfs crâniens

Coupe IRM sagittale médiane pondérée T1

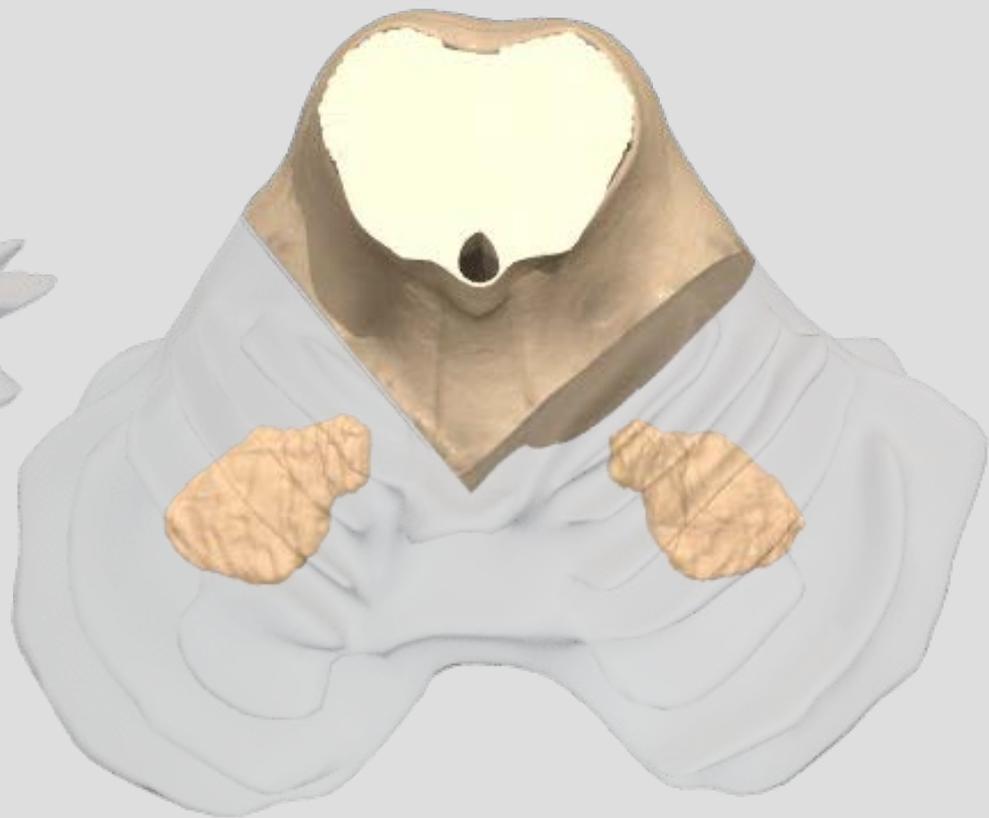








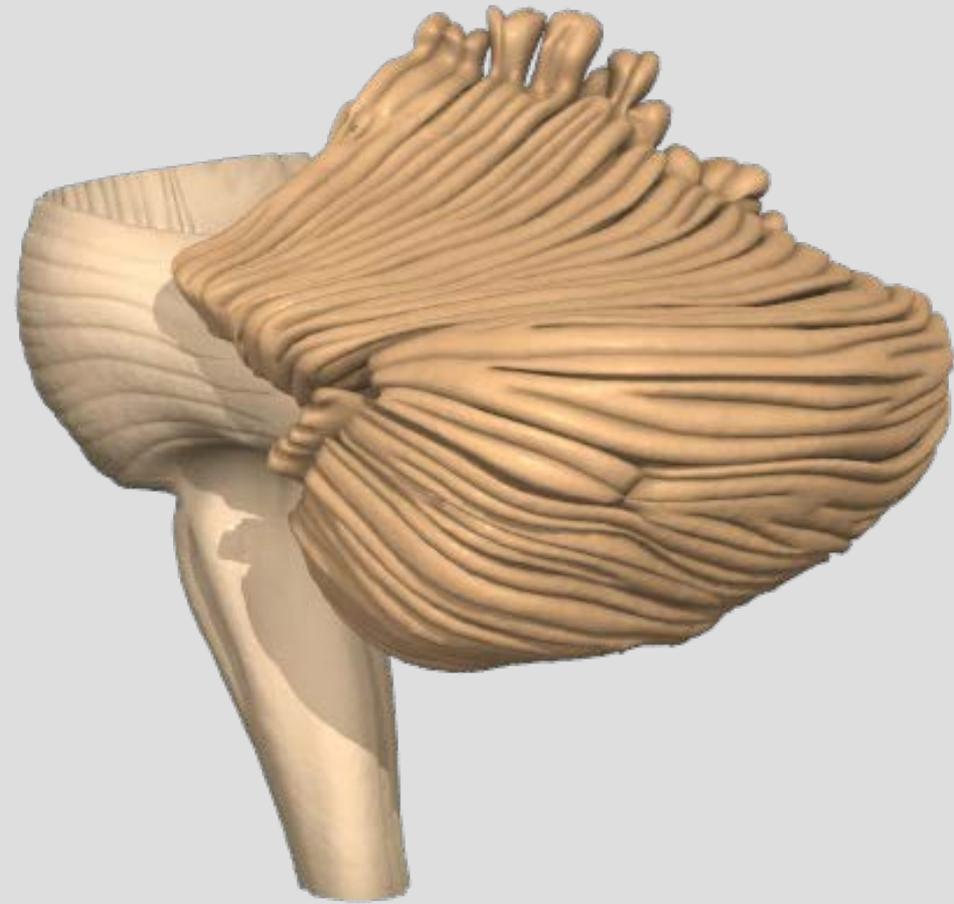
Arbor Vitae



noyau dentelé

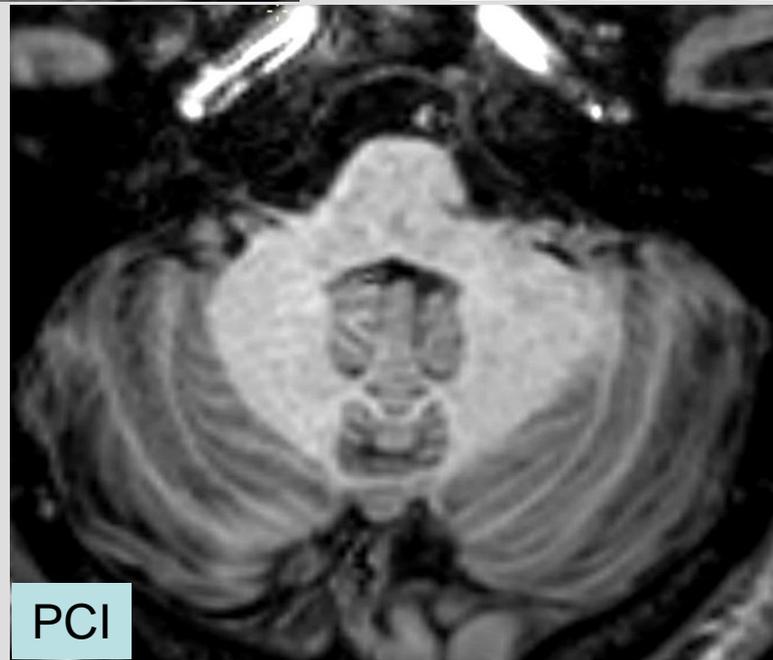
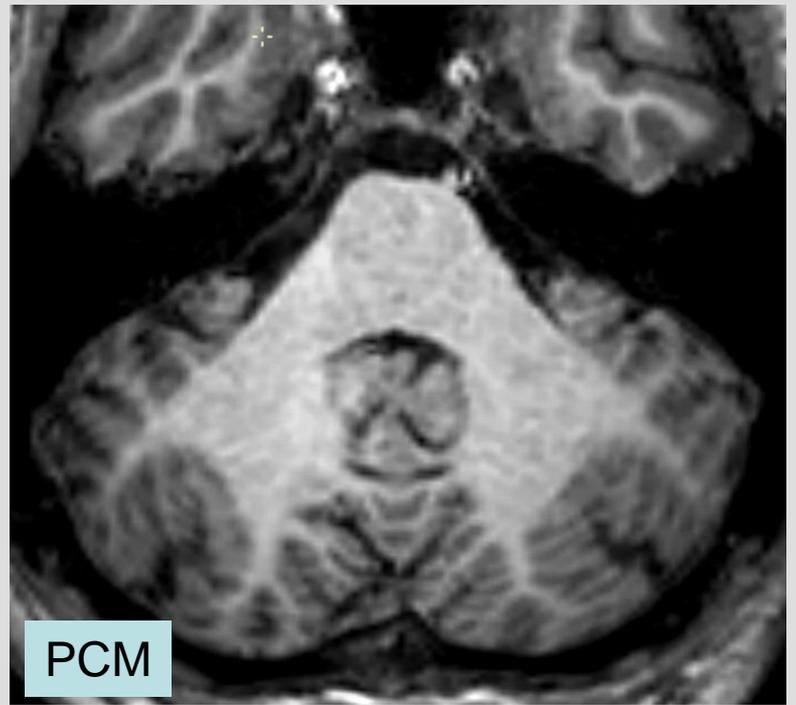
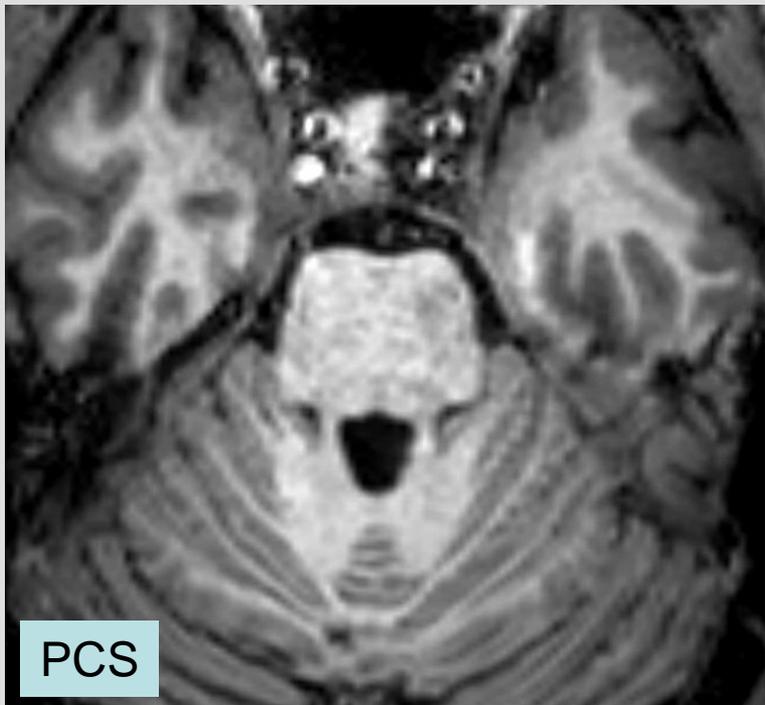


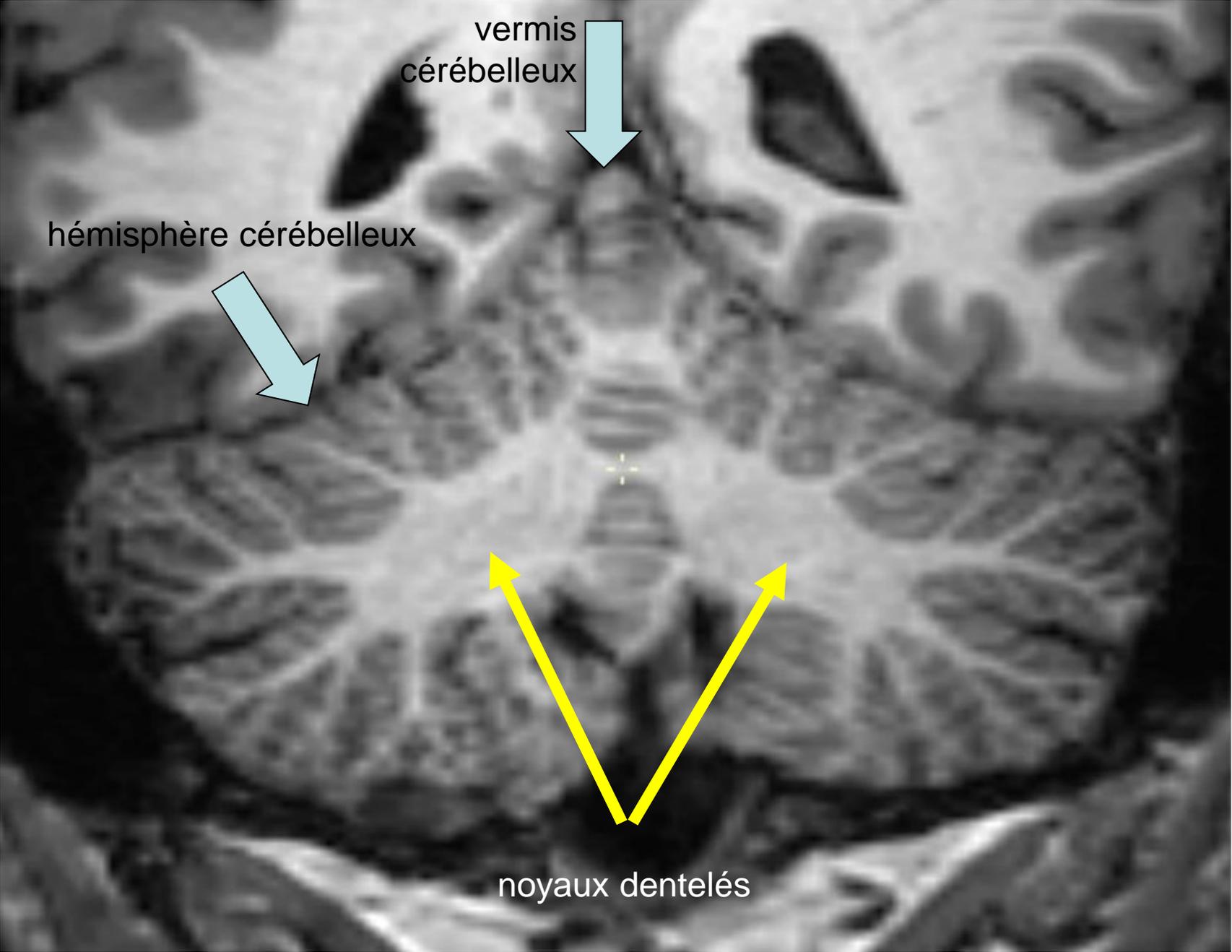
Arbor
Vitae
=
substance
blanche
cérébelleuse

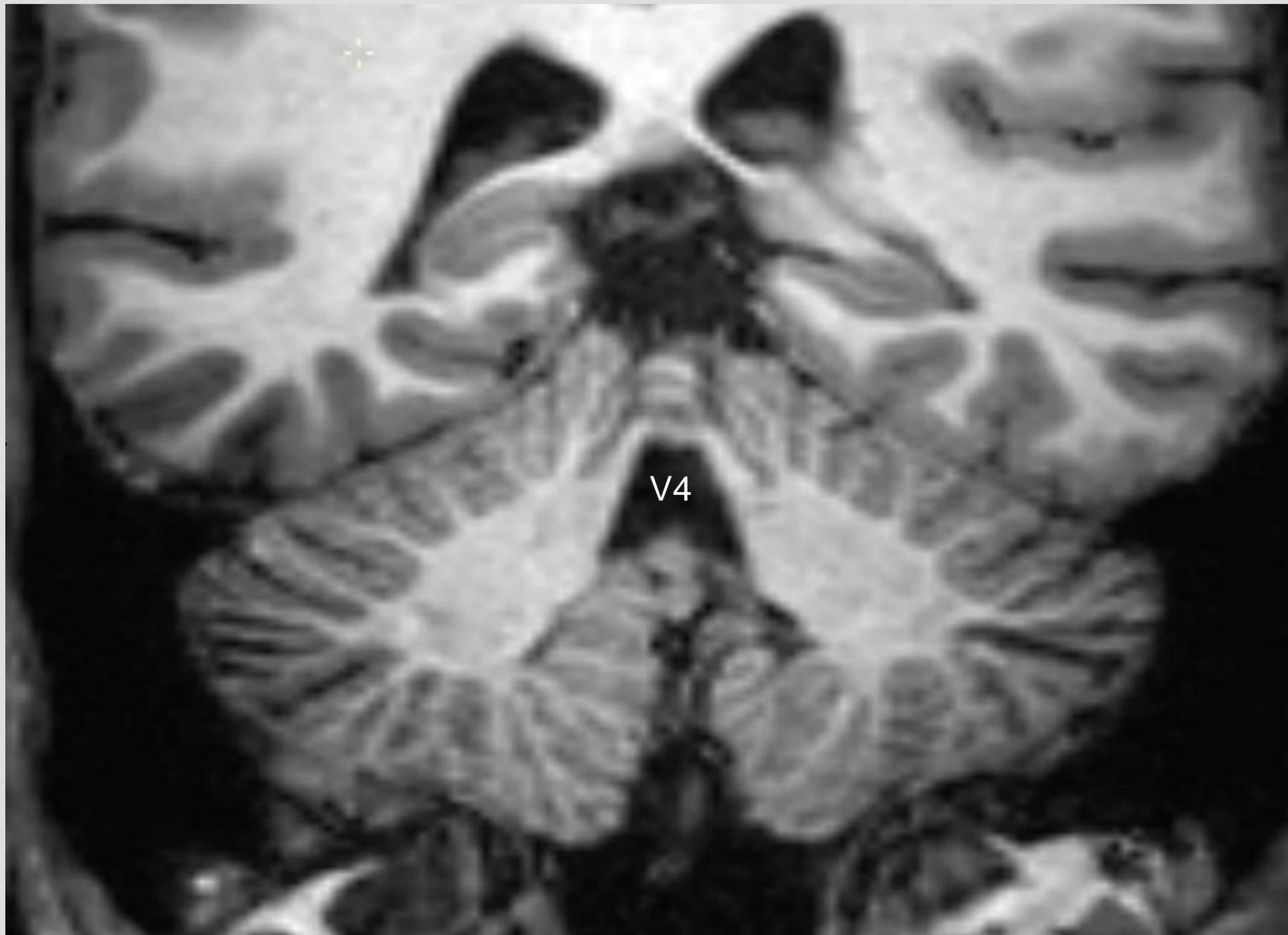


corticalité grise
(foliation)

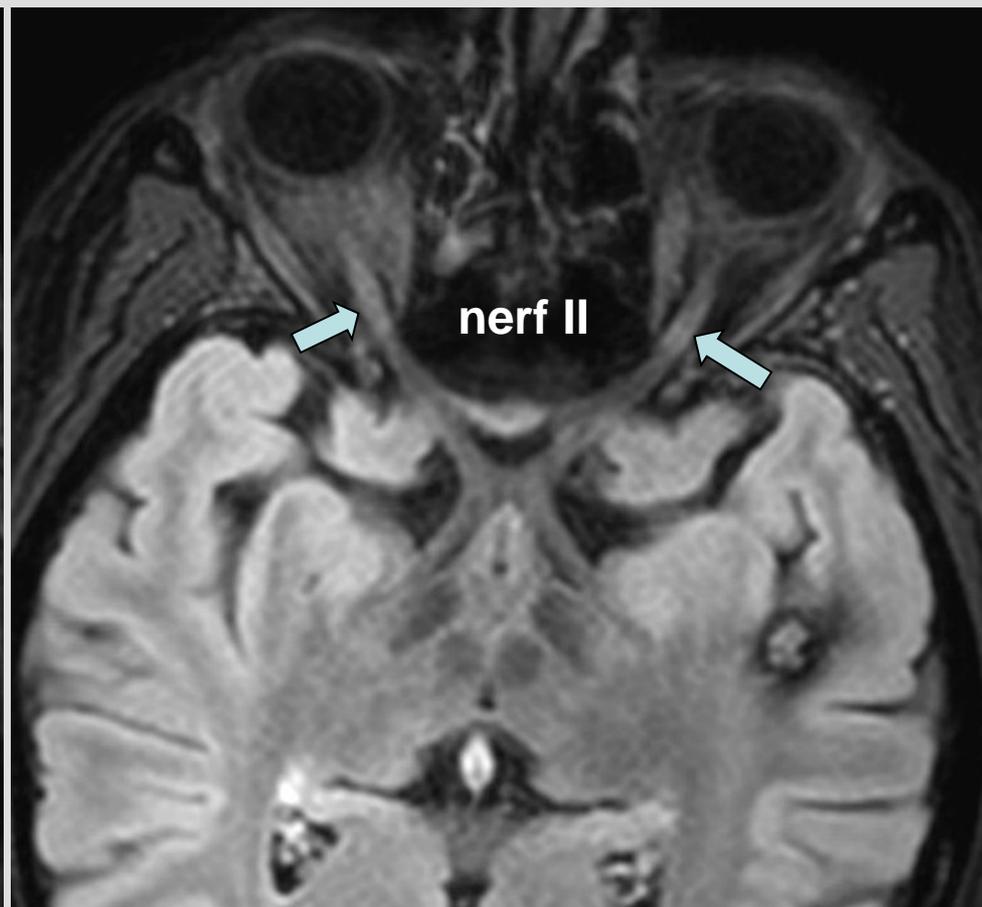
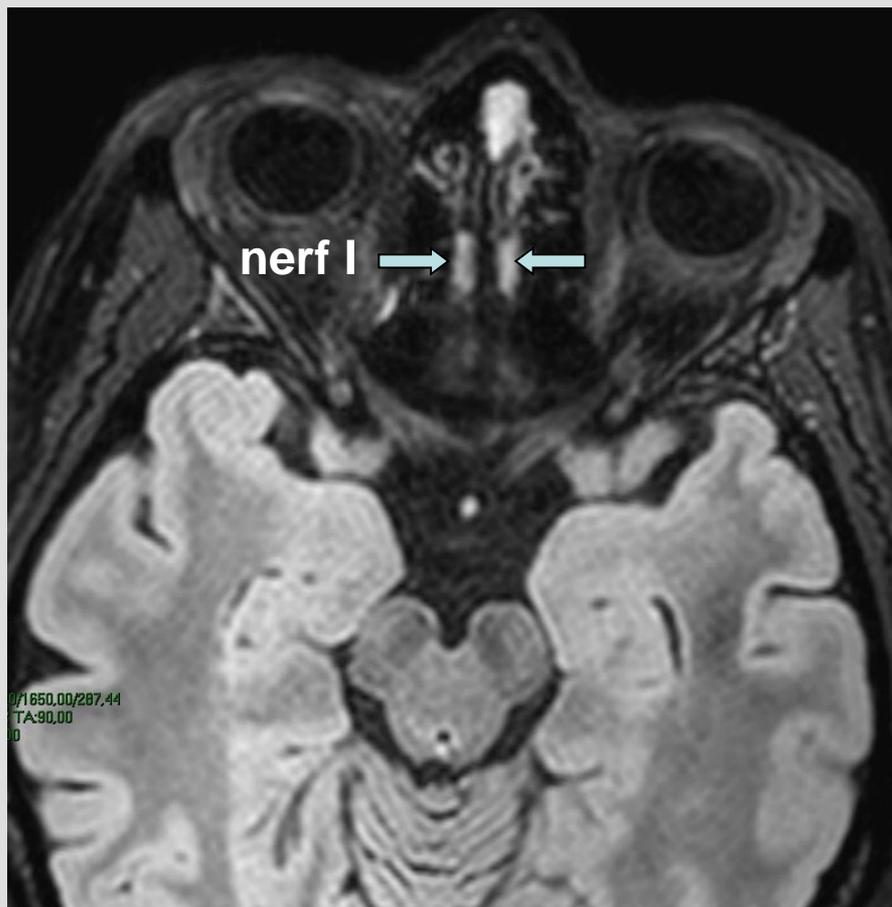


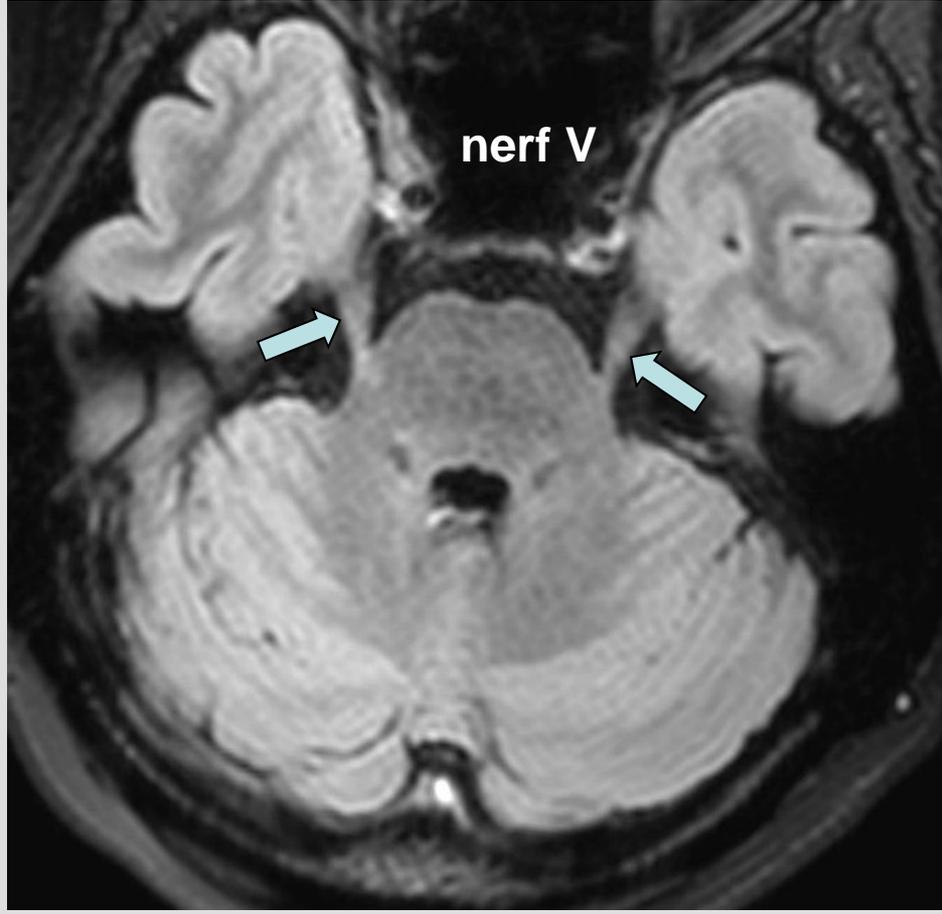
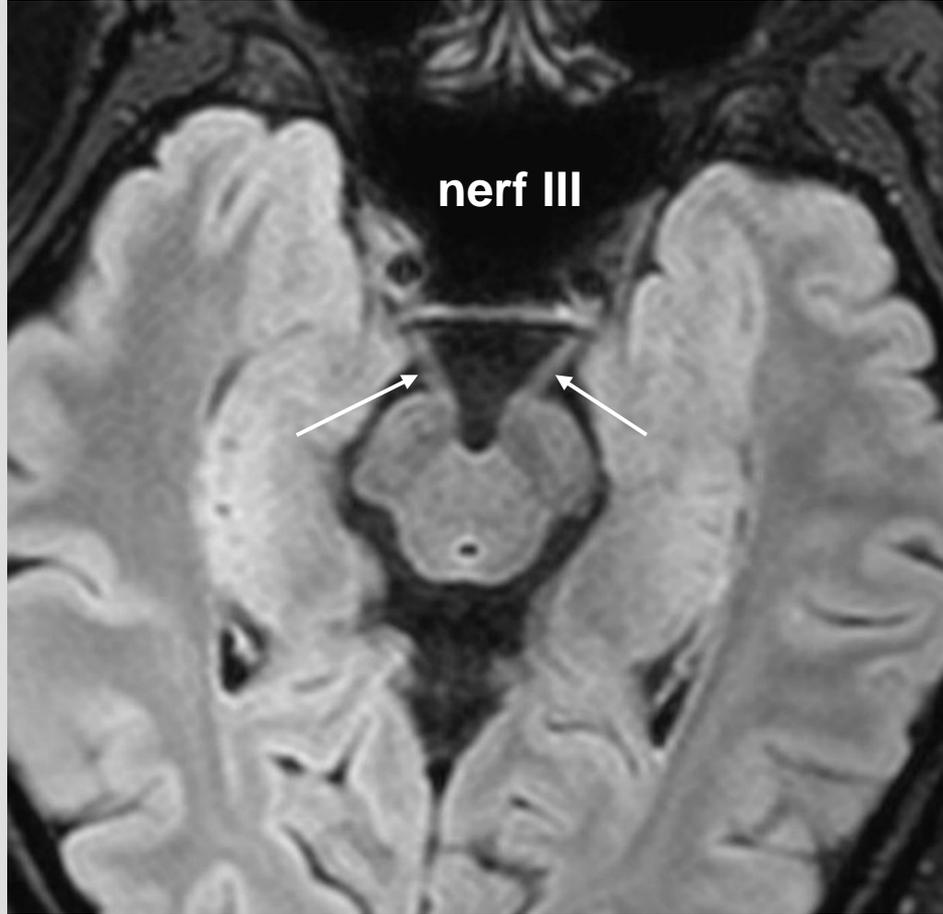






Nerfs crâniens

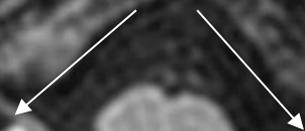


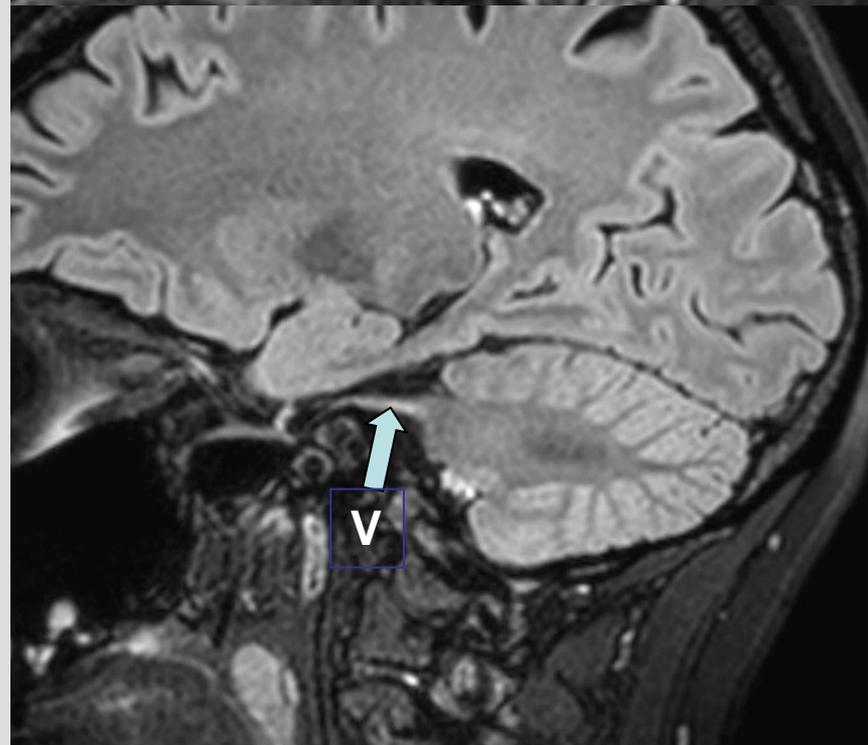
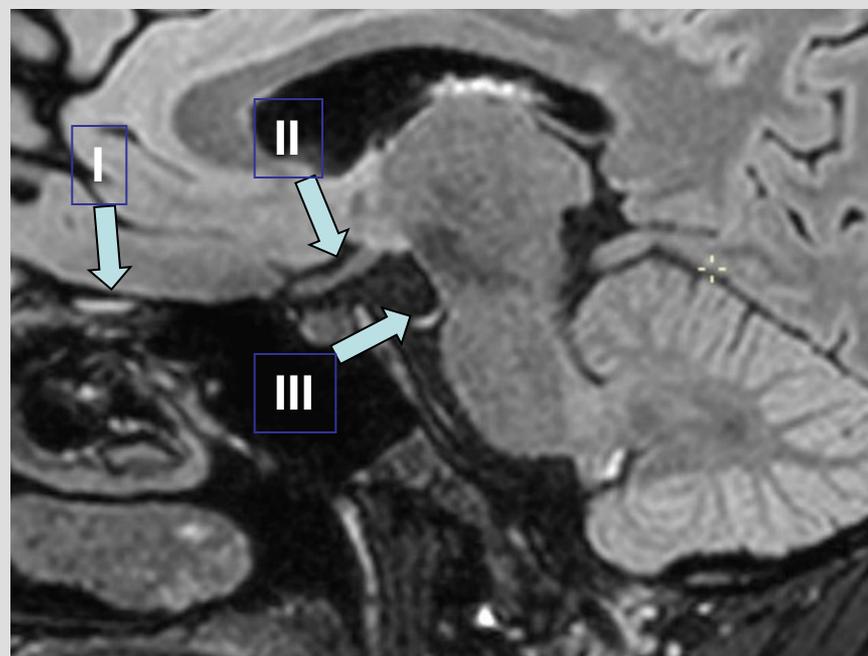
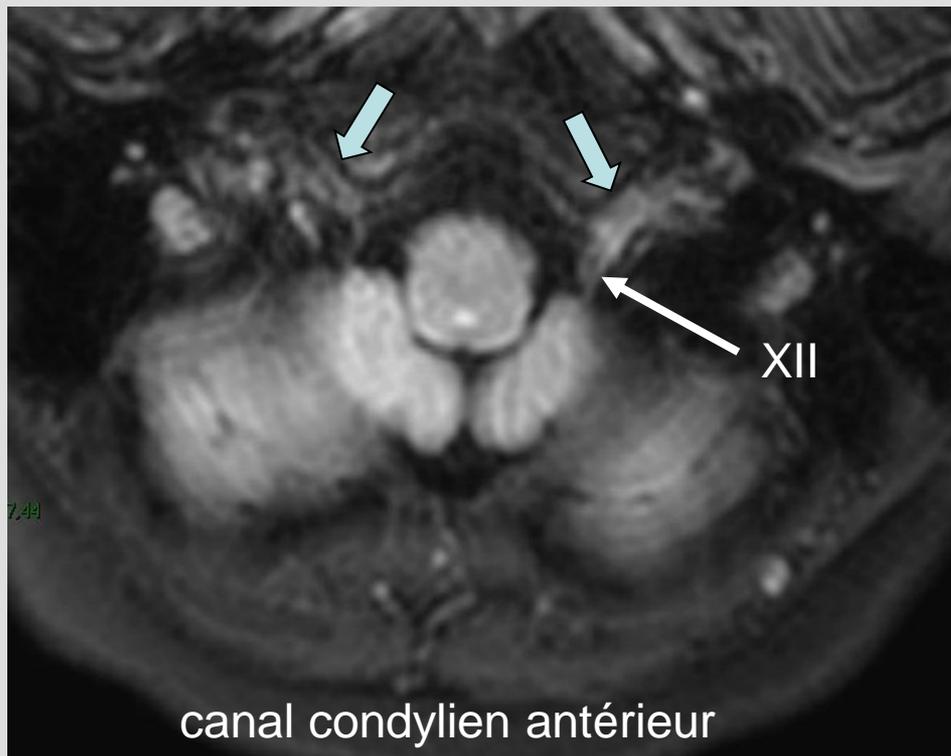


nerfs VII & VIII



nerfs 'mixtes' (IX,X,XI)





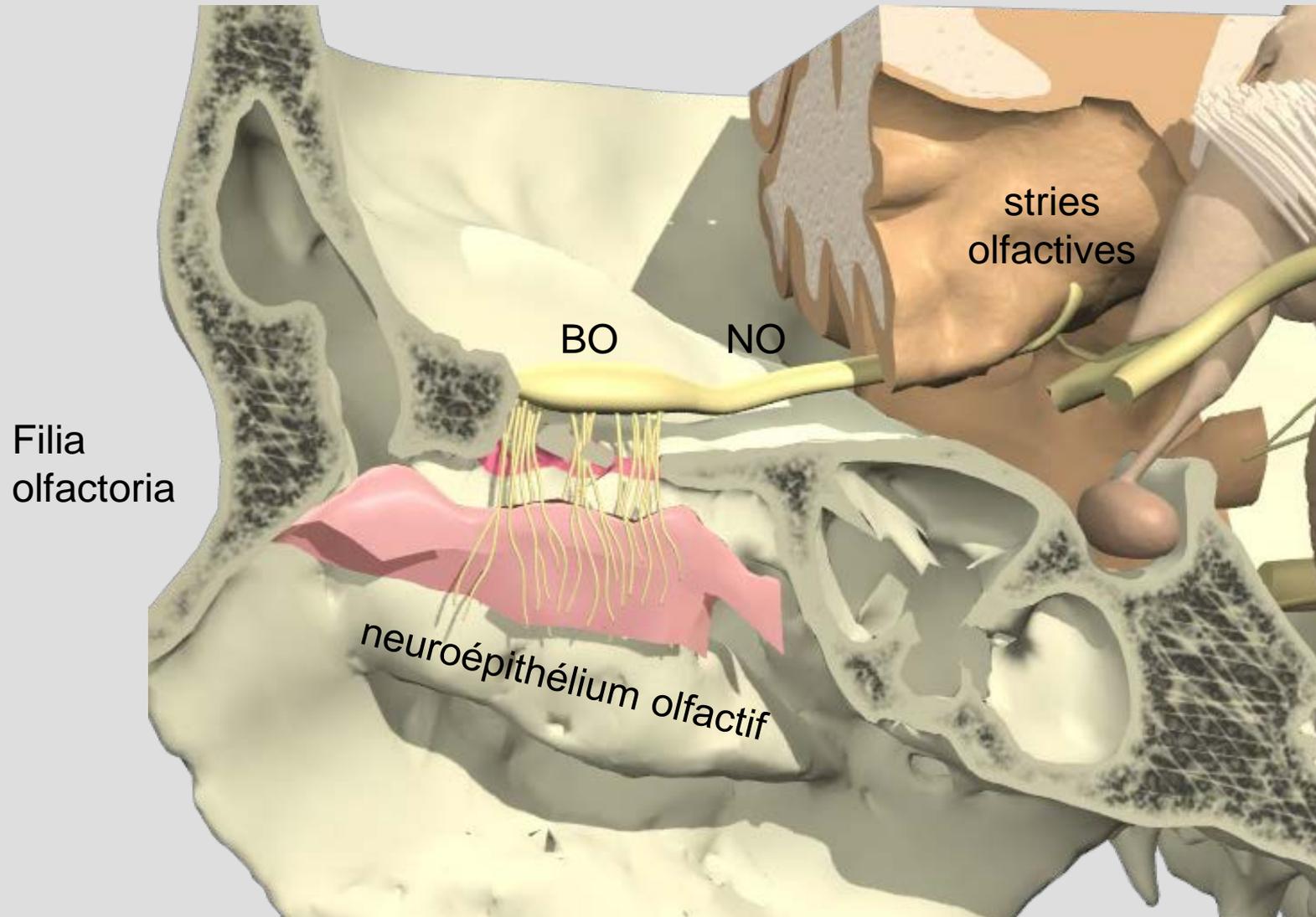
Paires crâniennes

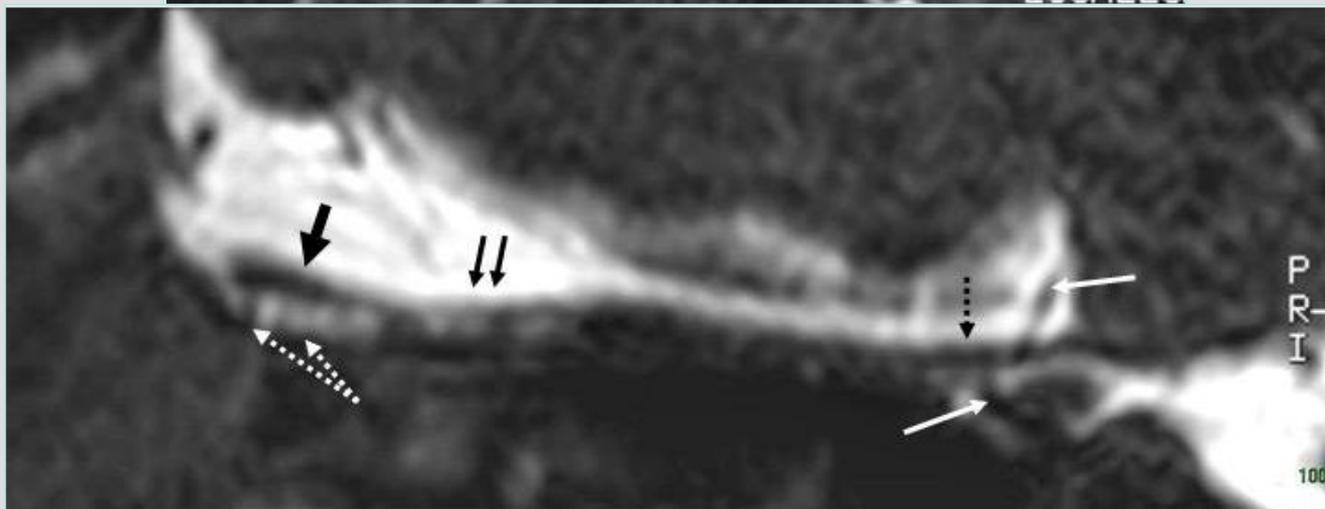
1. Modalités sensorielles

- * olfaction: nerf I
- * vision: nerf II
- * goût: nerfs I, V, IX, X
- * audition: nerf VIII
- * équilibre: nerf VIII

Olfaction

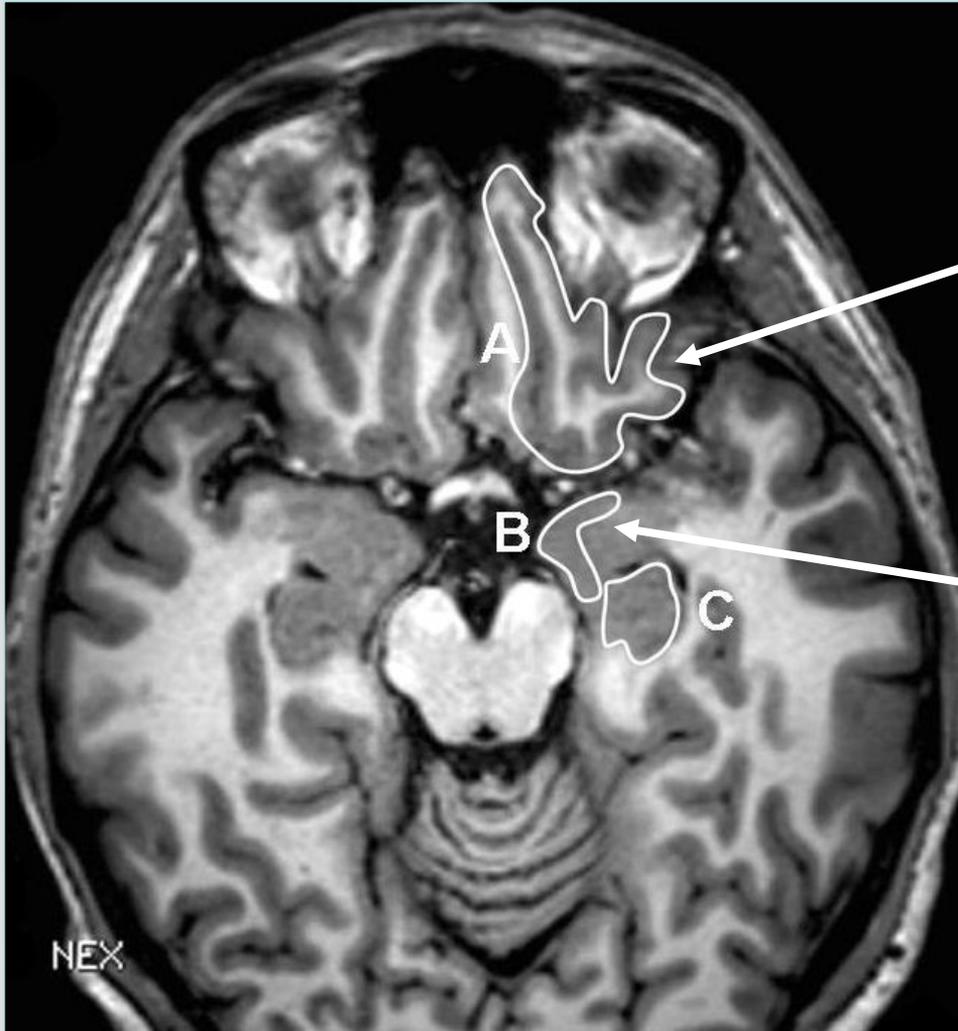
Nerf I *nerf olfactif*





A. Orbitofrontal olfactory cortex
(from MD thalamic nucleus)

Projections centrales



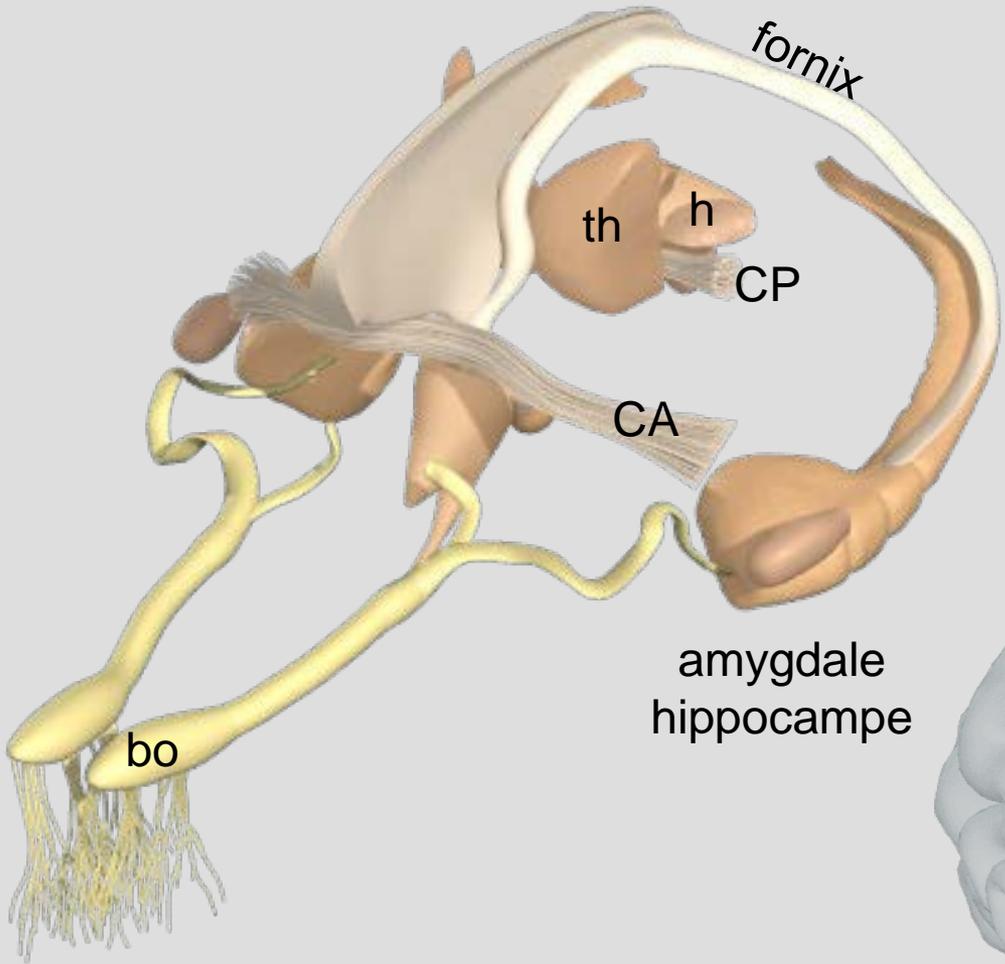
néocorticales

paléocorticales

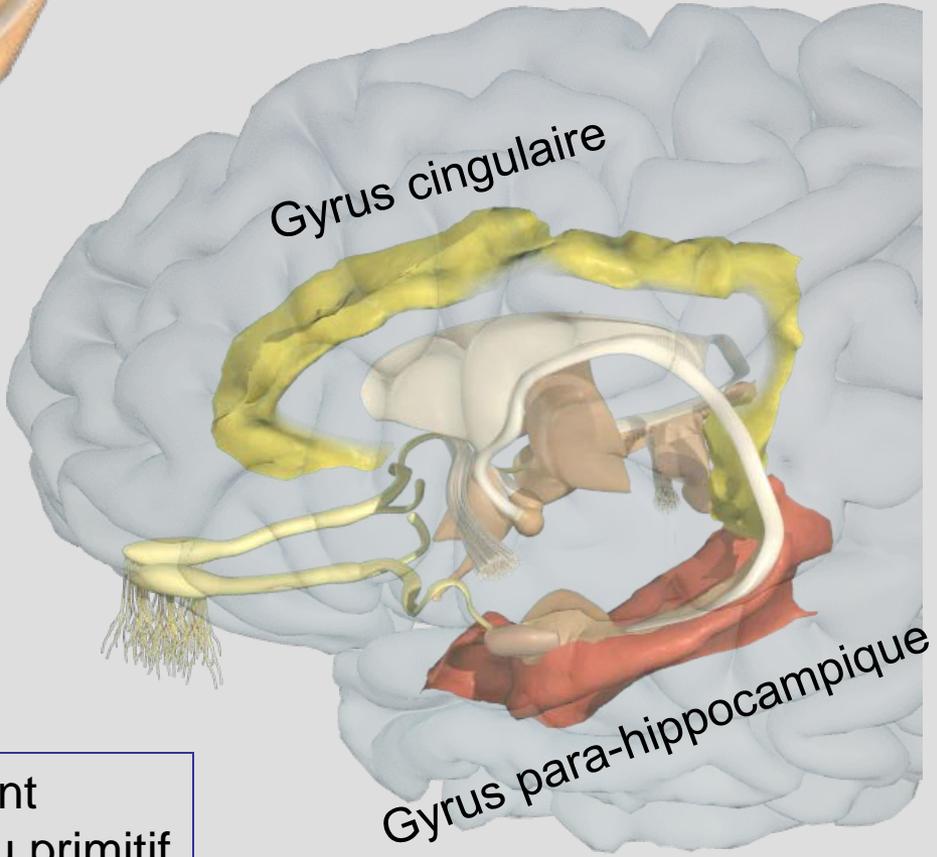
B. piriform/periamygdaloid cortex:
primary olfactory cortex

C. Entorhinal cortex:
secondary olfactory cortex

Cerveau primitif Système limbique



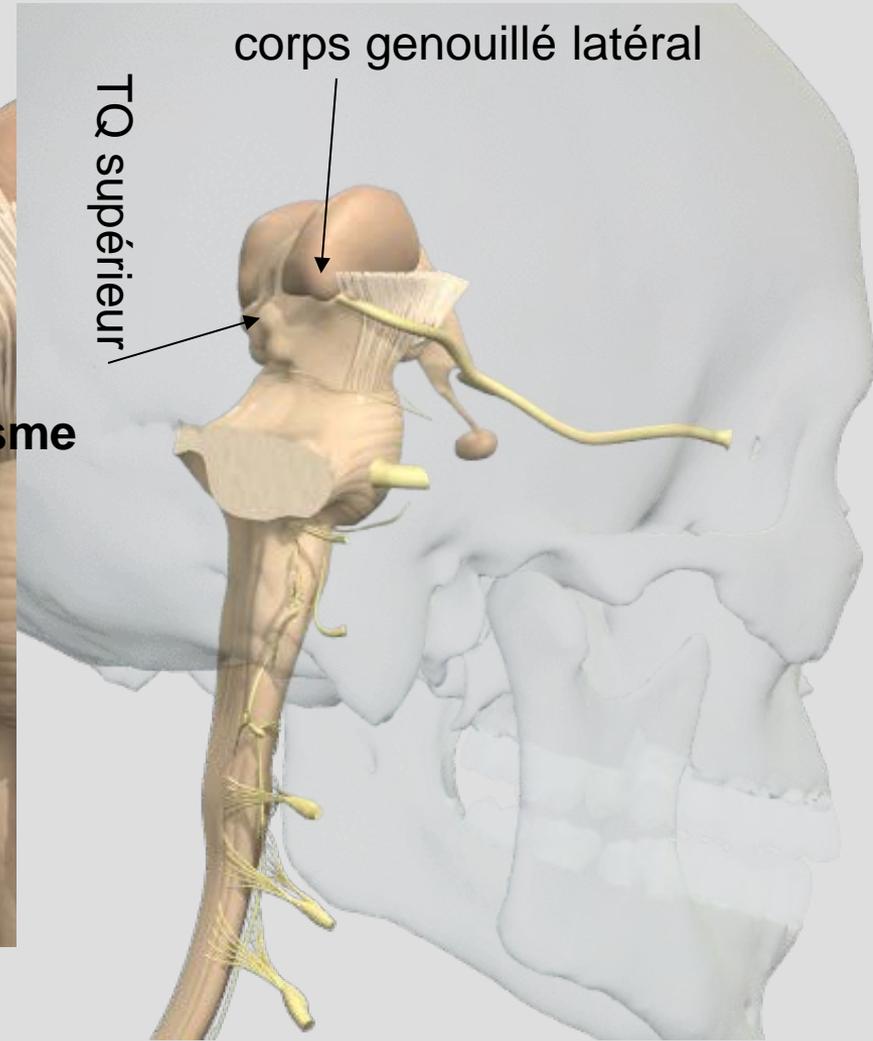
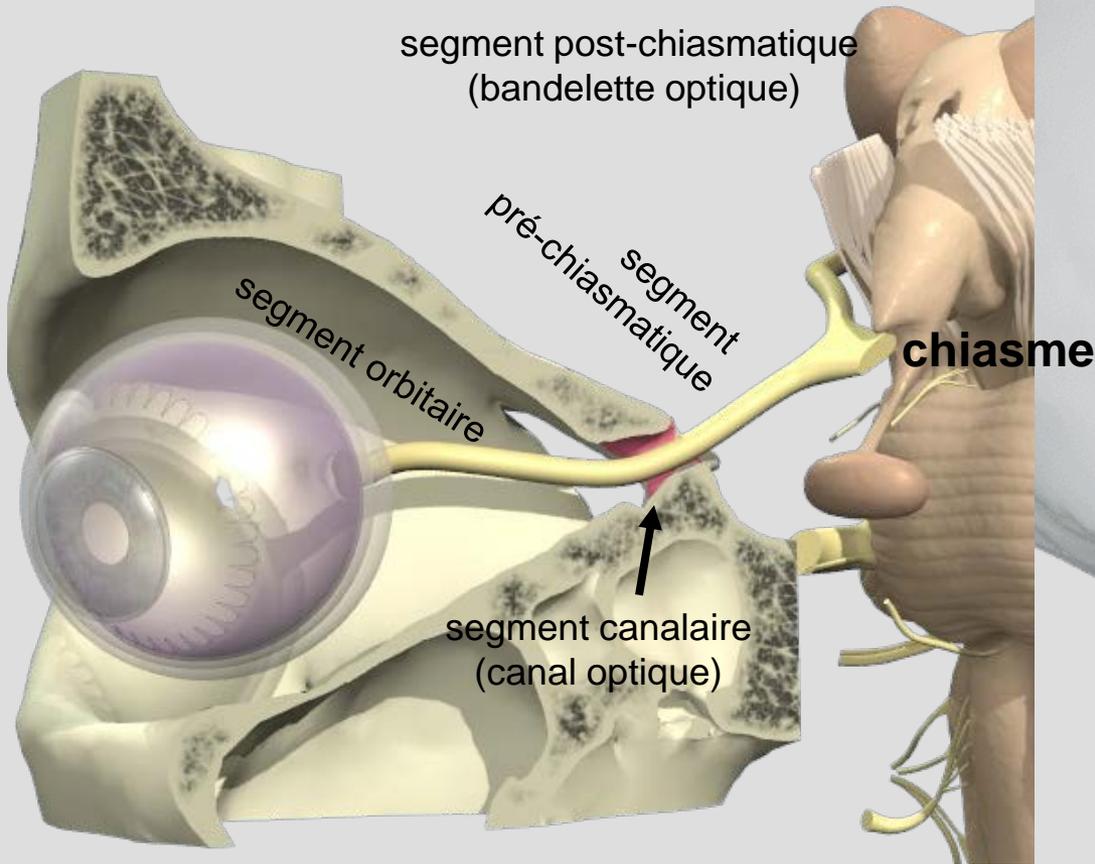
Nerf olfactif

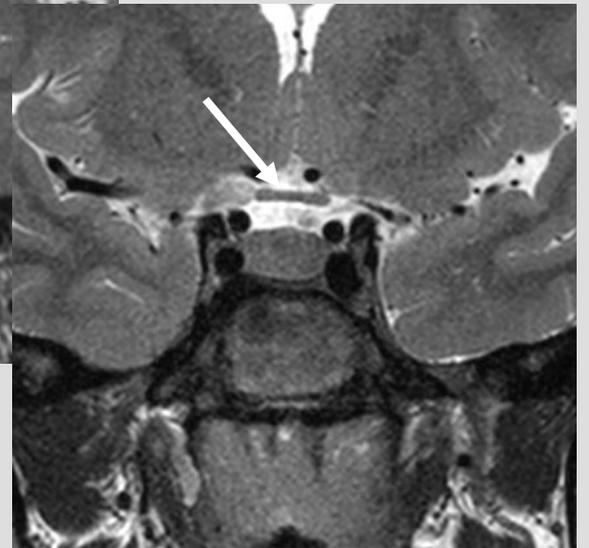
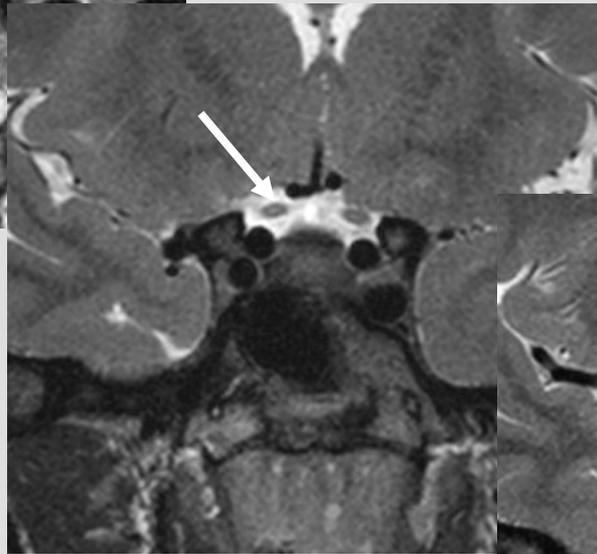
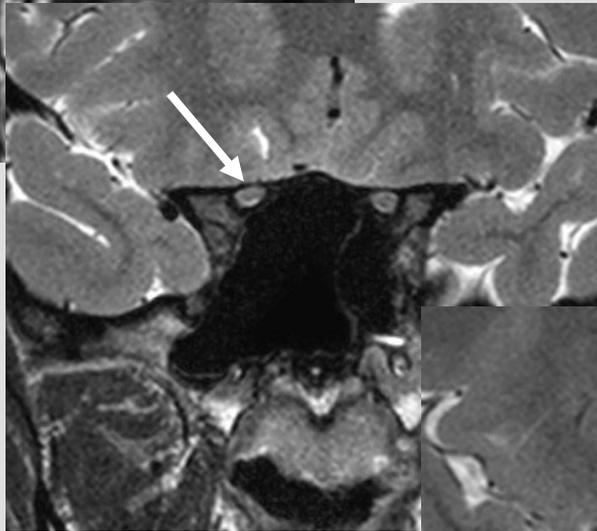
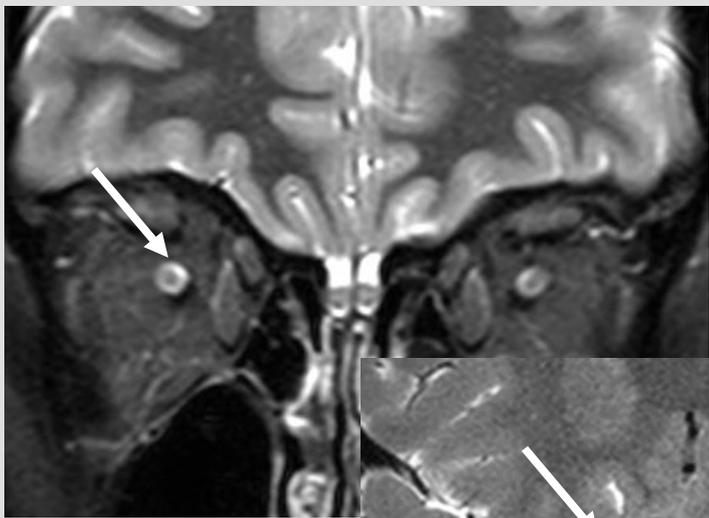


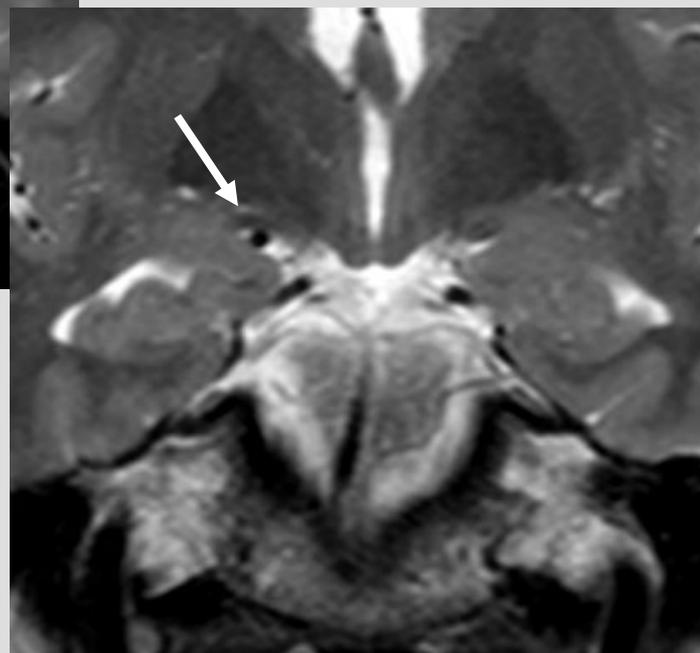
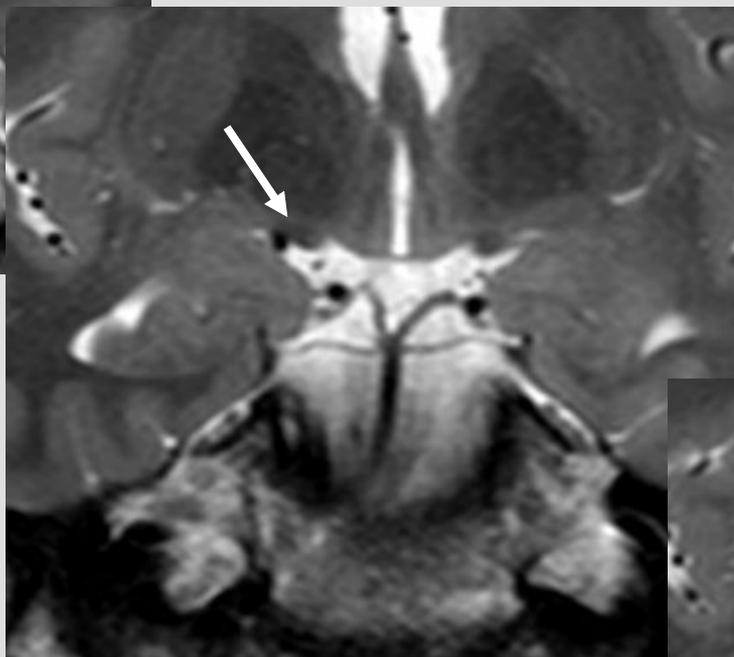
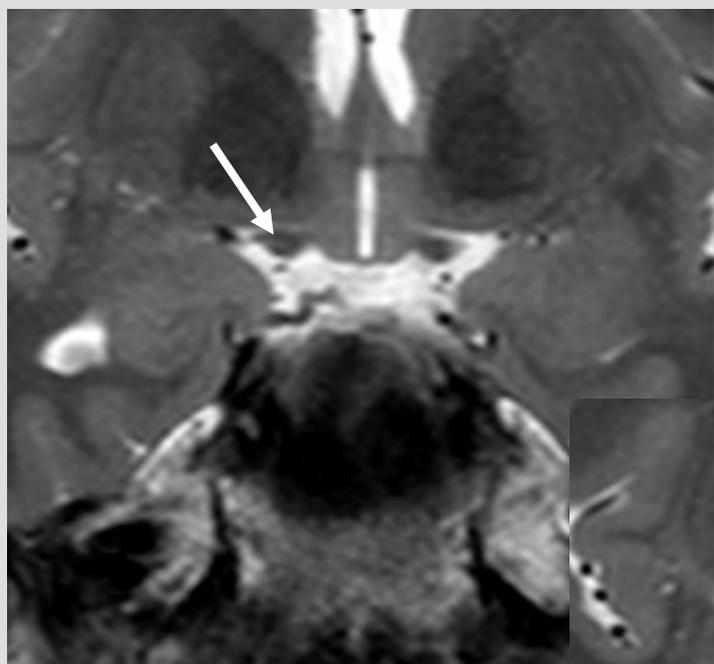
Olfaction = seule modalité sensorielle ayant des connexions centrales avec le cerveau primitif

Vision

Nerf II *nerf optique*

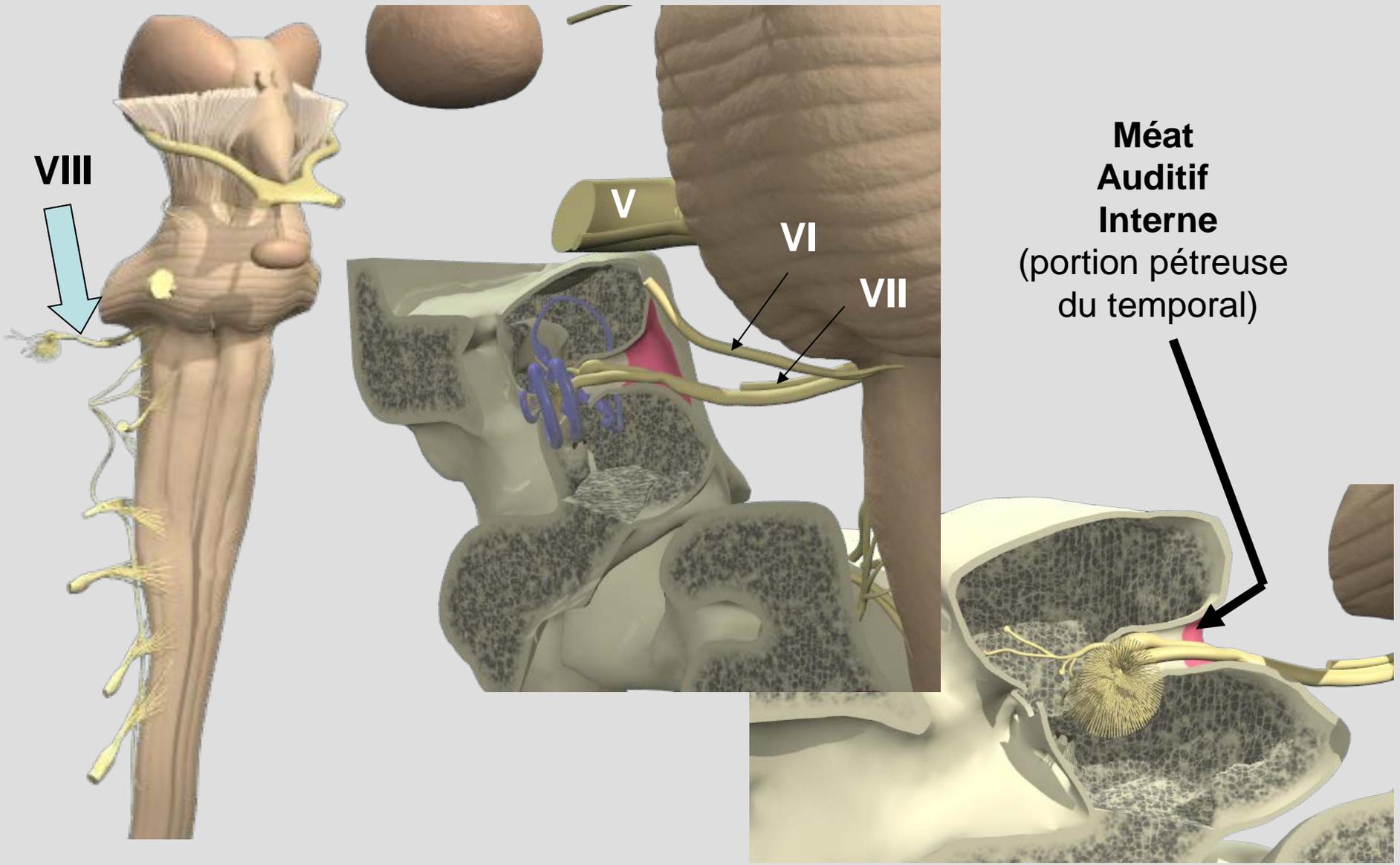




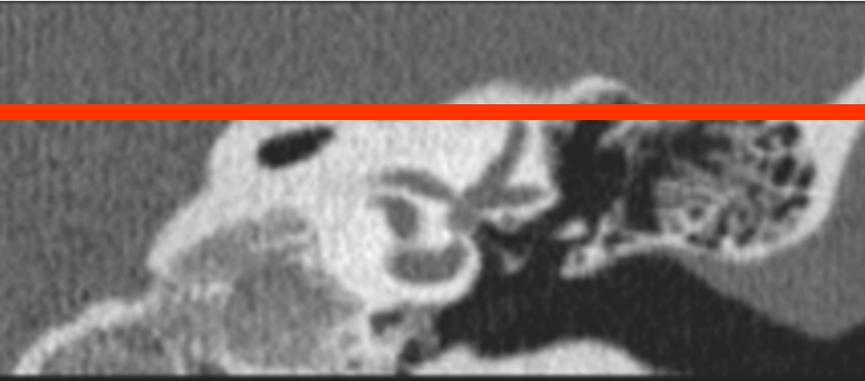


Audition - équilibre

Nerf VIII *nerf vestibulo-cochléaire*



Canal semi circulaire supérieur



Canal semi circulaire supérieur

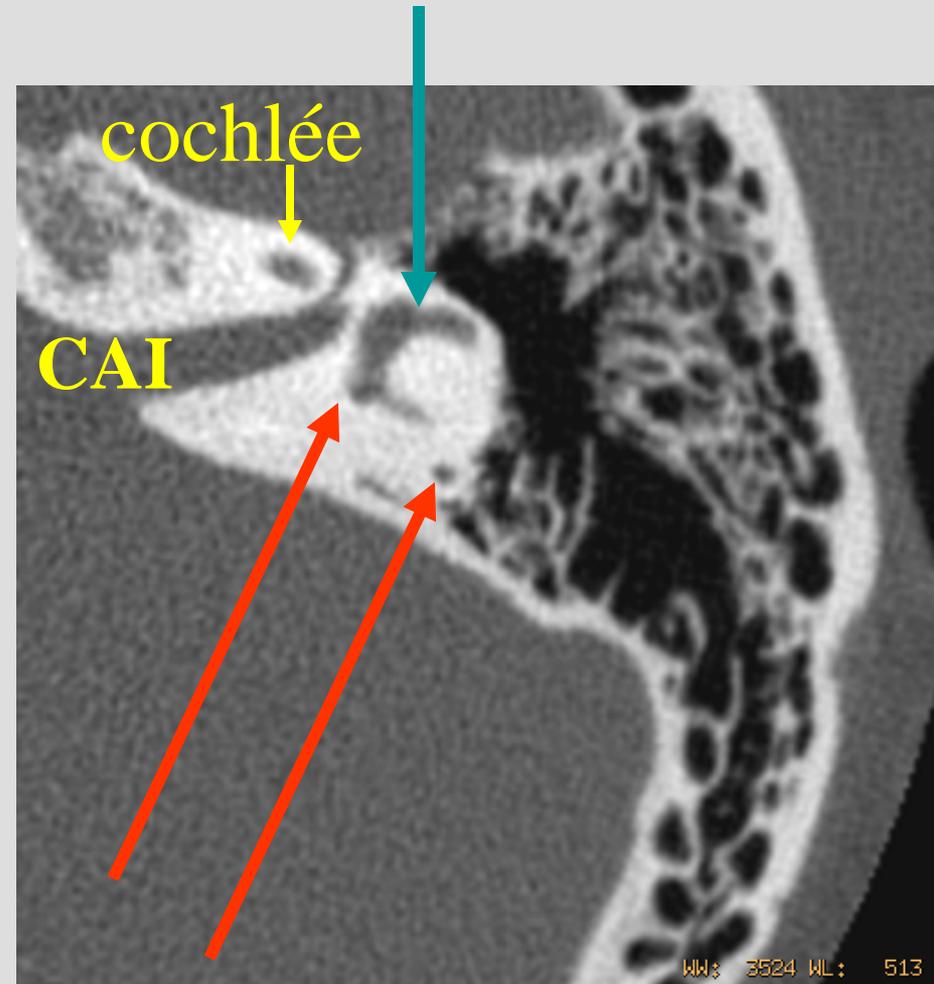


Canal semi circulaire supérieur



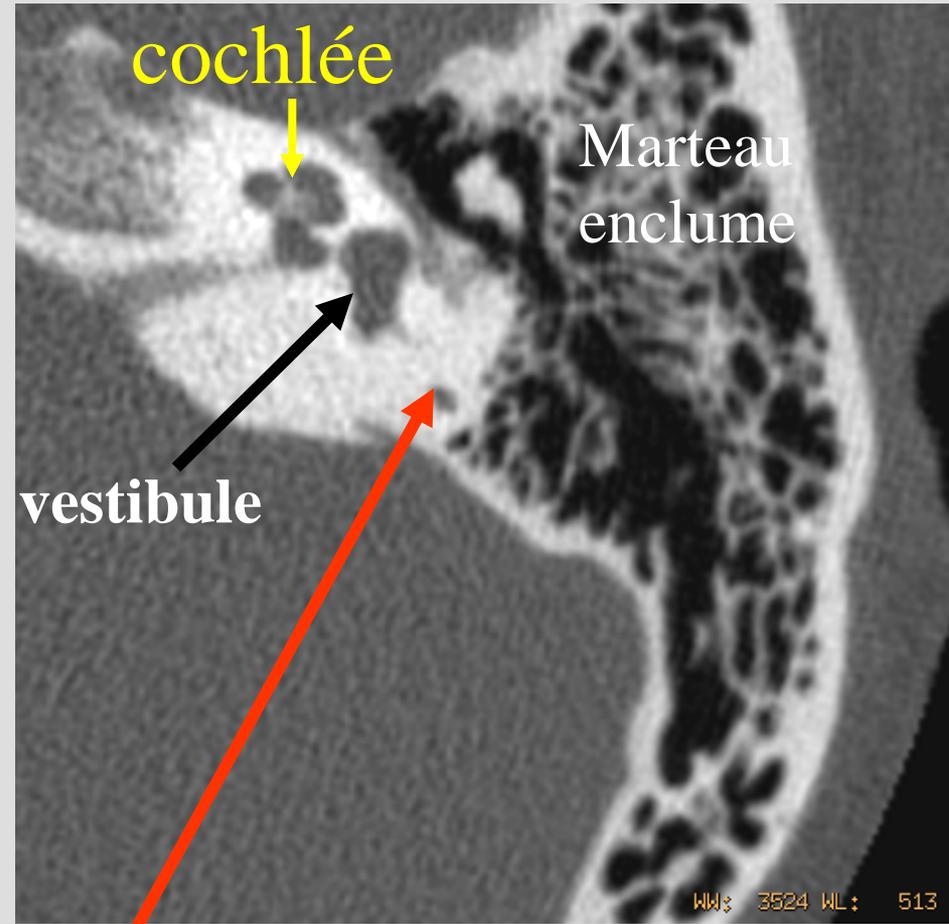
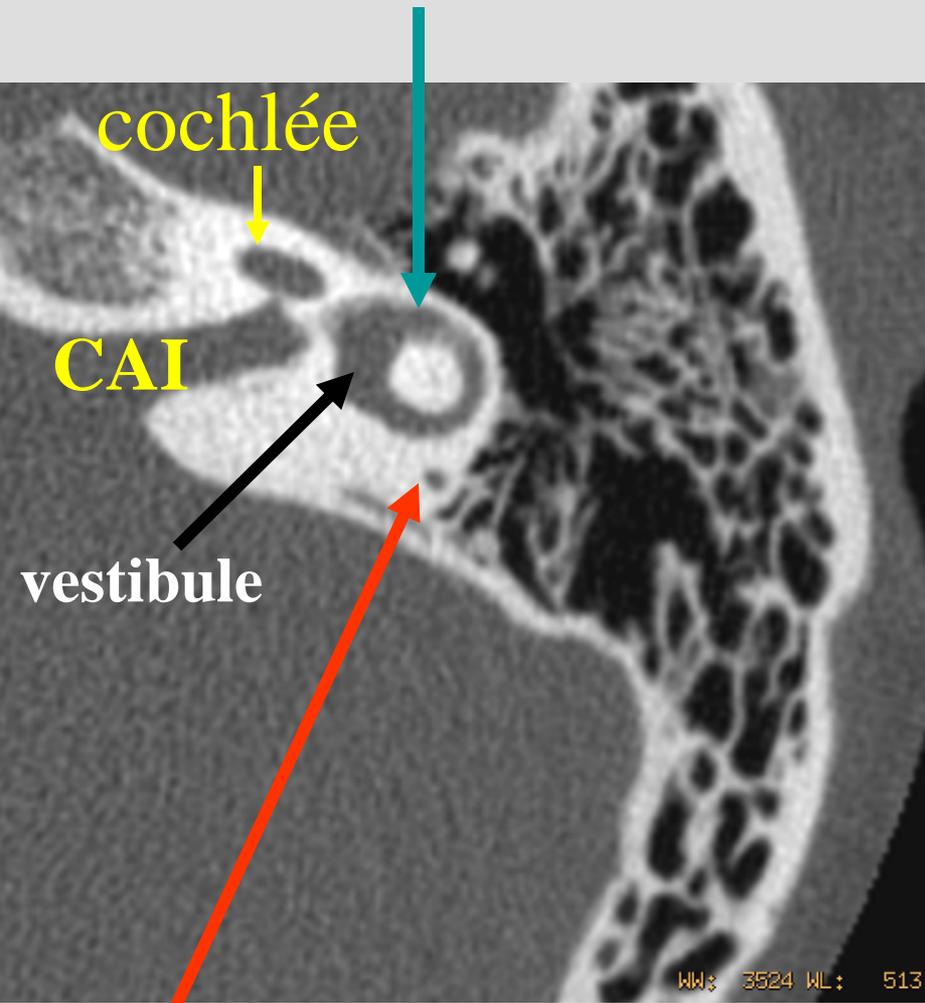
Canal semi circulaire postérieur

Canal semi circulaire latéral ou externe



Canal semi circulaire postérieur

Canal semi circulaire latéral ou externe

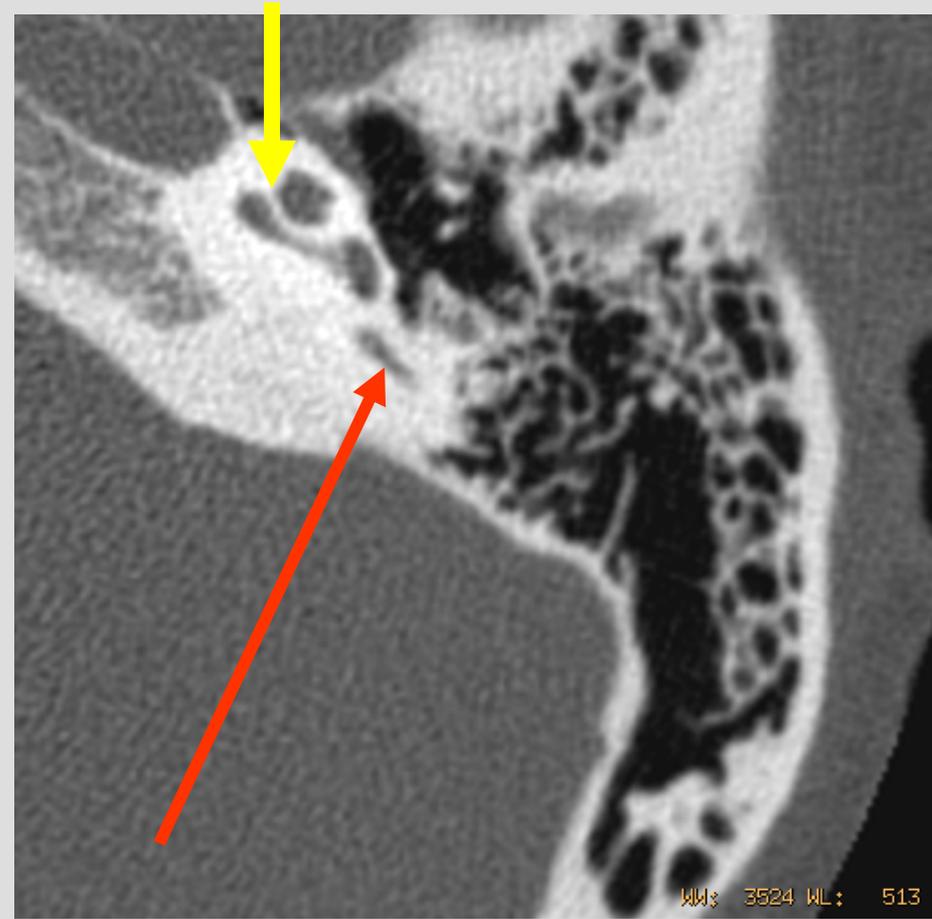


Canal semi circulaire postérieur

cochlée



cochlée



Canal semi circulaire postérieur

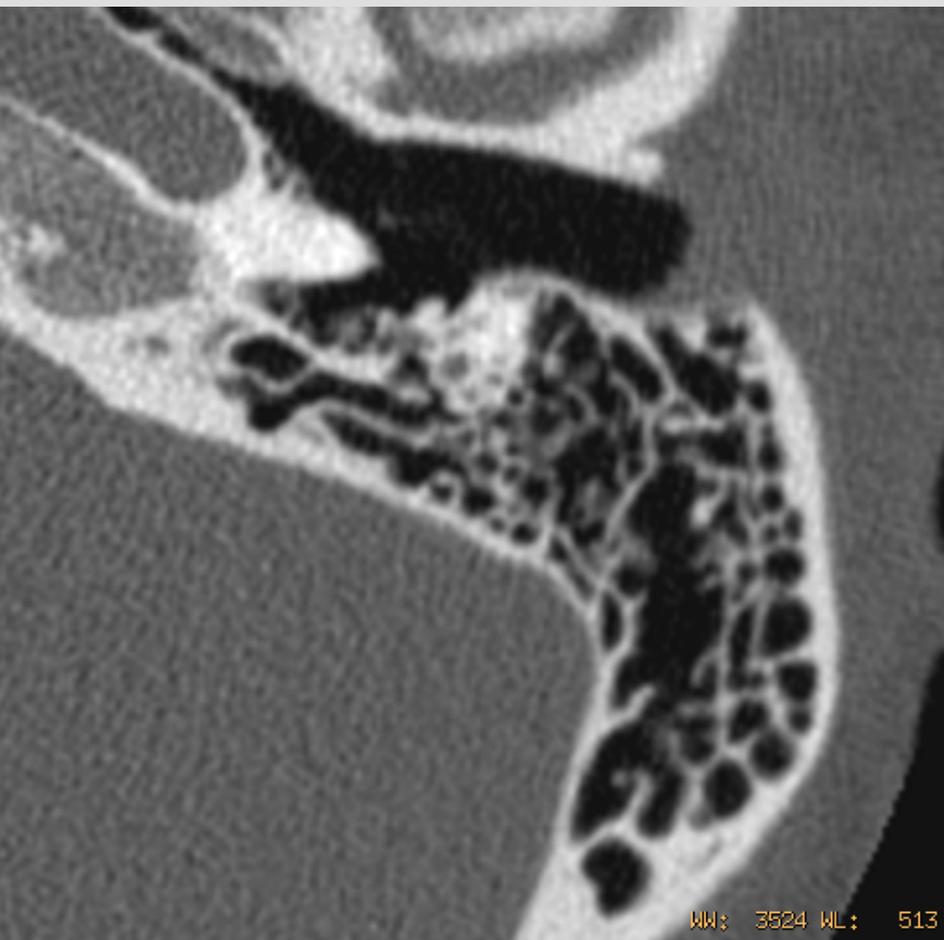
cochlée



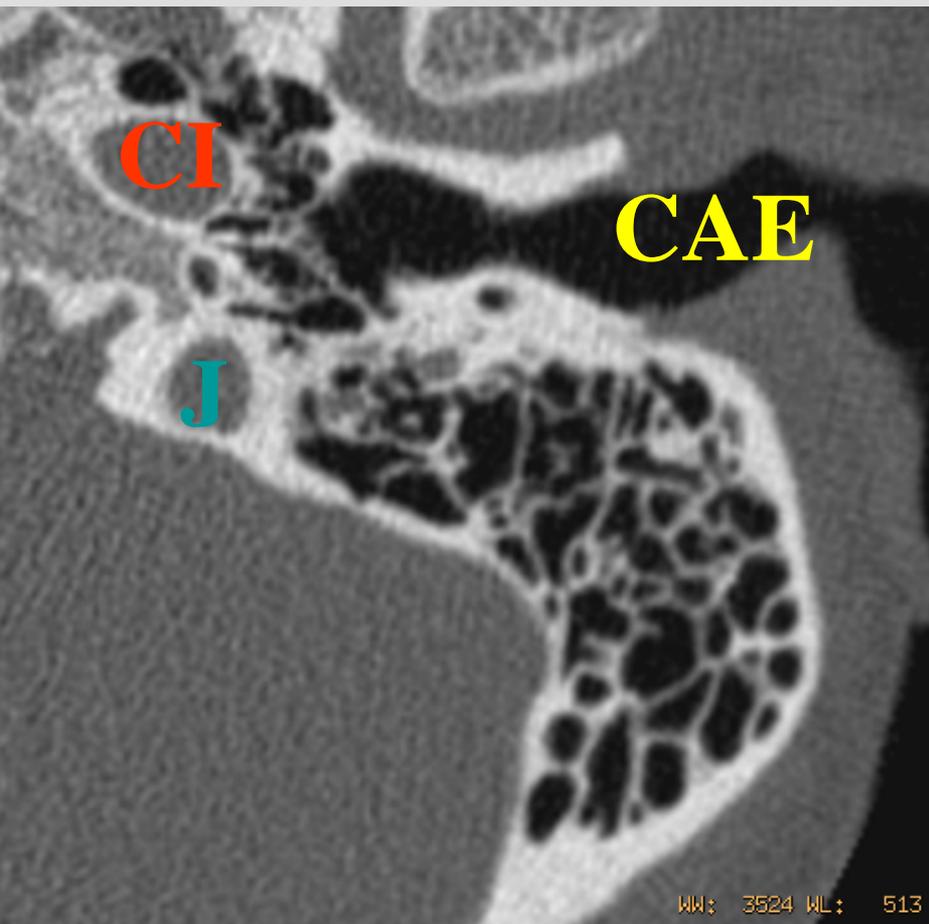
cochlée



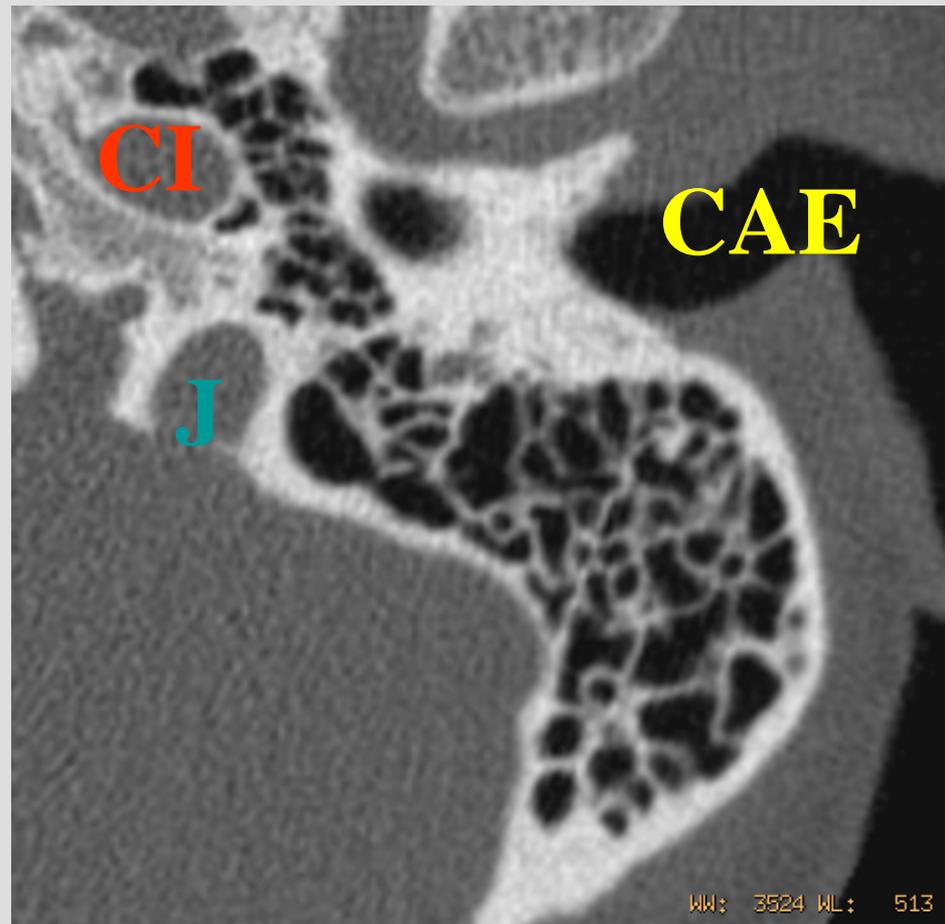
Aqueduc de la cochlée

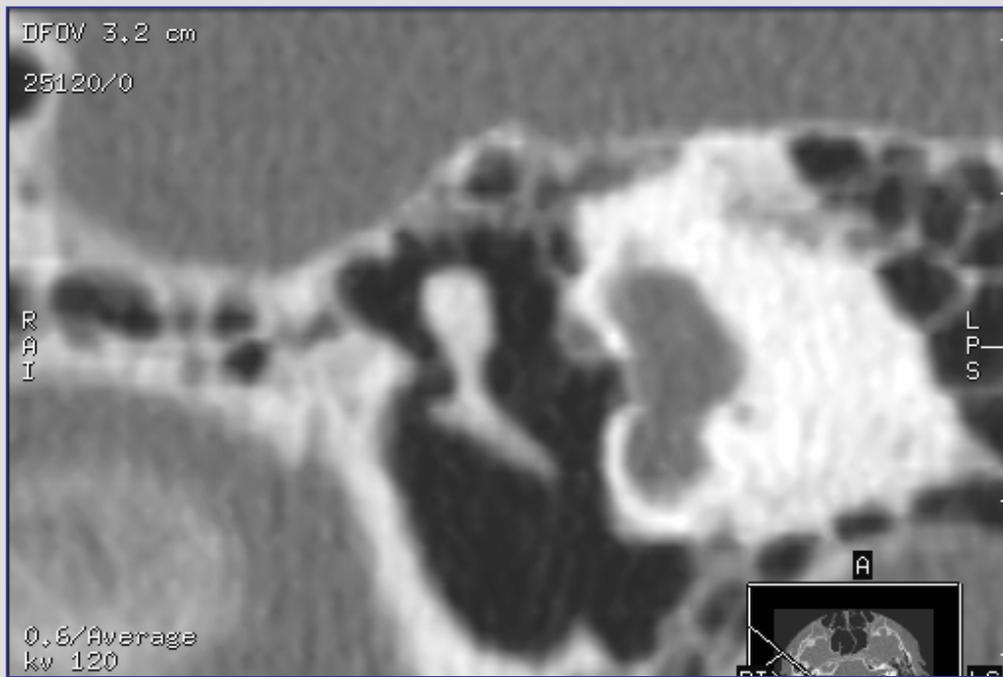


ATM



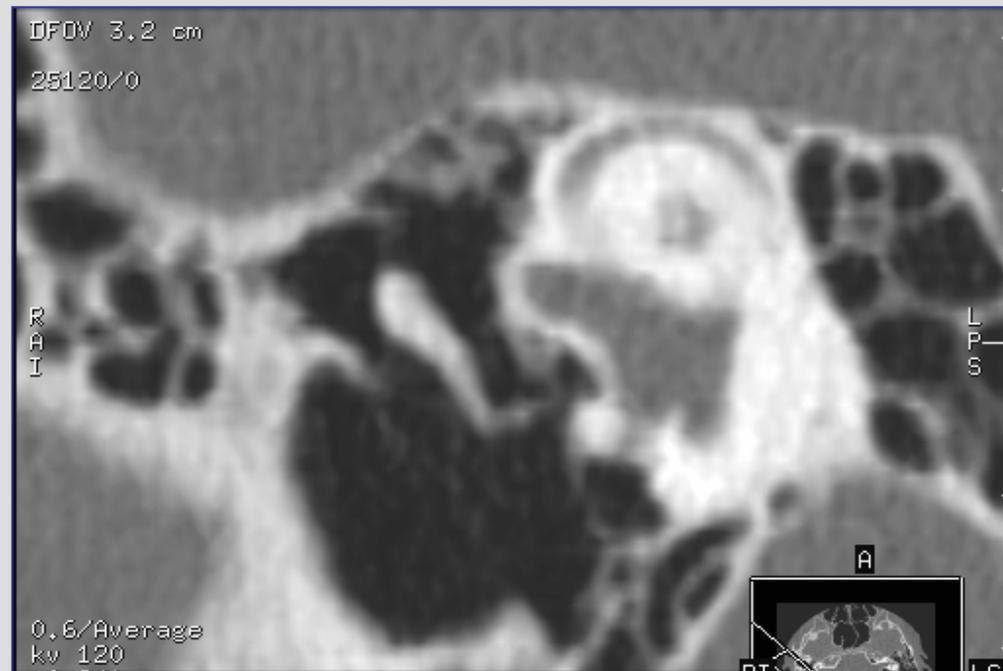
ATM

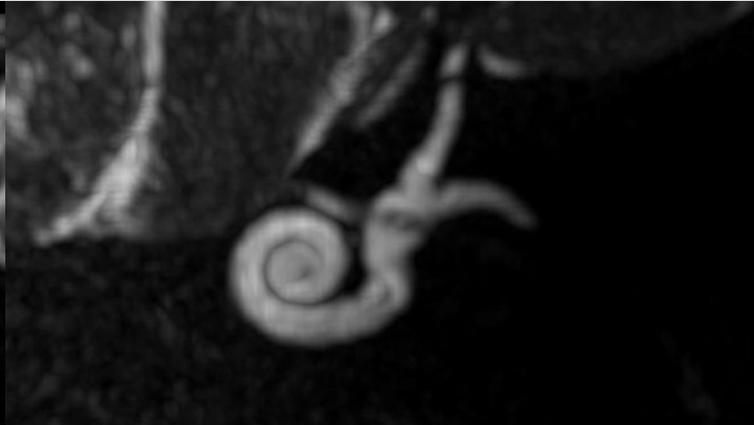
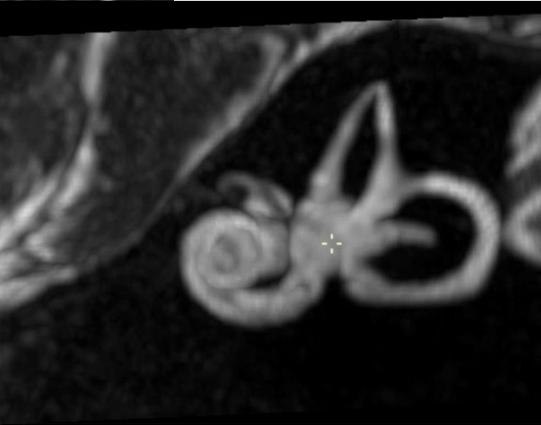
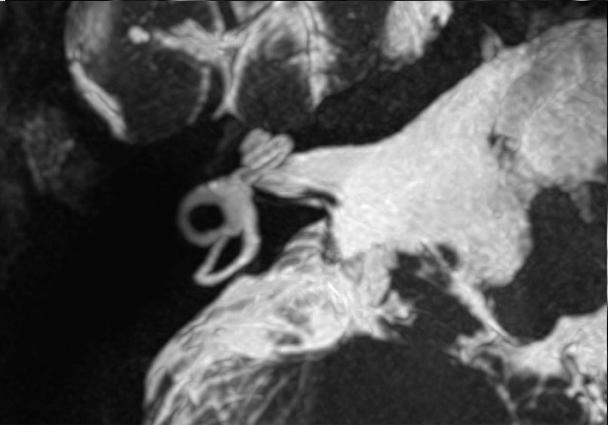
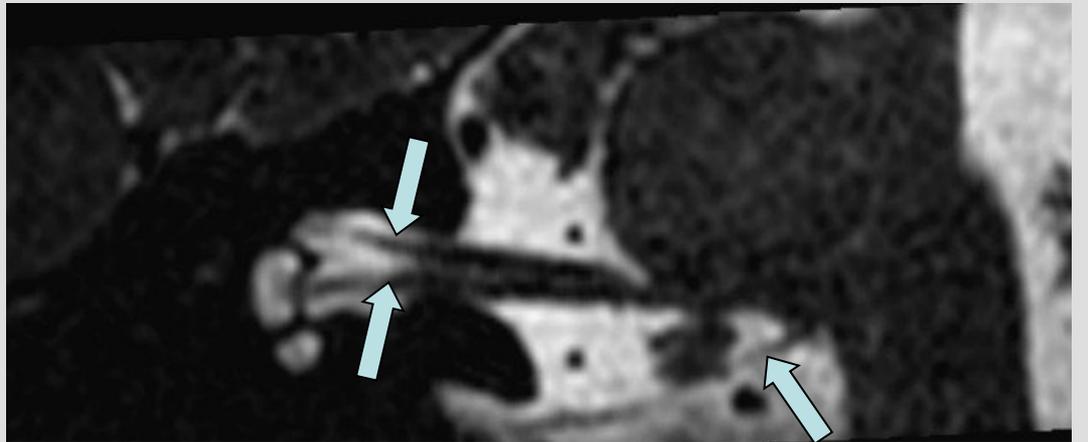
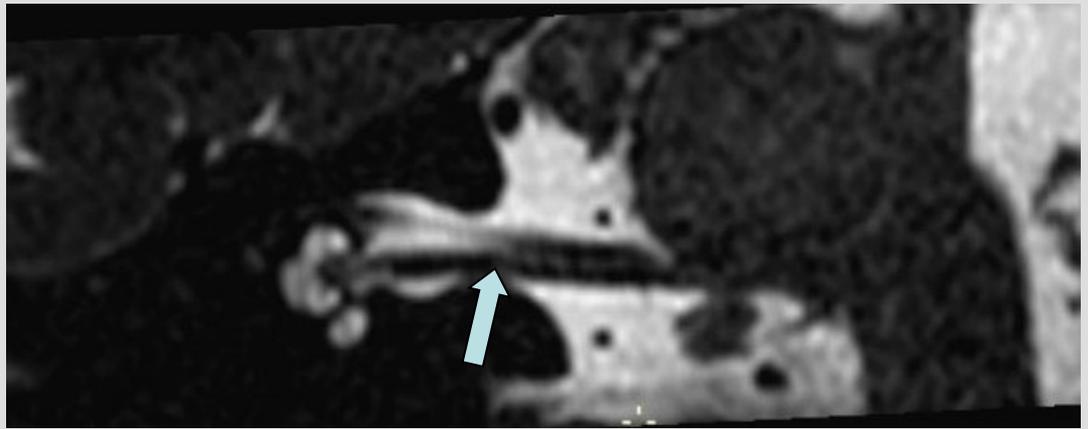
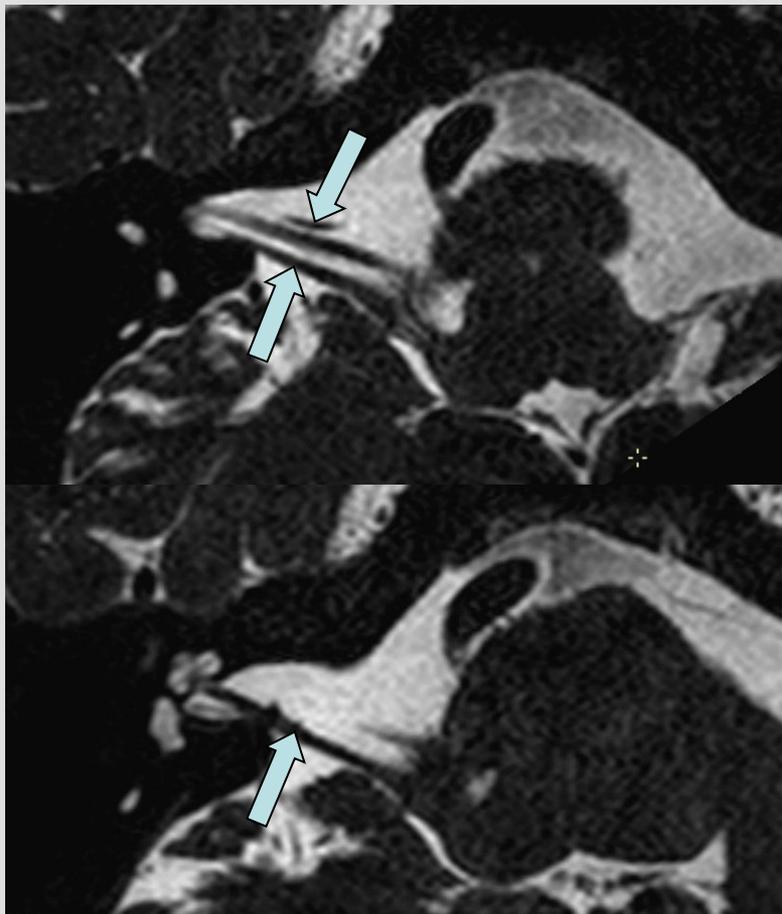


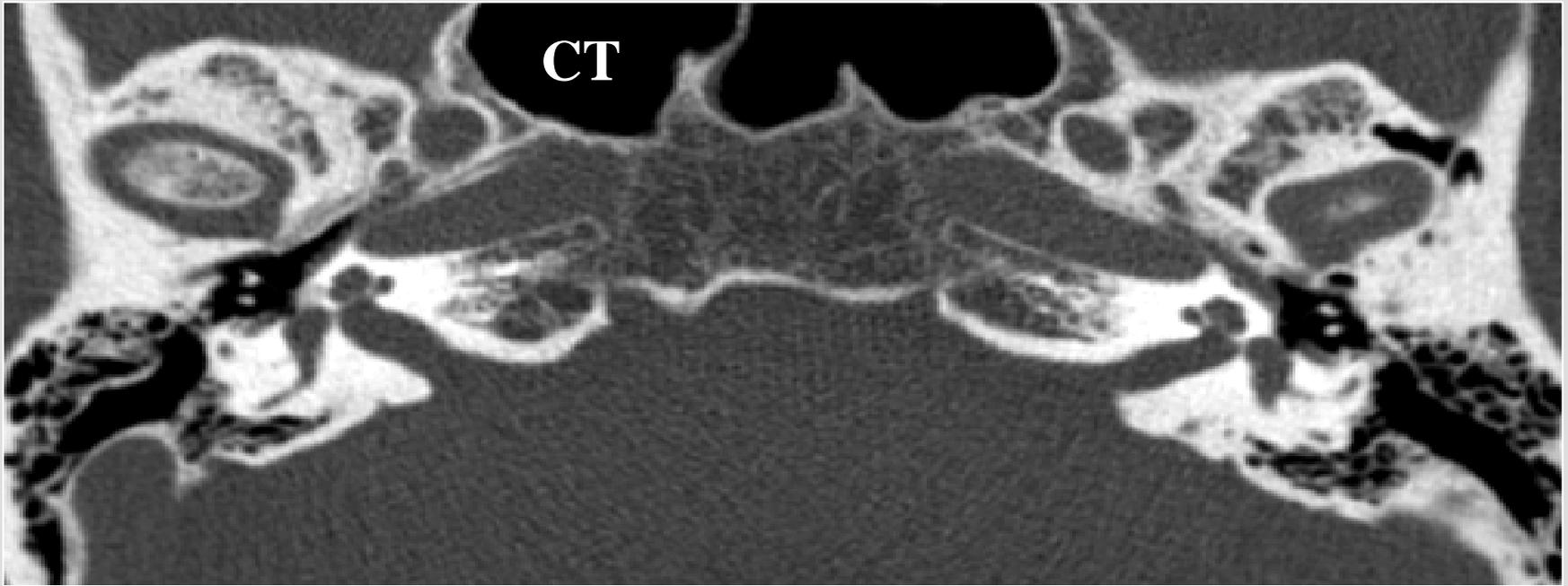


Anatomie tomographique sérielle

: coupes frontales obliques







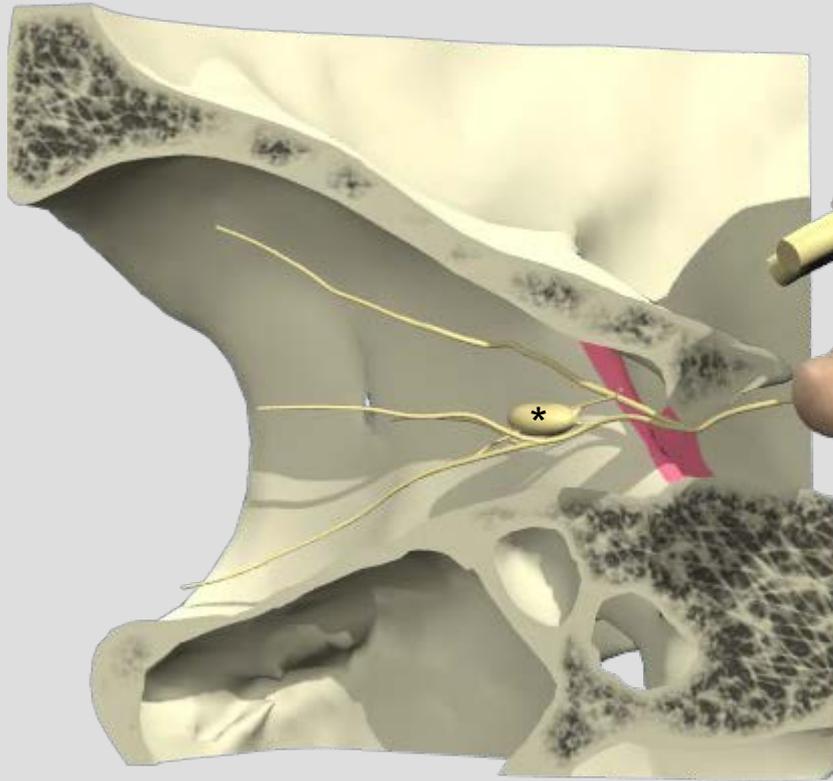
Paires crâniennes

2. Fonction motrice

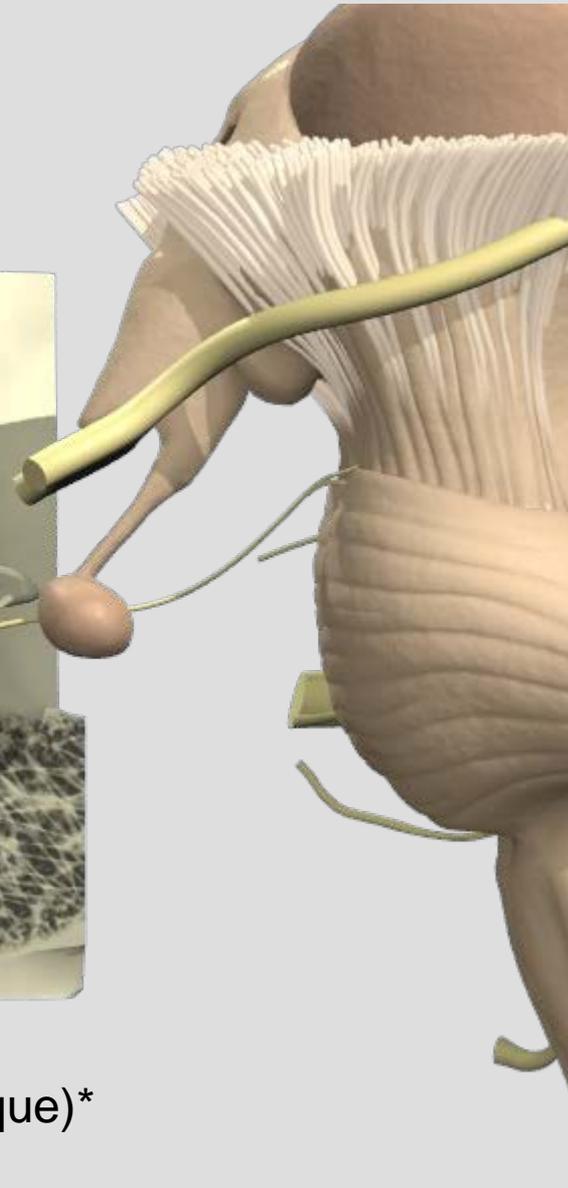
- *oculo-motricité: nerfs III, IV, VI
- *motricité de la face: nerf VII
- *motricité de la langue: nerf XII

Oculo-motricité

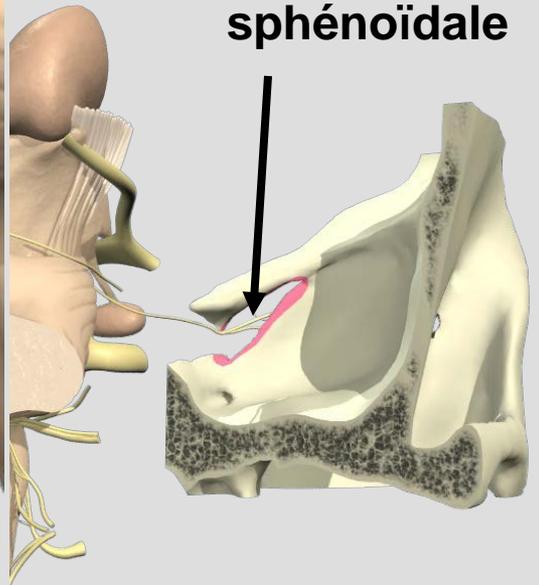
Nerf III = nerf oculomoteur (commun)

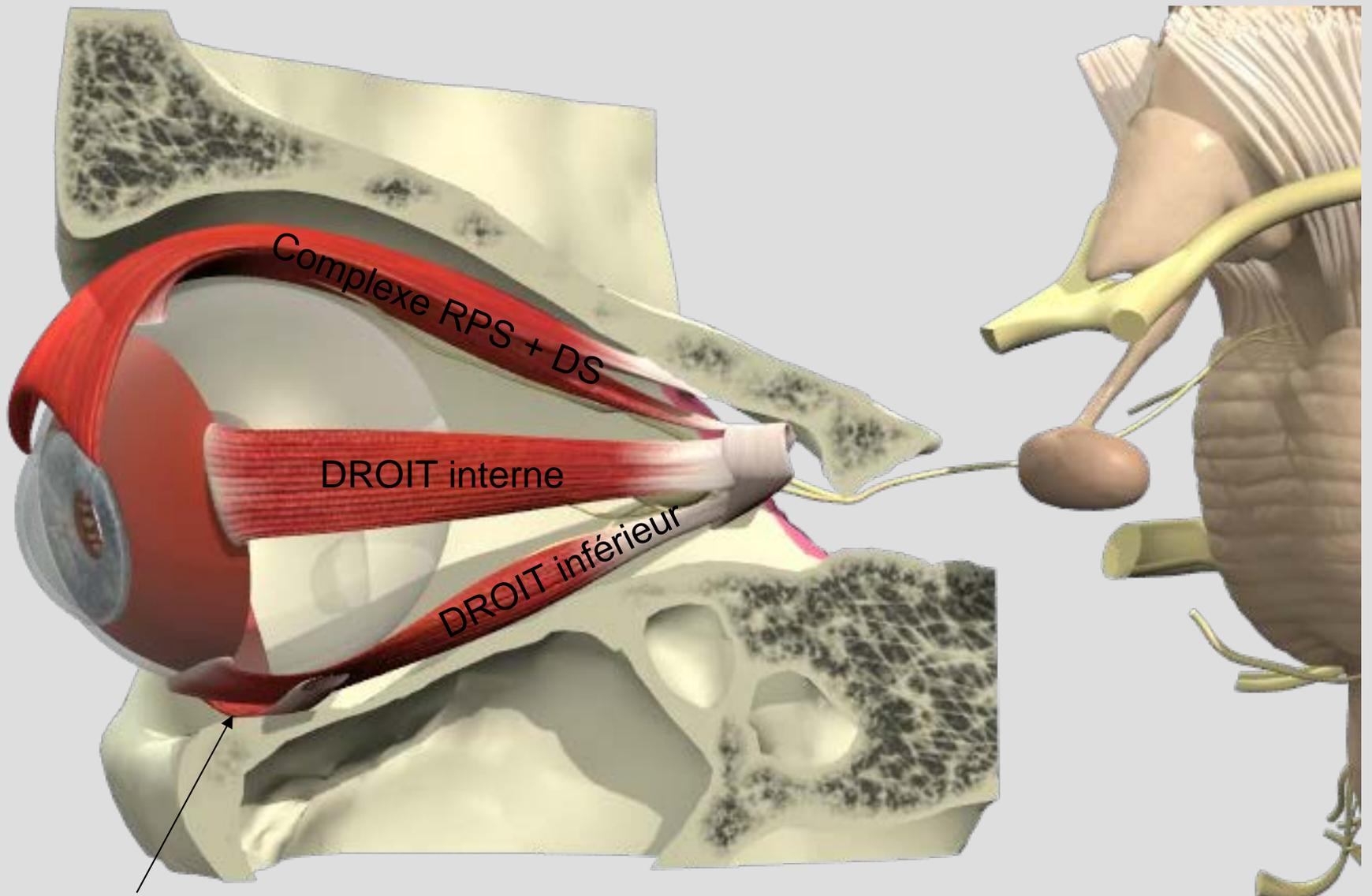


Branche supérieure
Ganglion ciliaire (parasymphique)*
Branche inférieure



Fissure
sphénoïdale





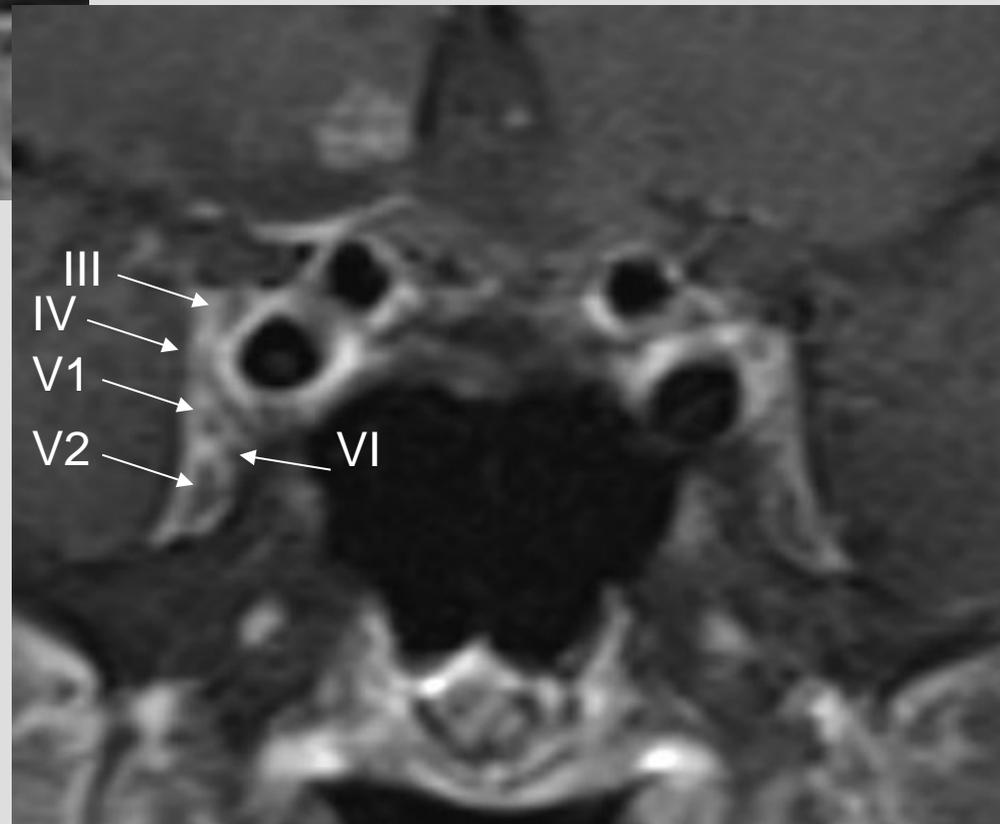
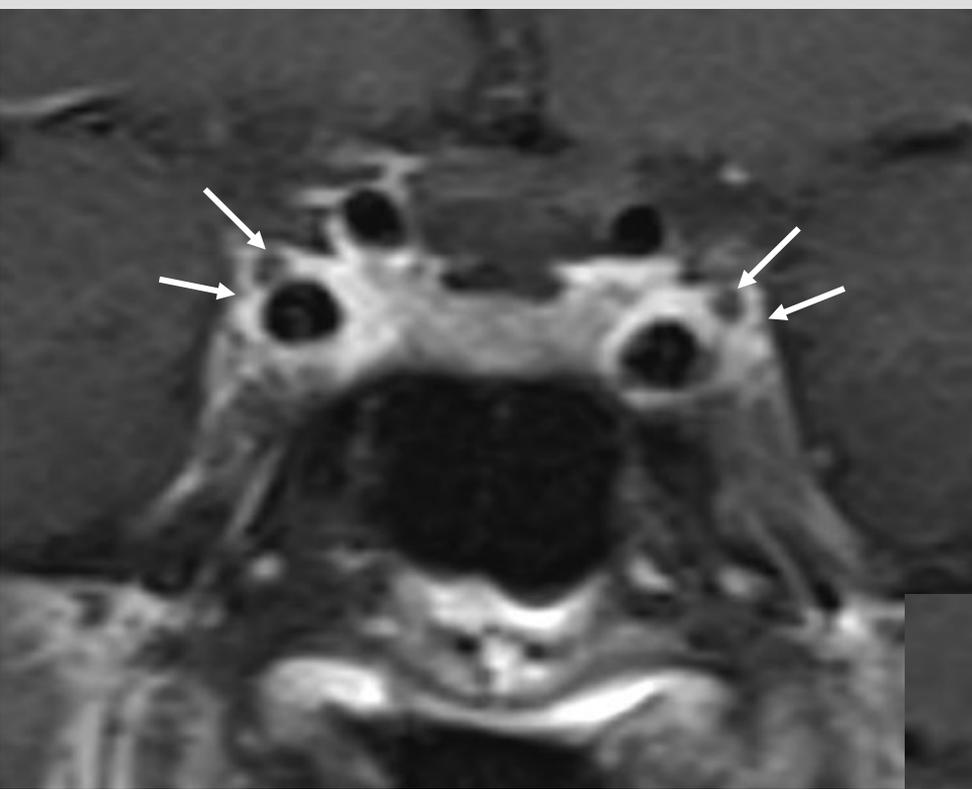
Complexe RPS + DS

DROIT interne

DROIT inférieur

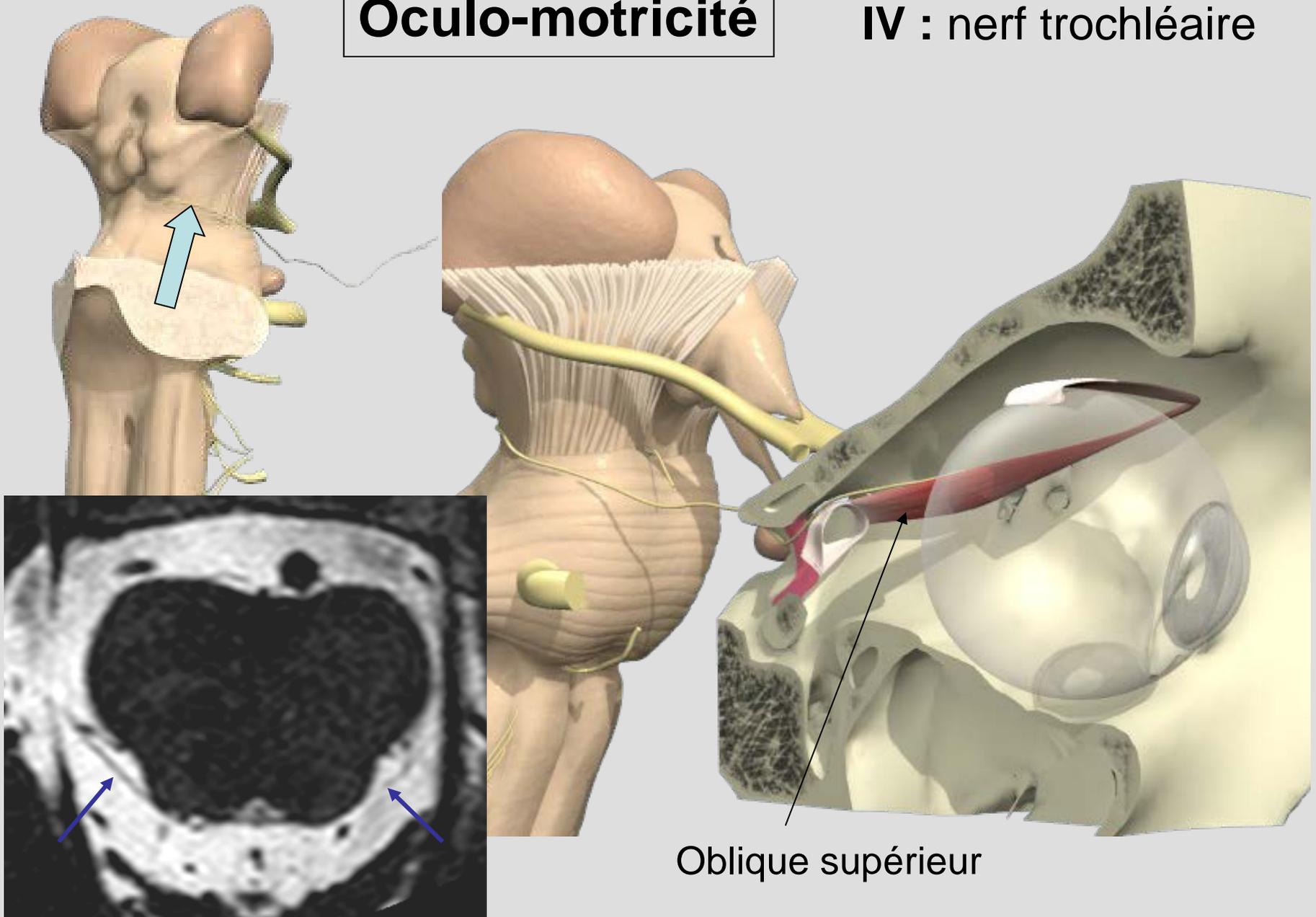
OBLIQUE inférieur

Sinus caverneux
coupes frontales T1 post C+ FS



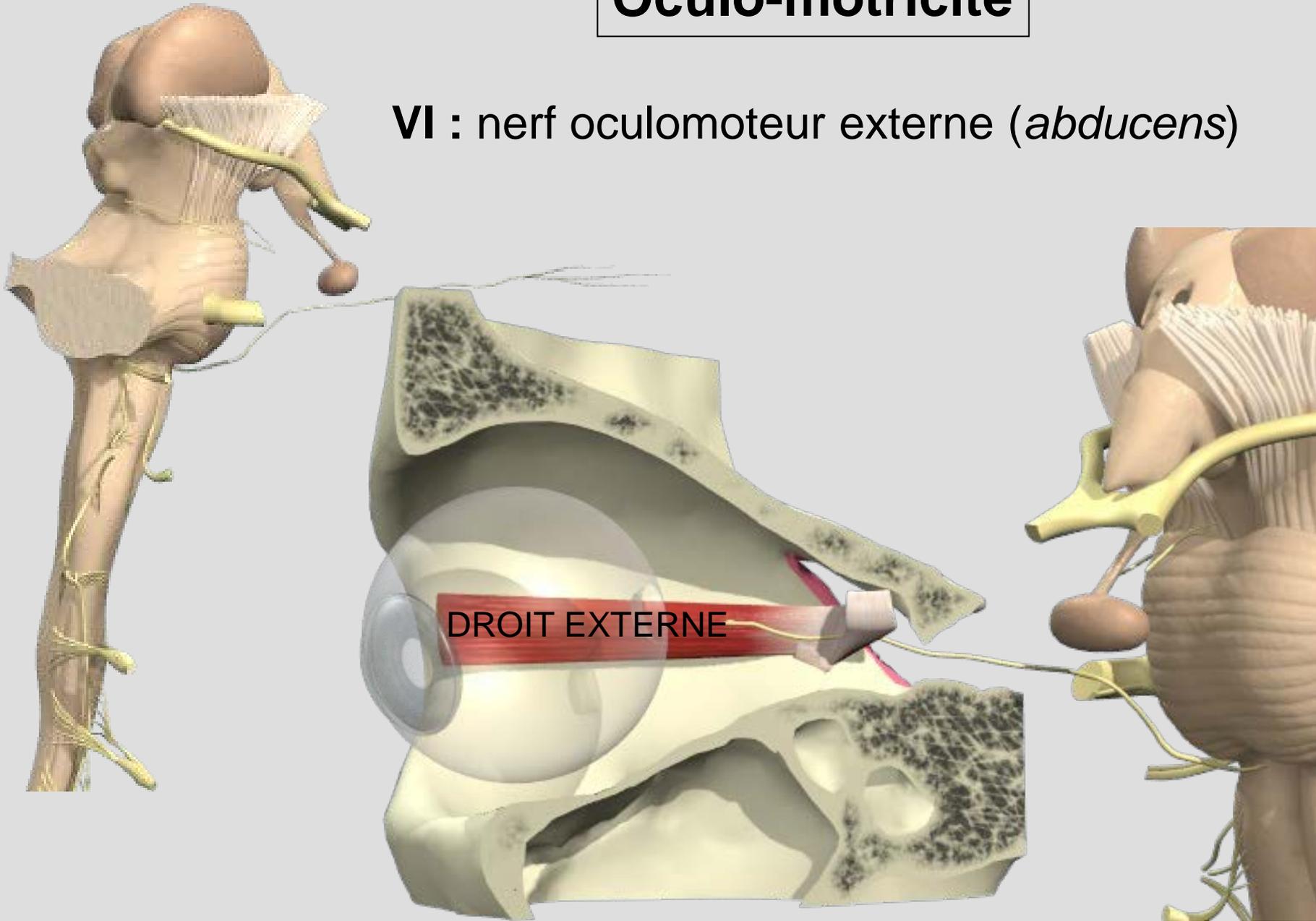
Oculo-motricité

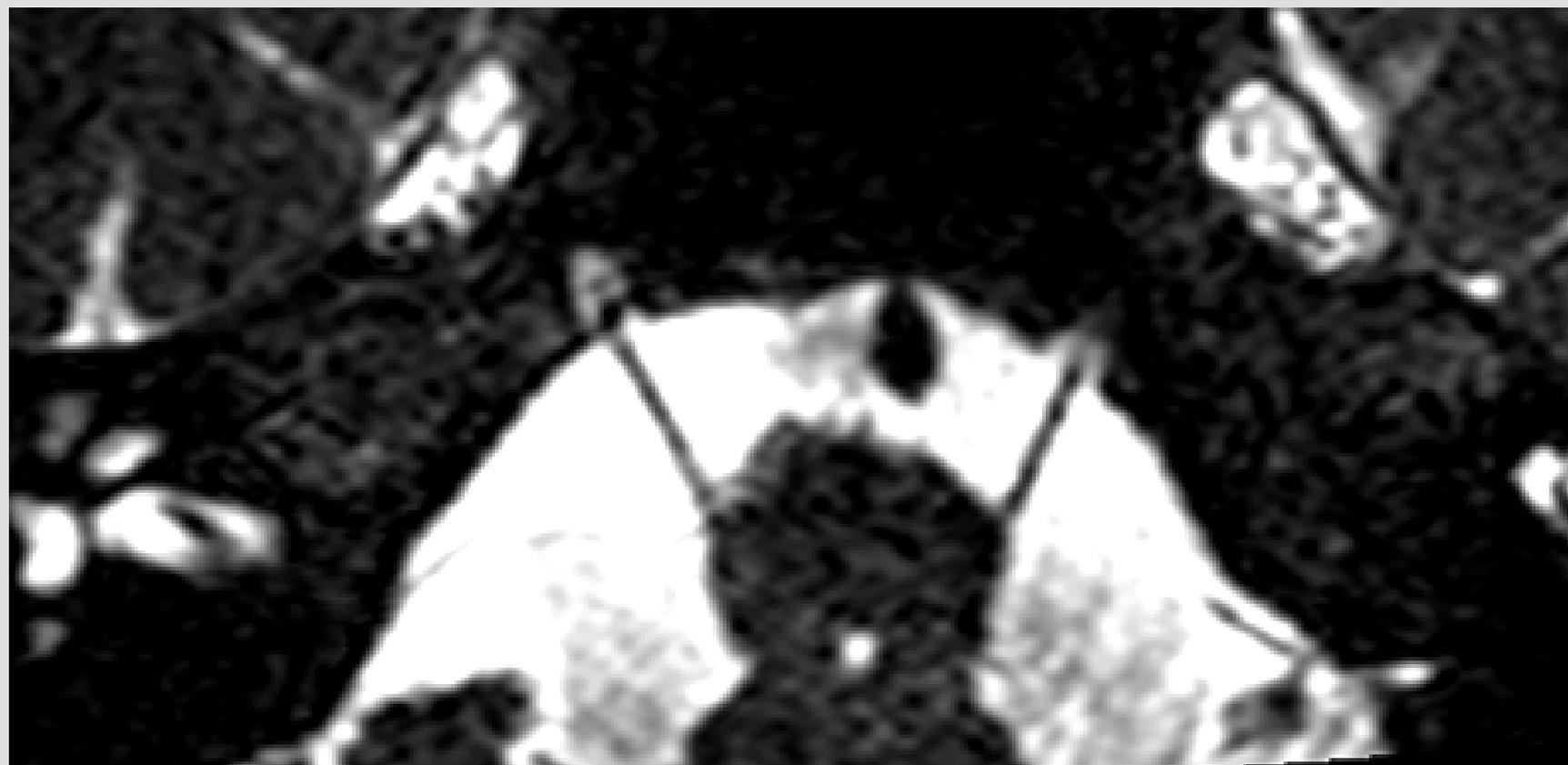
IV : nerf trochléaire



Oculo-motricité

VI : nerf oculomoteur externe (*abducens*)





Motricité de la face

Nerf VII: nerf facial

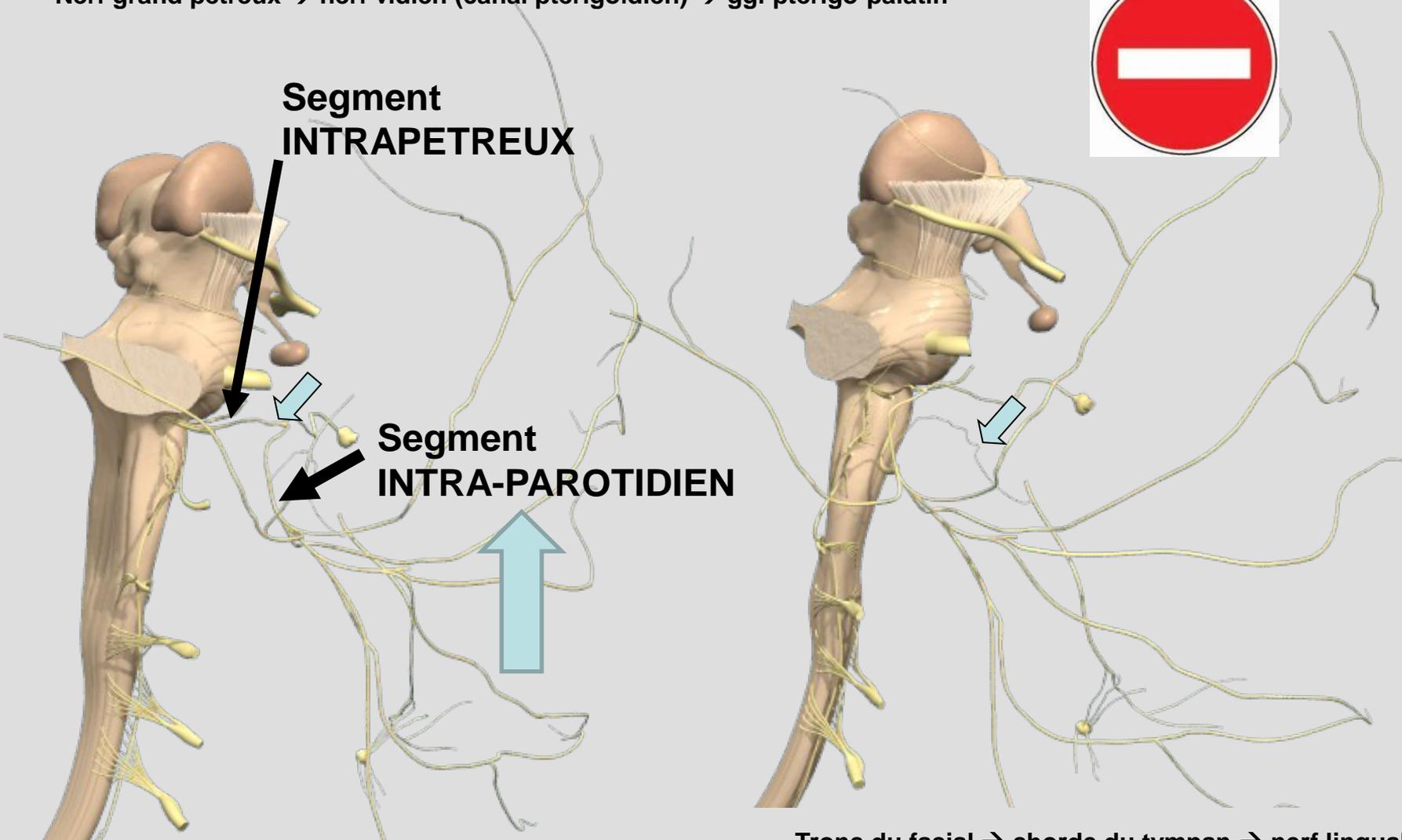
Nerf grand pétreux → nerf vidien (canal ptéridgien) → ggl ptérido-palatin

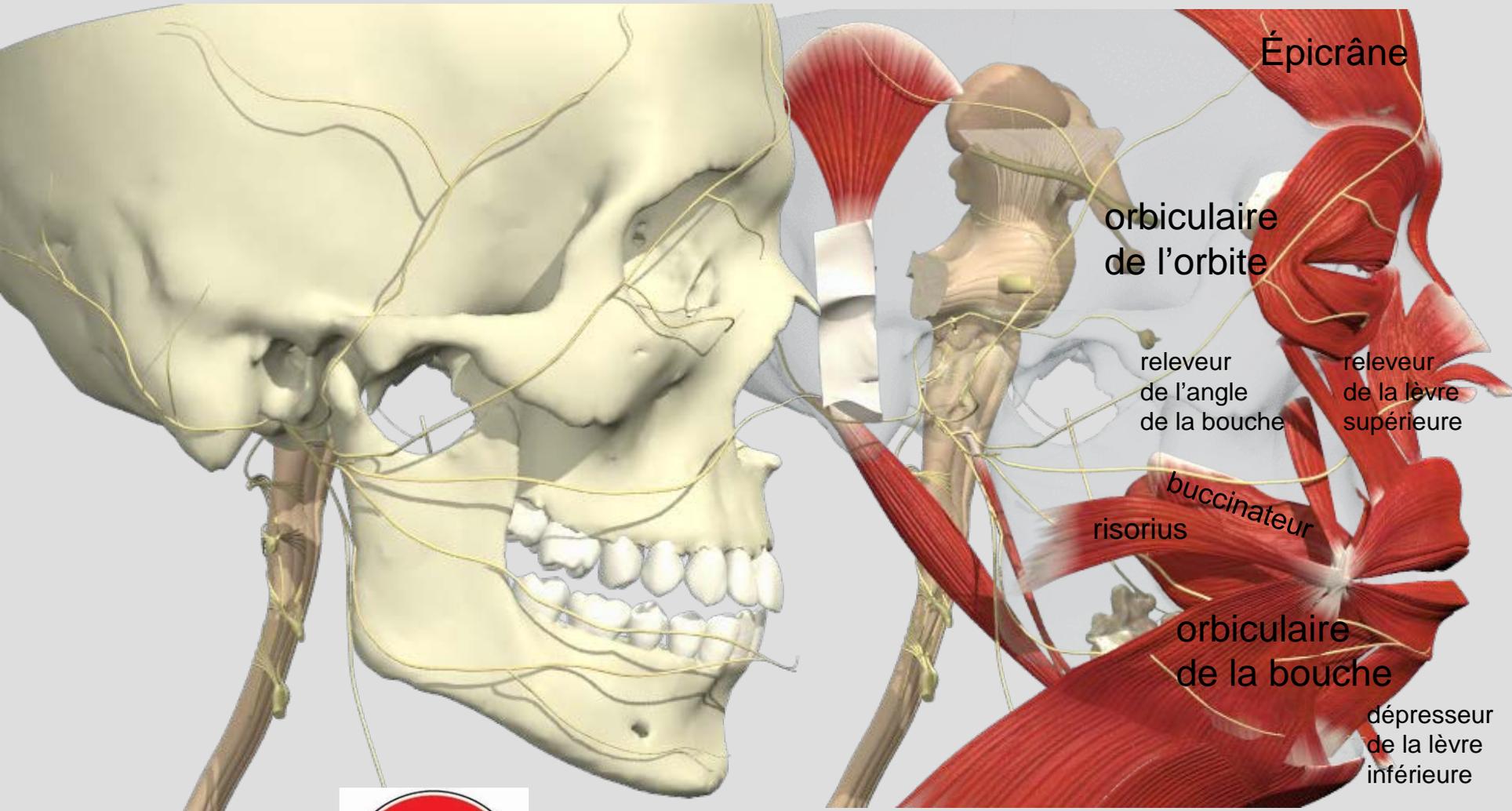
Segment
INTRAPETREUX

Segment
INTRA-PAROTIDIEN



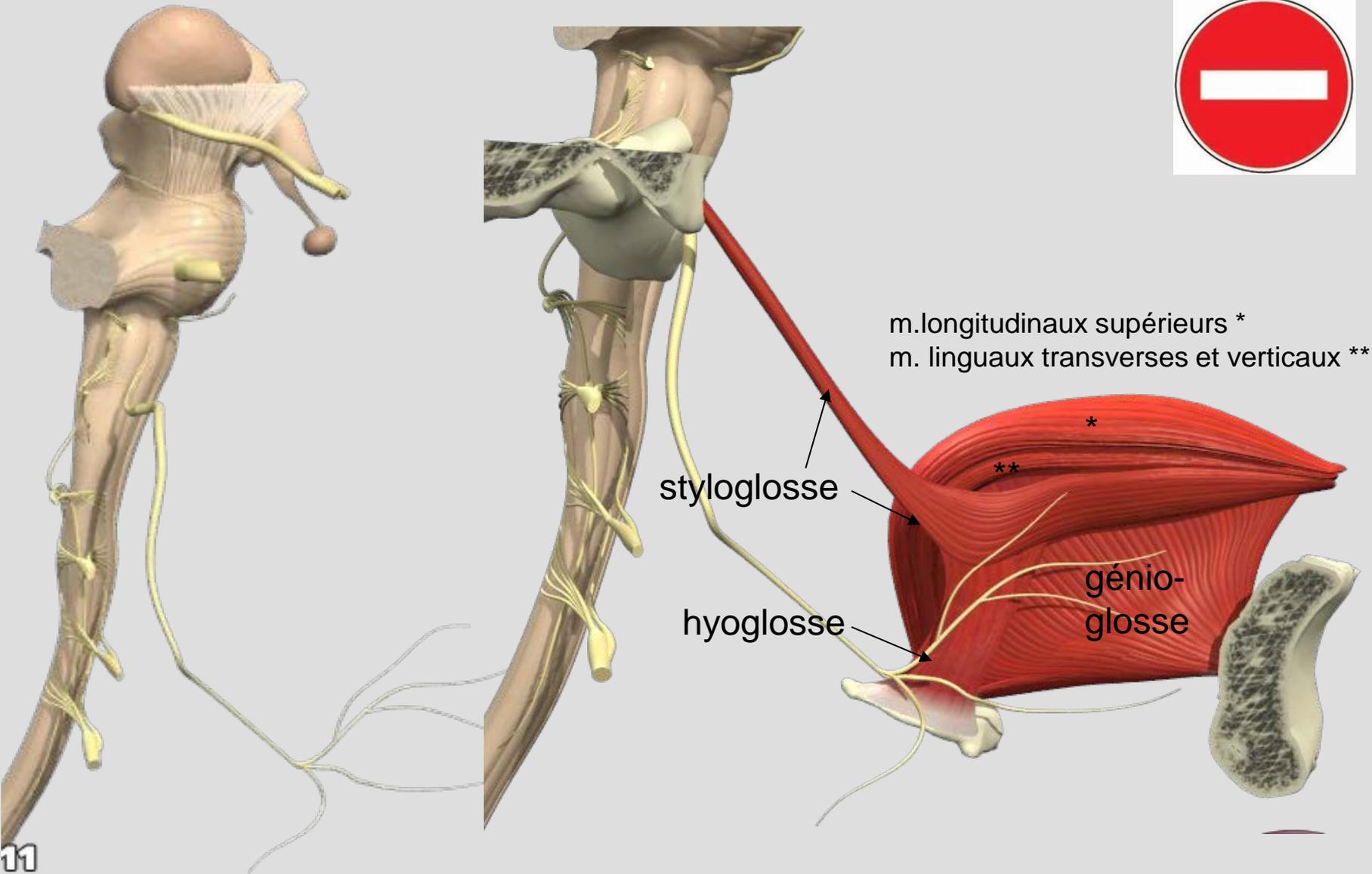
Tronc du facial → corde du tympan → nerf lingual (V3)





Motricité de la langue

Nerf XII: nerf (grand) hypoglosse



m.longitudinaux supérieurs *
m. linguaux transverses et verticaux **

styloglosse

hyoglosse

génio-
glosse

Paires crâniennes

3. Fonction mixte mais séparée

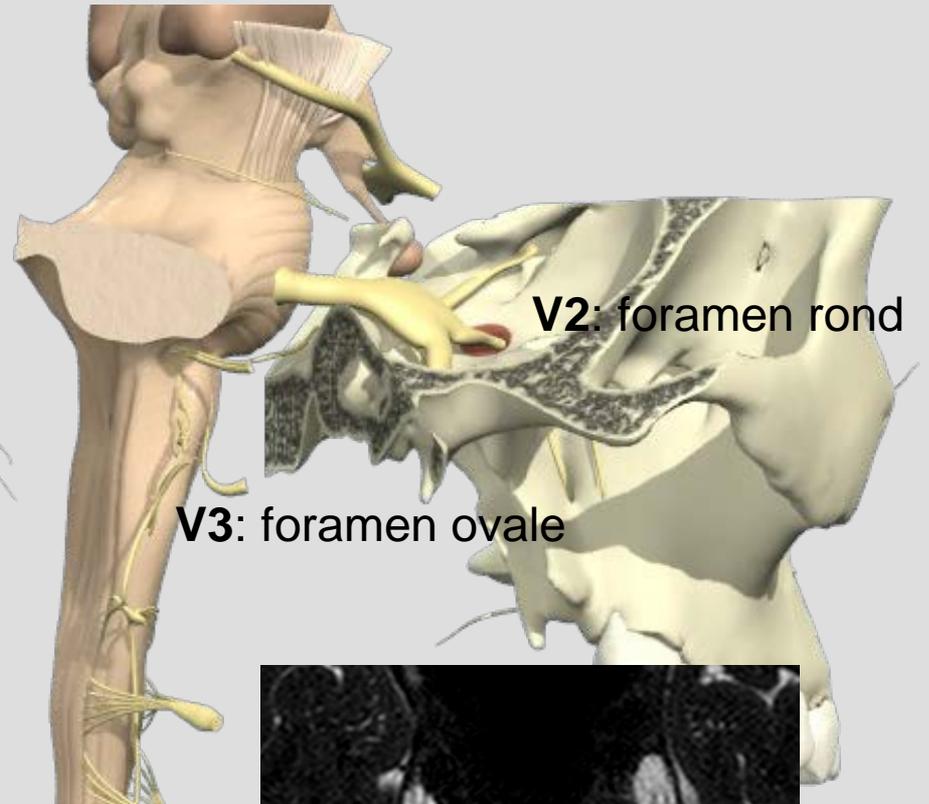
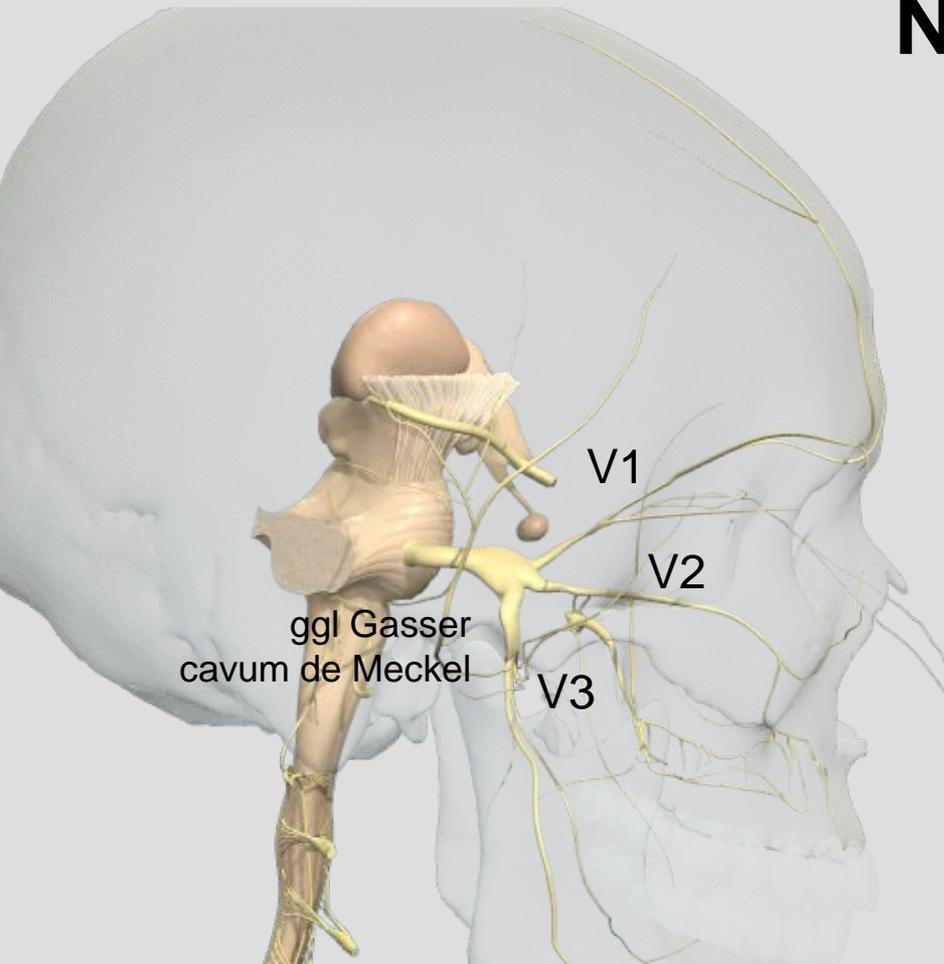
nerf V (trijumeau)

-Racine sensitive

-Racine motrice

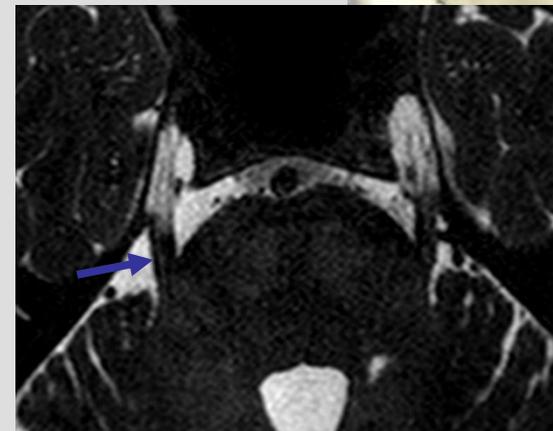
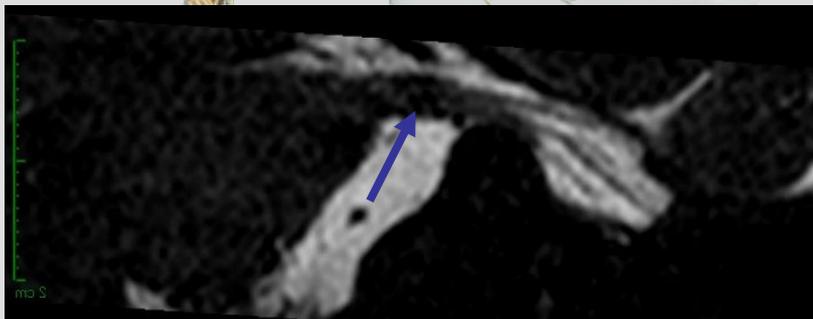
Nerf V – *racine sensitive*

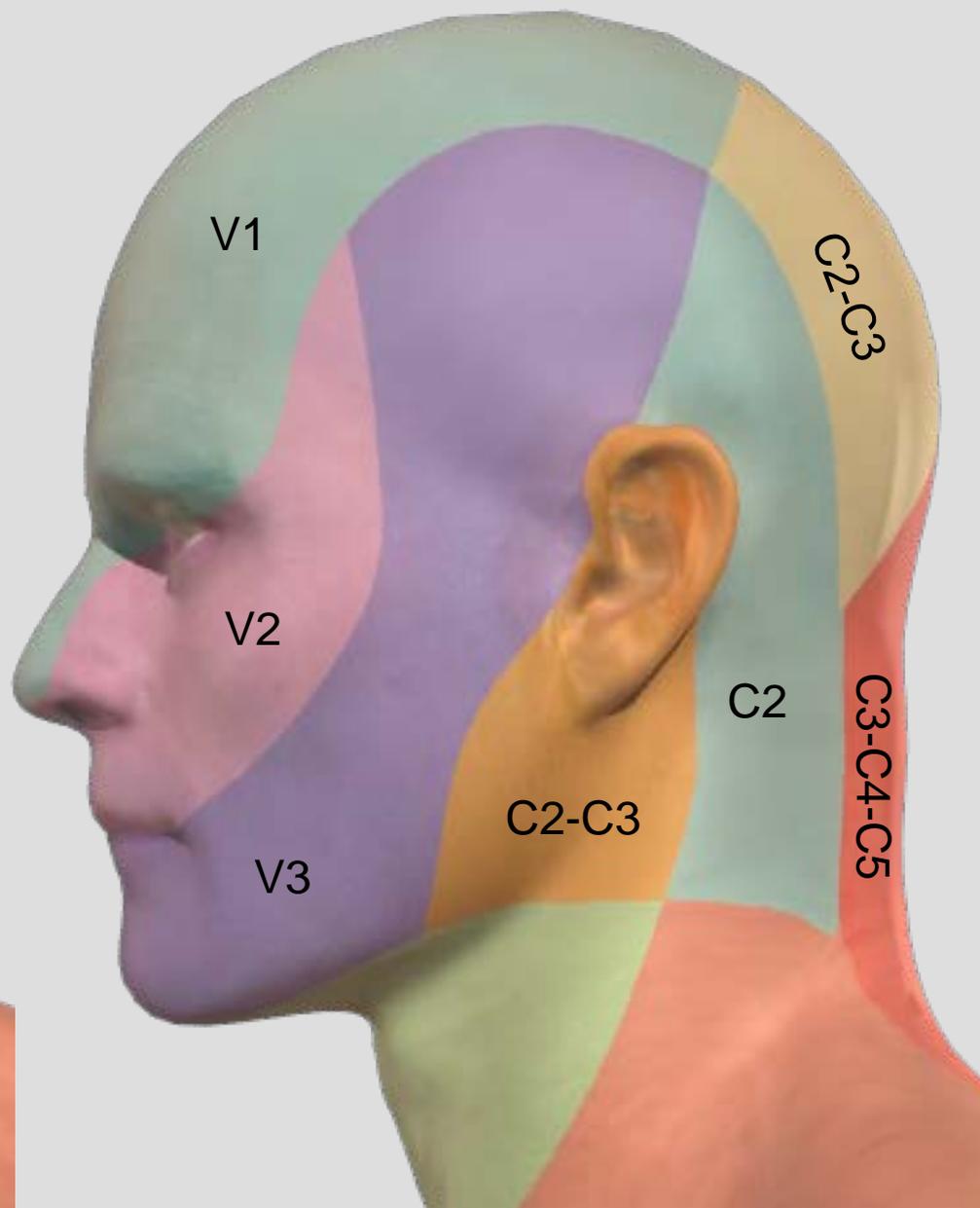
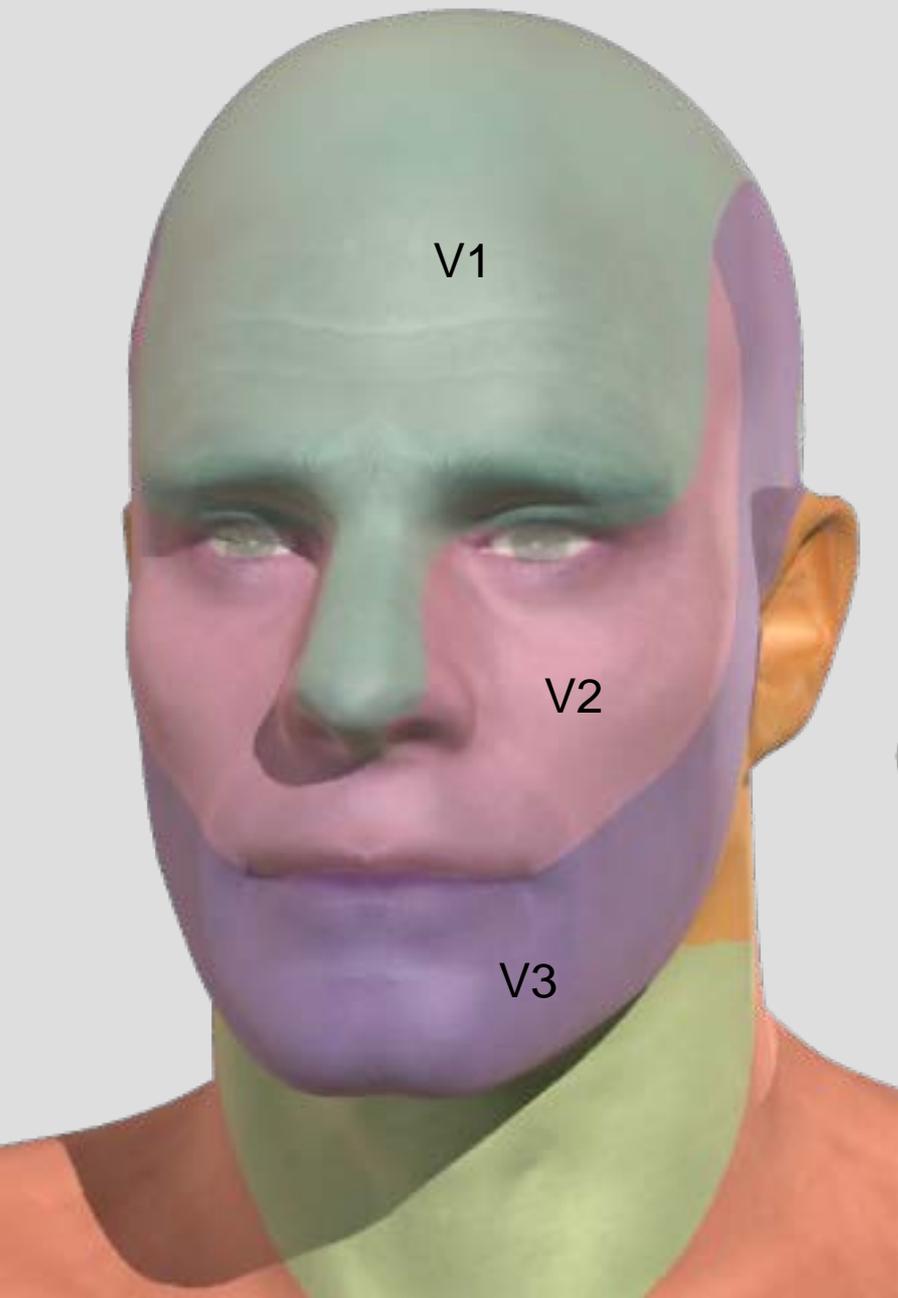
V1: fissure sphénoïdale supérieure



V2: foramen rond

V3: foramen ovale





Nerf V – *racine motrice*

Nerf manducateur

- Temporal
- Ptéridoïdien médial
- Ptéridoïdien latéral
- Masseter

Tenseur du voile du palais

Mylo-hyoïdien
Digastrique

