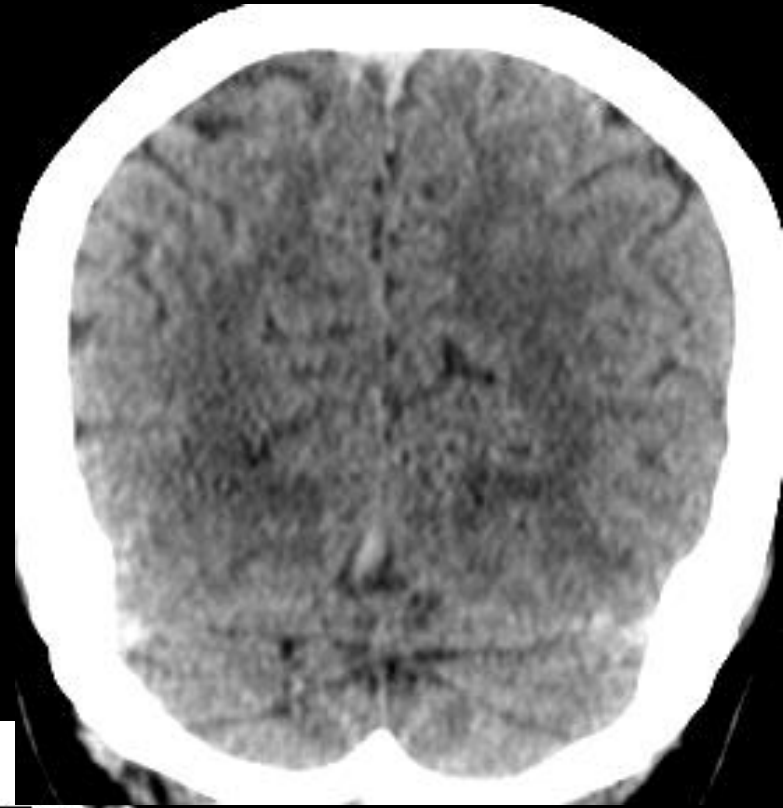
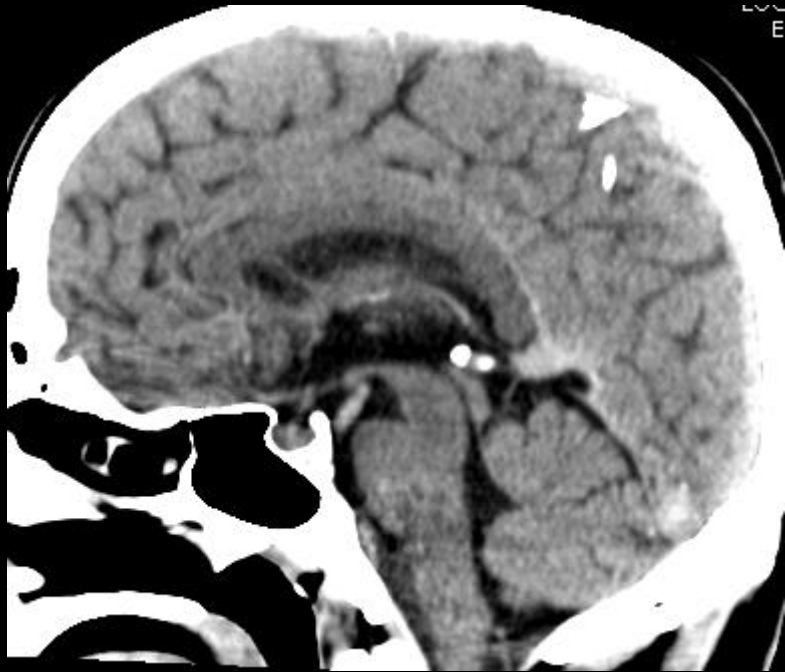


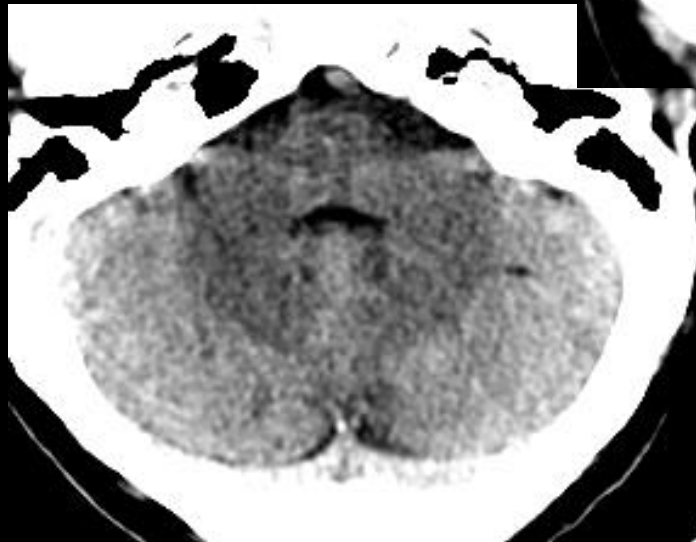
homme 41 ans quel diagnostic portez vous et comment allez vous conduire le bilan d'imagerie pour en préciser la cause ?



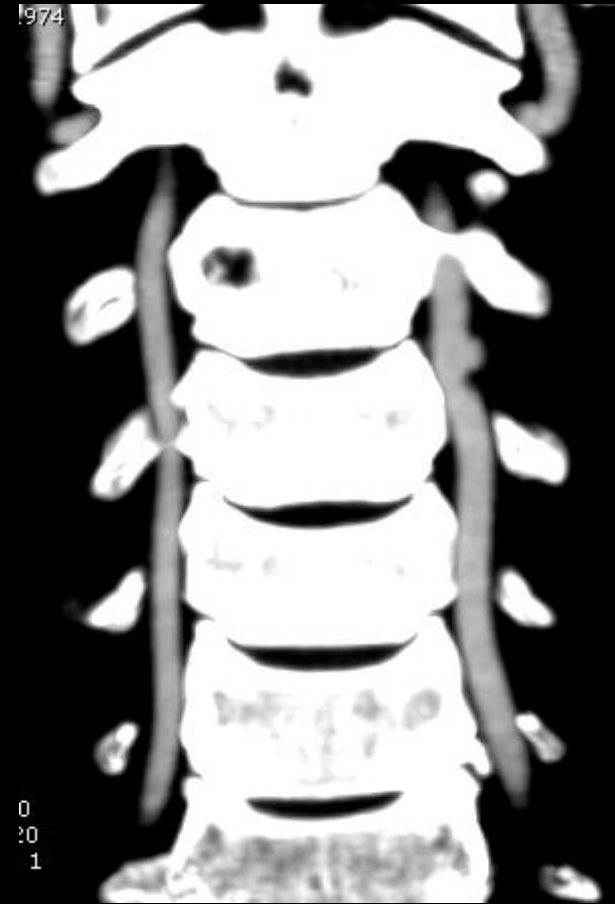
il s'agit bien sur d'un syndrome de Claude Bernard- Horner



Scanner cérébral sans IV



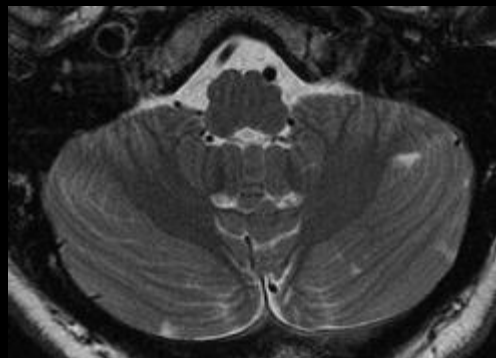
Angioscanner TSA



→ Pseudo anévrysmes sur probables stigmates de dissections de l'ACI droite sous pétreuse et du segment V2 de l'artère vertébrale gauche

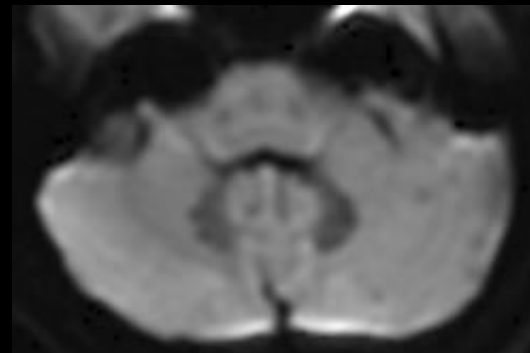
→ Pathologie vasculaire sous jacente à type de dysplasie fibromusculaire artérielle ?

Contrôle par IRM

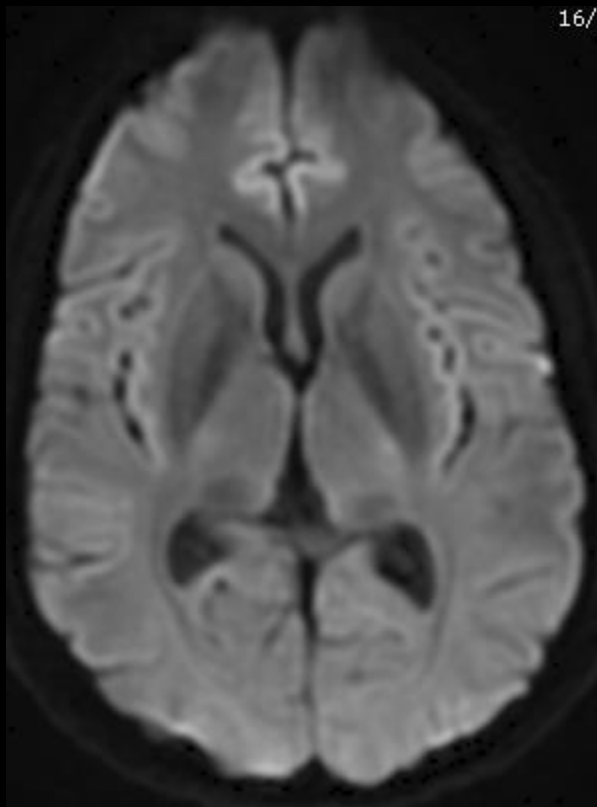


T2

Diffusion



3D TOF



16/c

Syndrome de Claude Bernard-Horner

- Ptosis
- Myosis
- Énophthalmie
- Autres :
 - Anhidrose
 - Troubles de la sécrétion lacrymale : larmoiement
 - Troubles de l'accomodation
 - Hémiatrophie de la face
 - Alopécie unilatérale



Physiopathologie

• Système nerveux végétatif

➤ Système (ortho)sympathique : "**fight or flight**"

Ergotrope = augmente le niveau d'activité

Organisation pseudo métamérique

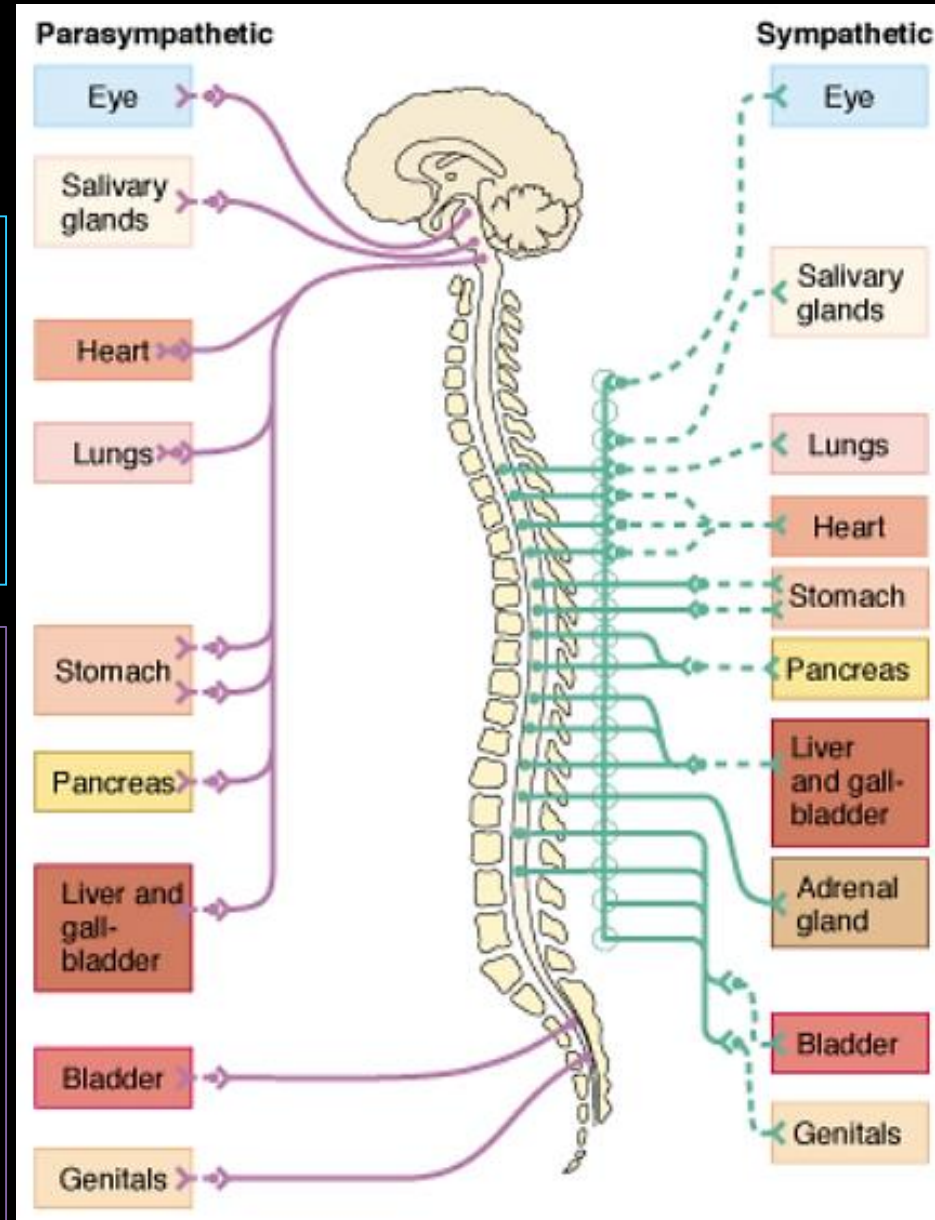
➤ Système parasympathique : "**rest or digest**"

Trophotrope = fonctions métaboliques, restauration d'énergie

Organisation bi polaire

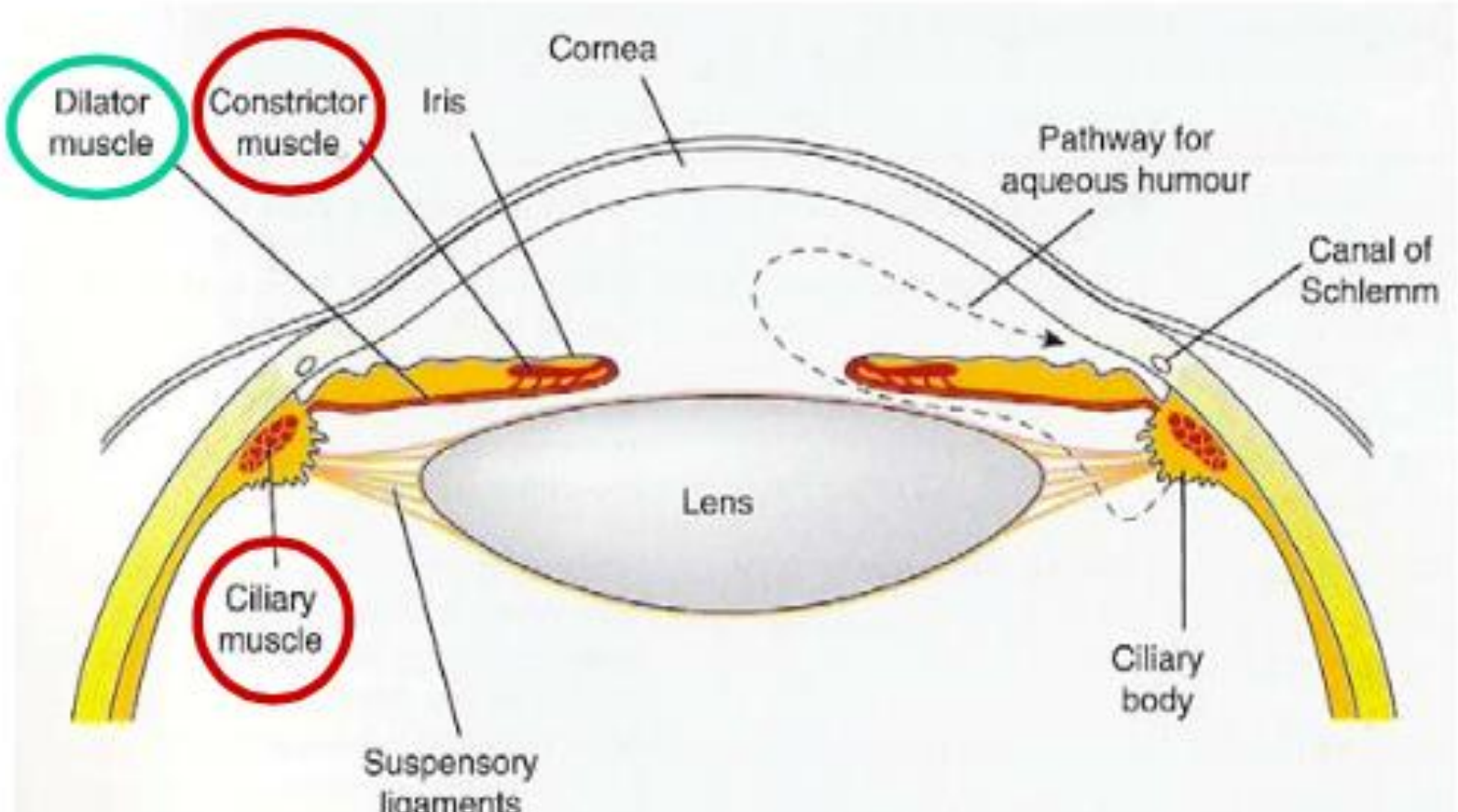
→ Paires crâniennes III, VII, IX et X

→ Racines sacrées S2, S3 et S4



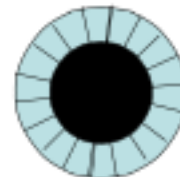
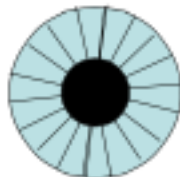
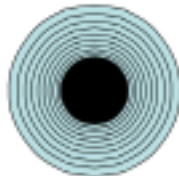
	Parasympathetic Response "Rest and Digest"	Sympathetic Response "Fight or Flight"
Heart (baroreflex)	Decreased heart rate Cardiac output decreases	Increased rate and strength of contraction Cardiac output increases
Lung Bronchioles	Constriction	Dilation
Liver Glycogen	No effect	Glycogen breakdown Blood glucose increases
Fat tissue	No effect	Breakdown of fat Blood fatty acids increase
Basal Metabolism	No effect	Increases ~ 2X
Stomach	Increased secretion of HCl & digestive enzymes Increased motility	Decreased secretion Decreased motility
Intestine	Increased secretion of HCl & digestive enzymes Increased motility	Decreased secretion Decreased motility
Urinary bladder	Relaxes sphincter Detrusor muscle contracts Urination promoted	Constricts sphincter Relaxes detrusor Urination inhibited
Rectum	Relaxes sphincter Contracts wall muscles Defecation promoted	Constricts sphincter Relaxes wall muscles Defecation inhibited
Eye	Iris constricts Adjusts for near vision	Iris dilates Adjusts for far vision
Male Sex Organs	Promotes erection	Promotes ejaculation

Physiopathologie

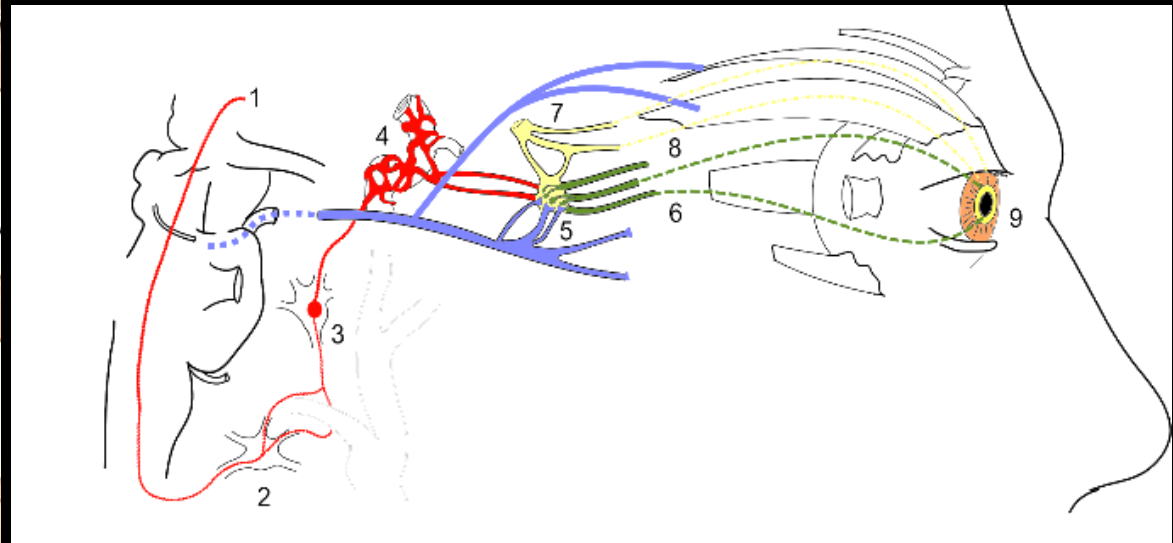
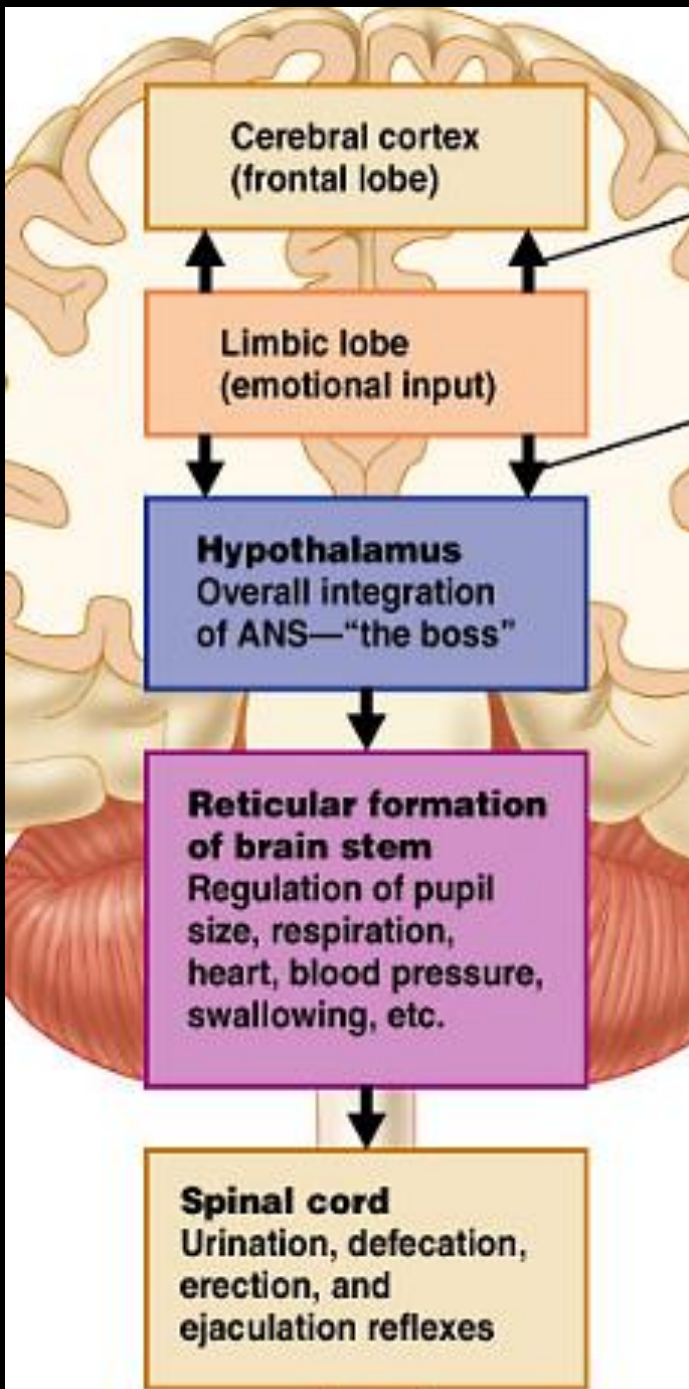


Parasympathetic Innervation

Sympathetic Innervation

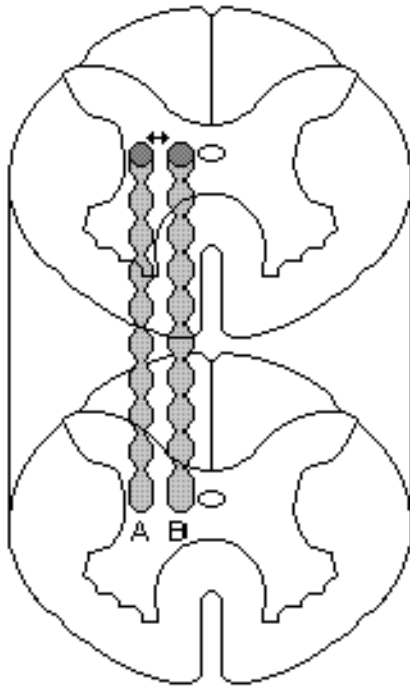


Anatomie



[S.93

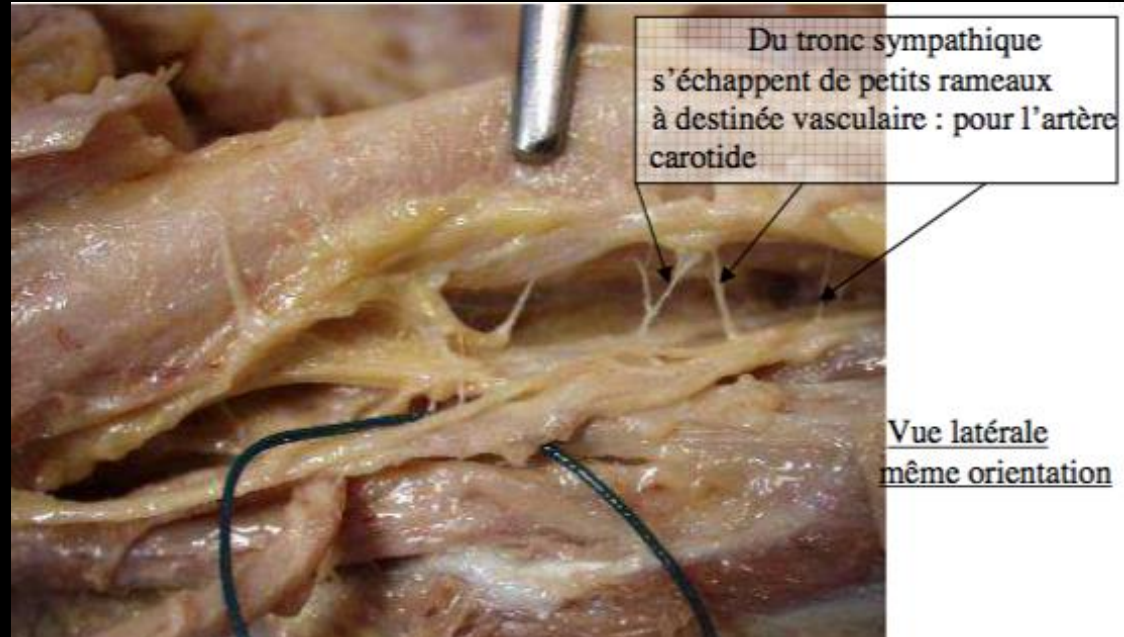
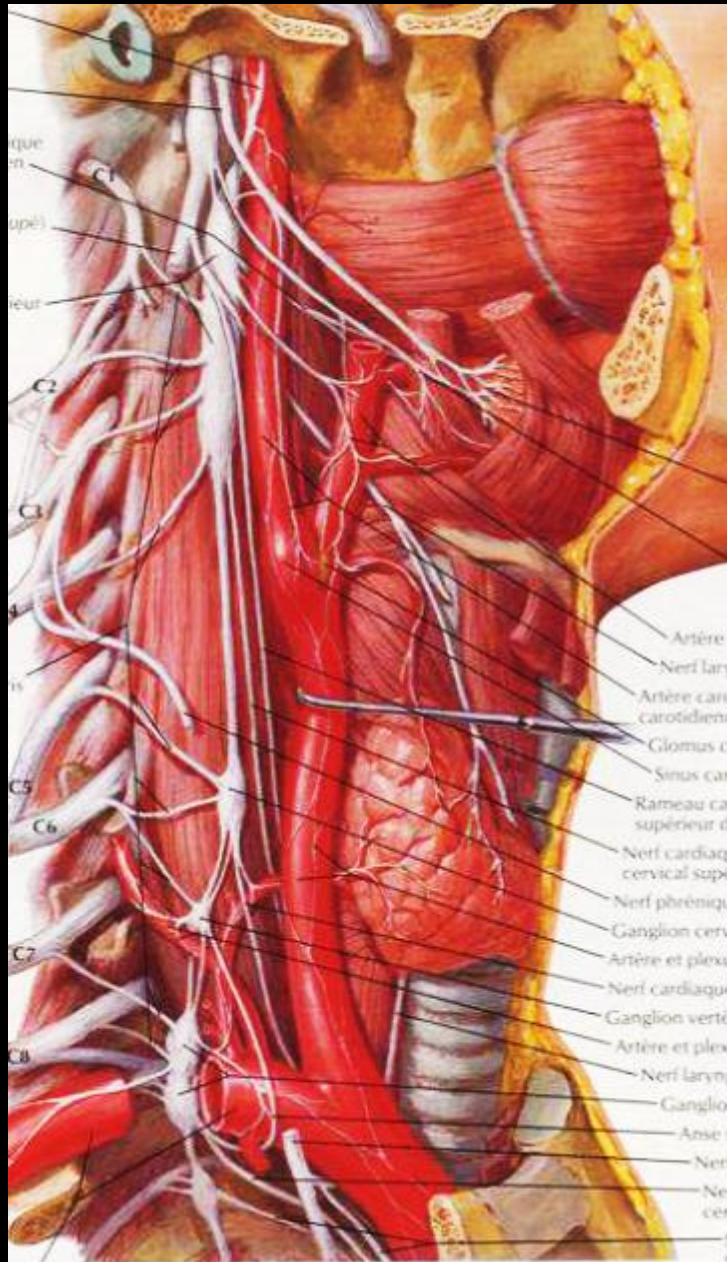
Système nerveux végétatif
Centres ortho - sympathiques médullaires



A : Colonne intermédio - latérale. B : Colonne intermédio - médiale.
(noter les cellules intercalées entre les deux colonnes - ↔ -)



Anatomie



Netter

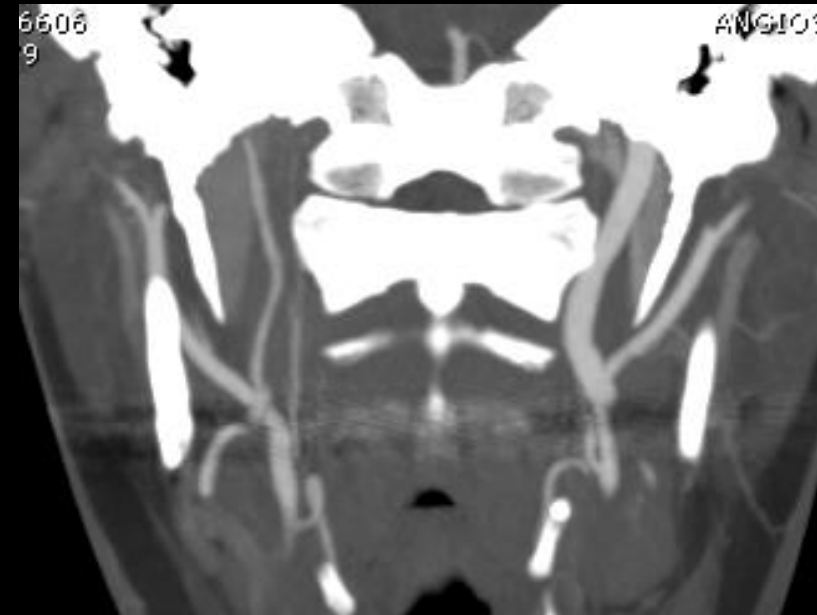
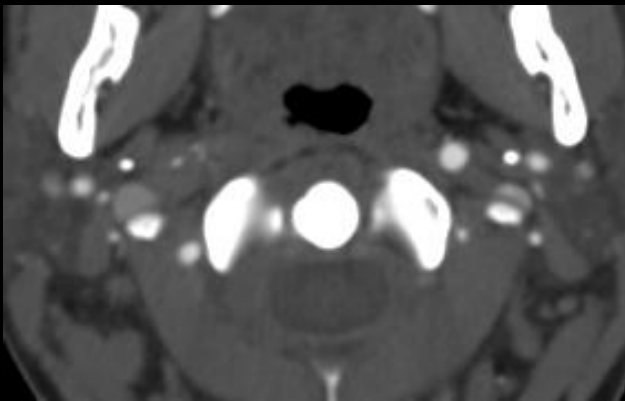
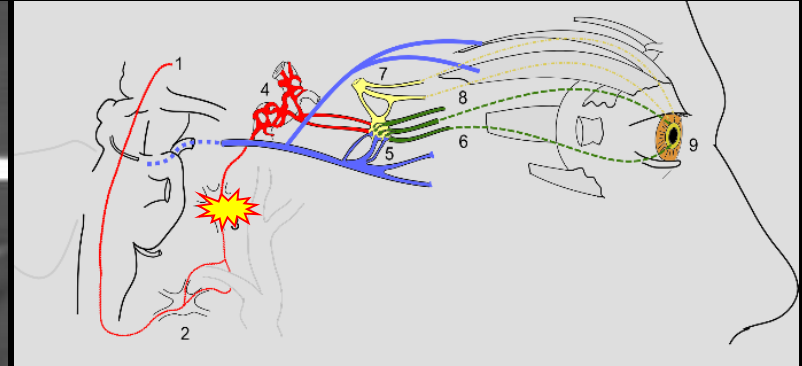
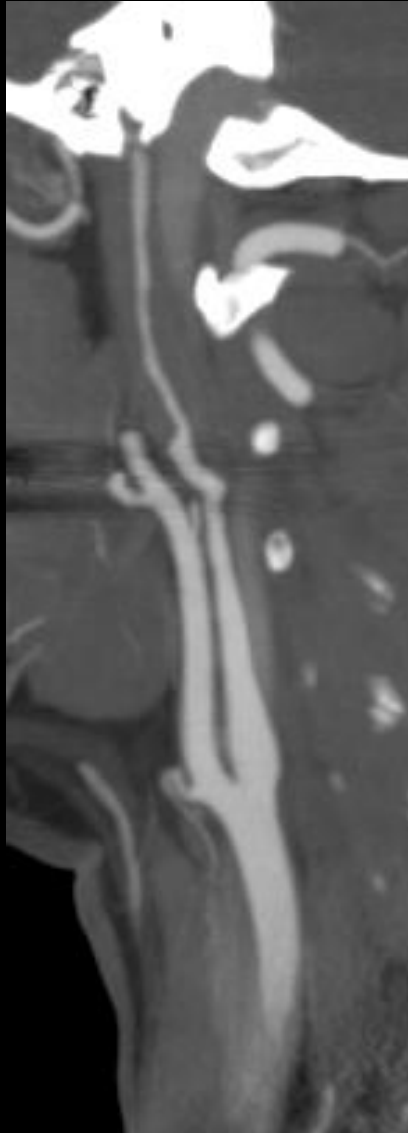
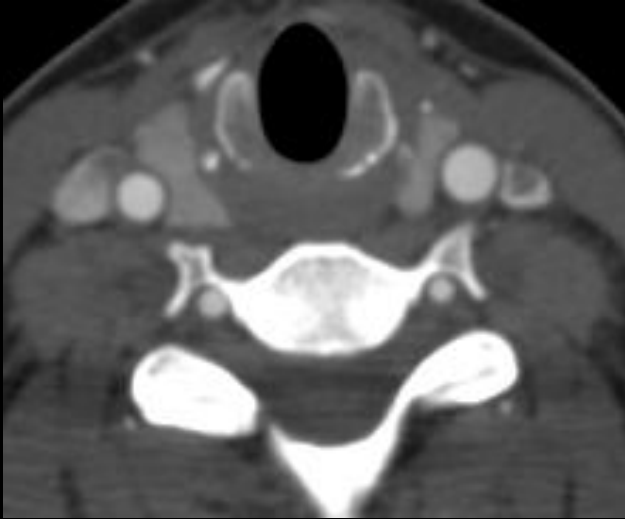
La chaîne sympathique cervicale, Mémoire V.Veto,
Laboratoire d'anatomie de la faculté de médecine de Nantes

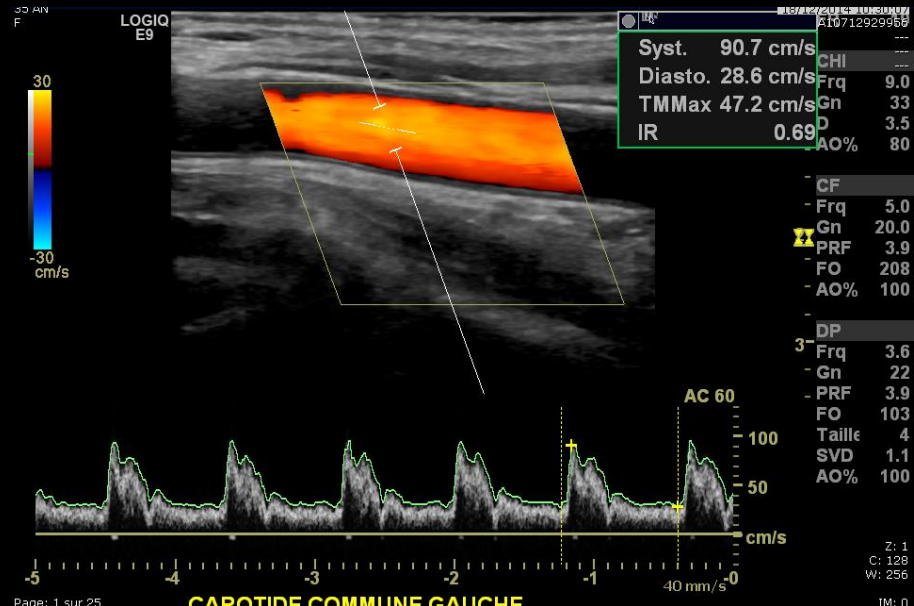
Cas cliniques

place de l'imagerie dans le diagnostic étiologique d'un syndrome de

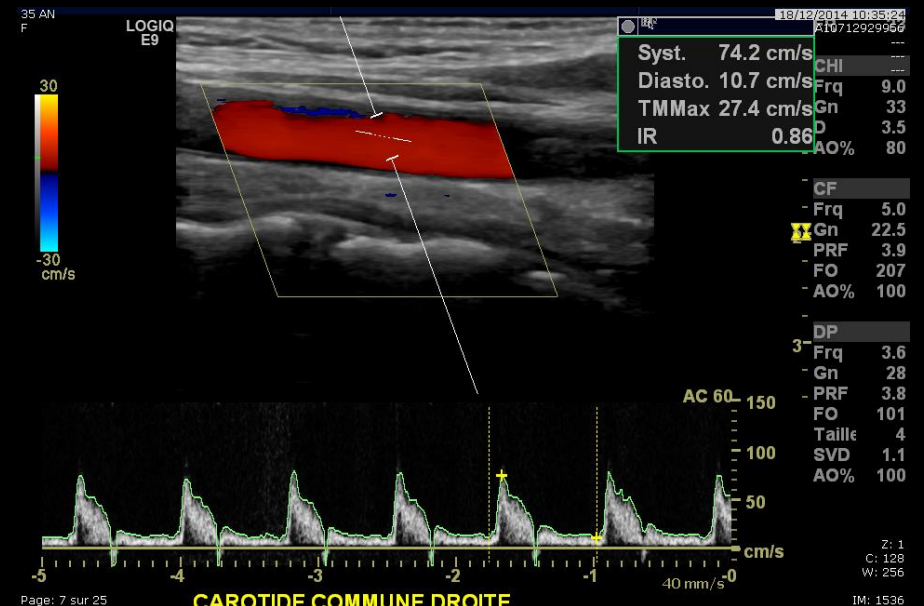
Claude Bernard-Horner, en fonction du siège et de la cause

Femme de 30 ans, claudication horner droite et cervicalgies depuis 15 jours dans un contexte de post partum

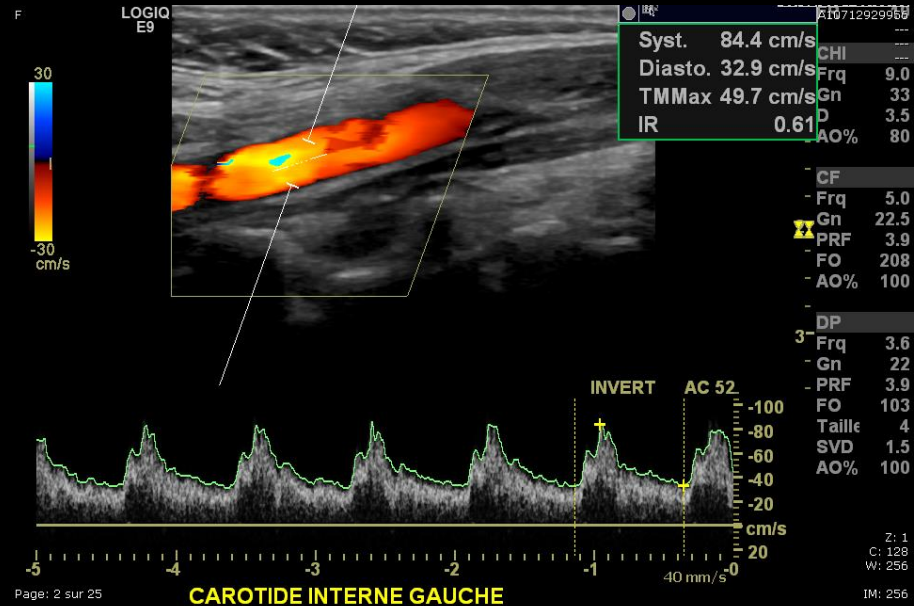




CAROTIDE COMMUNE GAUCHE



CAROTIDE COMMUNE DROITE



CAROTIDE INTERNE GAUCHE

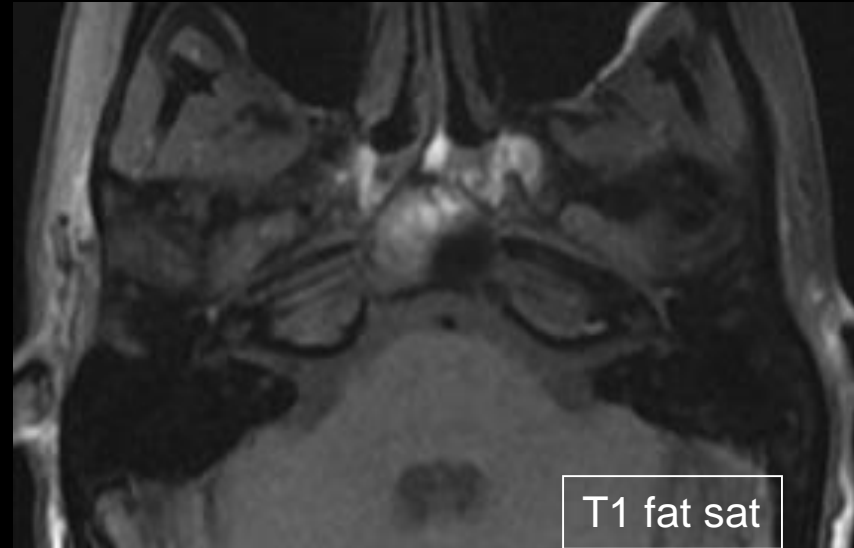
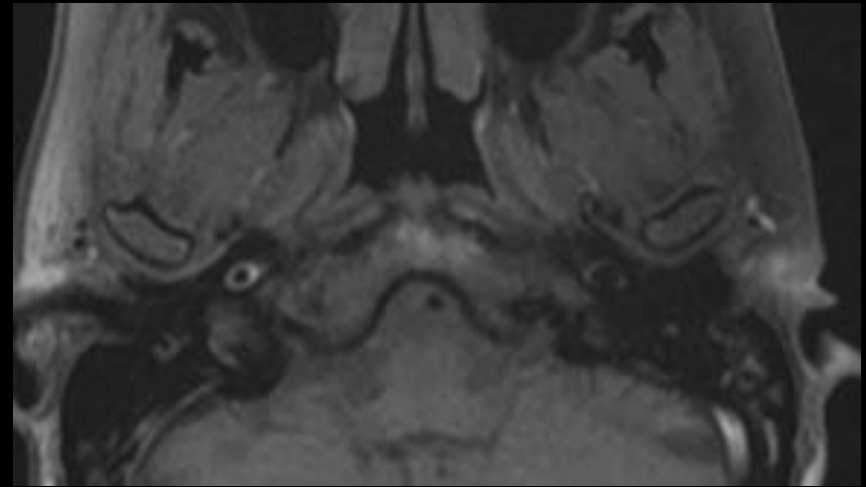
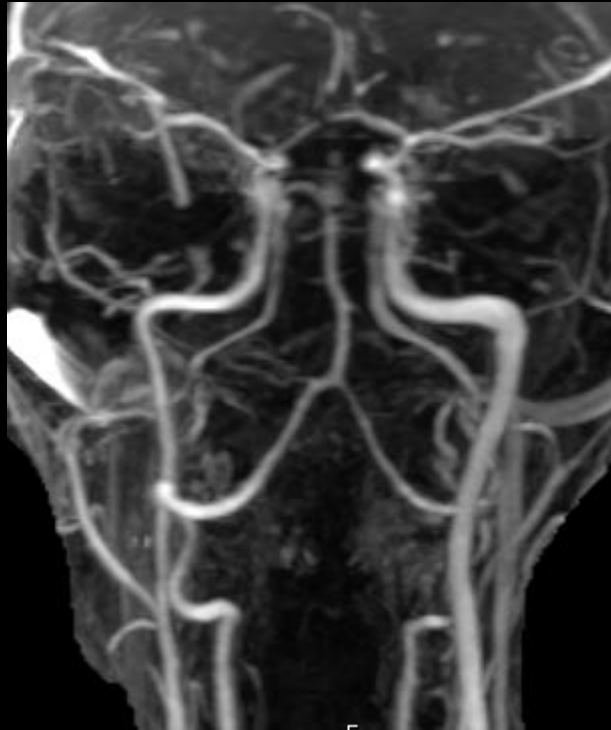


CAROTIDE INTERNE DROITE

Contrôle à 2 mois, angio IRM



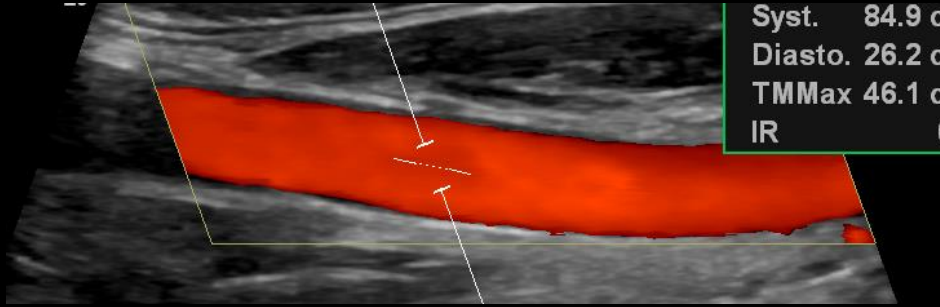
EFGRE



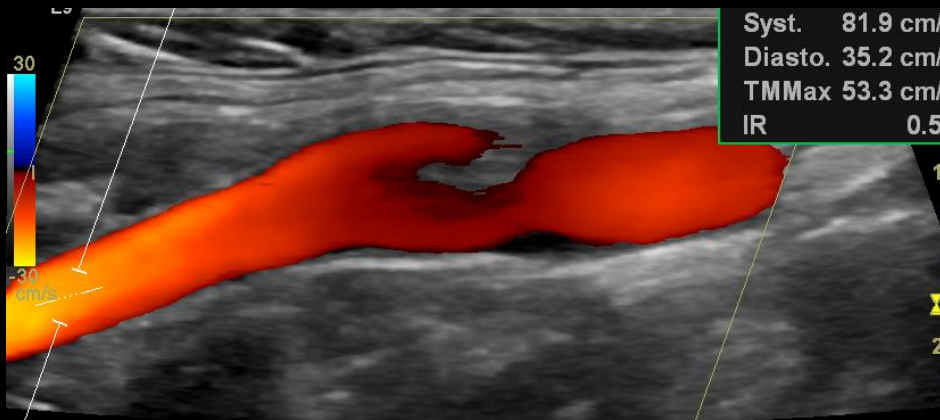
T1 fat sat

Bonne reperméabilisation de l'ACI droite
Persistance d'un hématome mural sous et intra pétreux

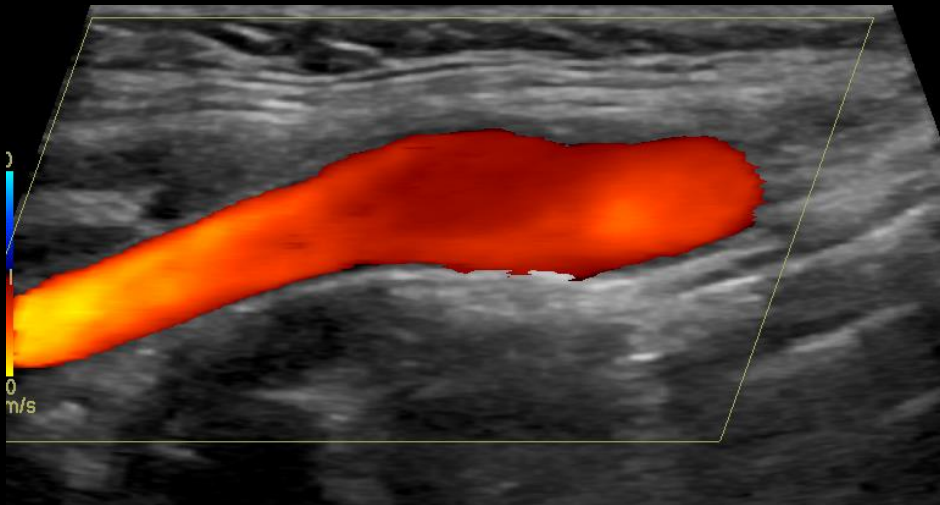
Femme de 49 ans, claudication intermittente droite depuis 15 jours, Doppler carotidien



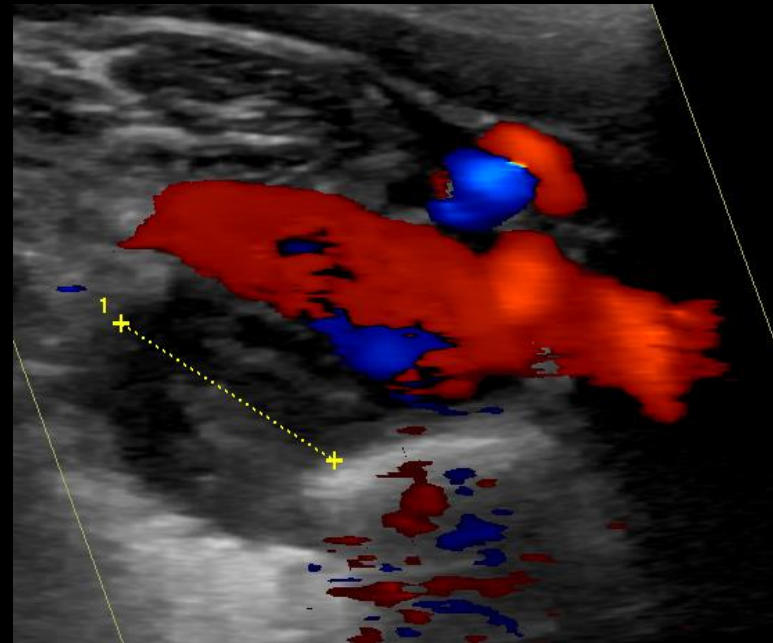
ACC



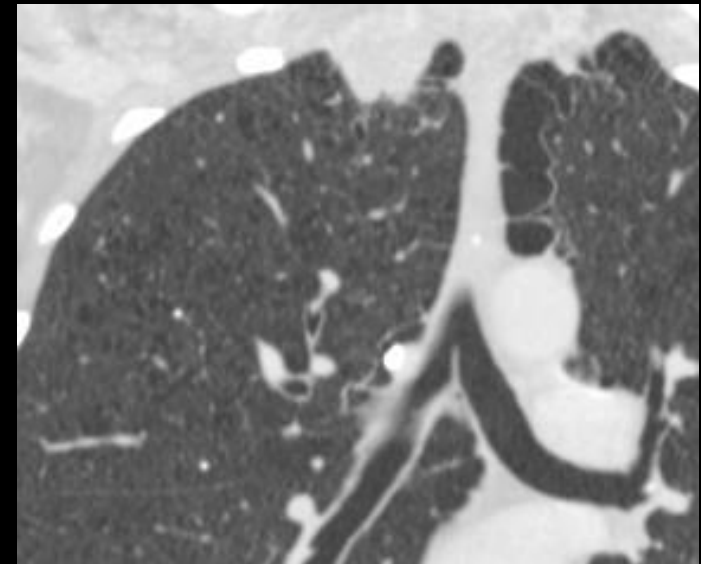
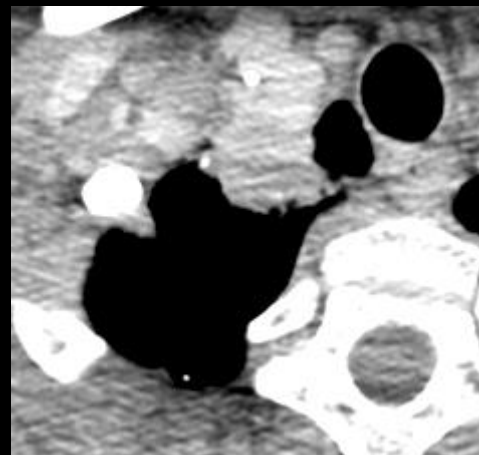
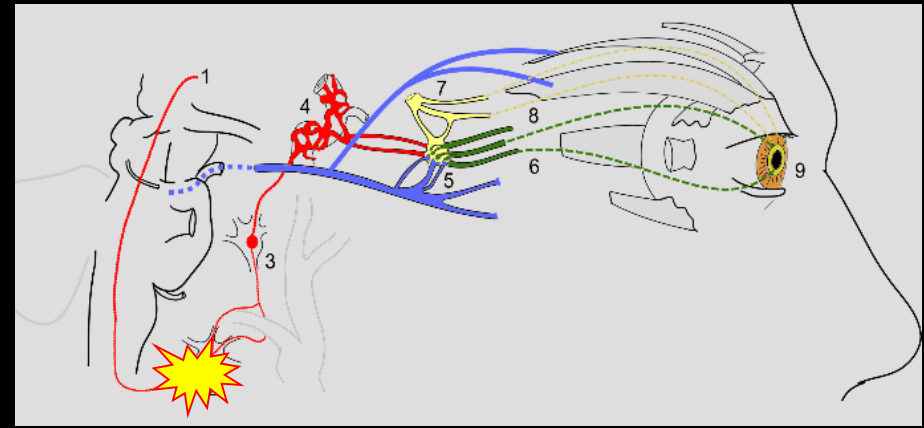
Bulbe



ACI



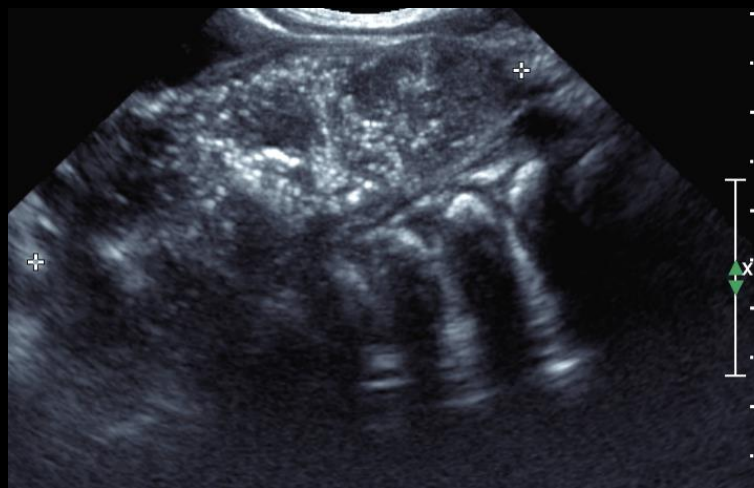
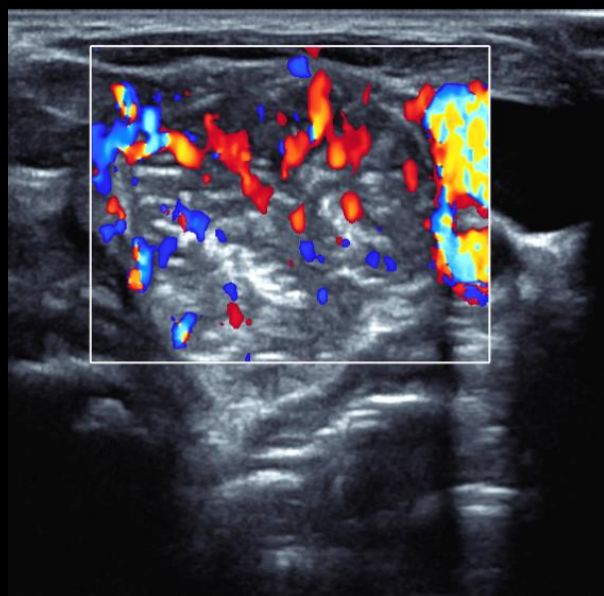
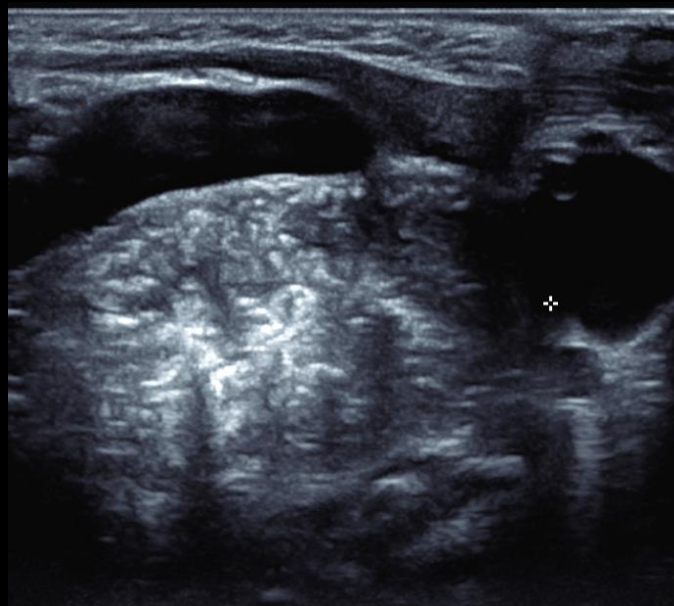
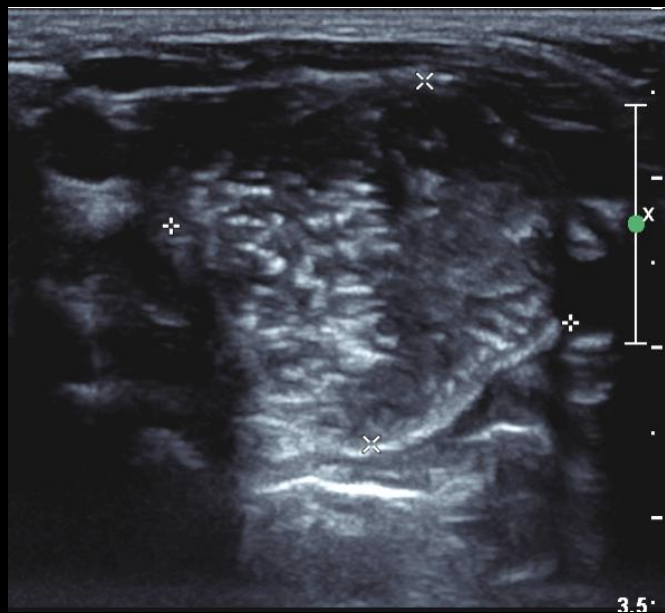
Artères carotides sans particularité
Lésion hypoéchogène sous clavière droite : ADP ?



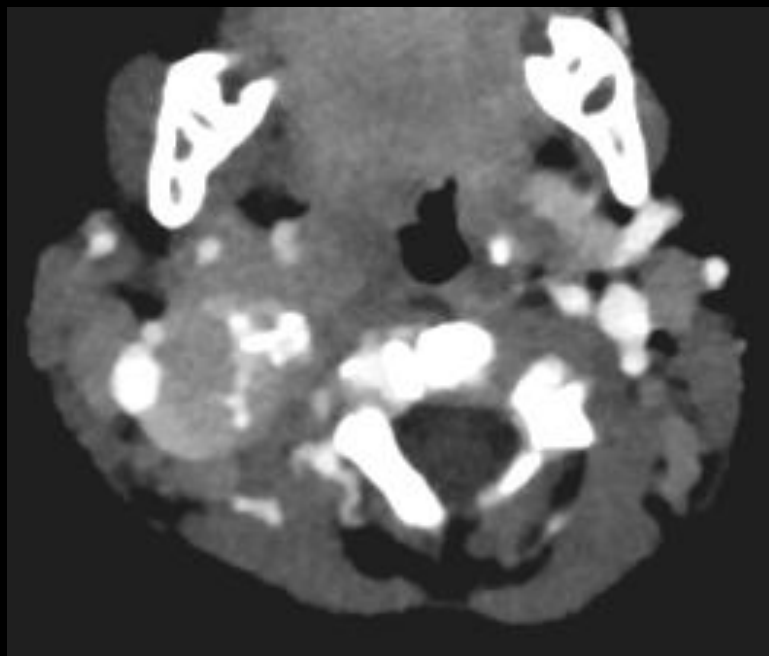
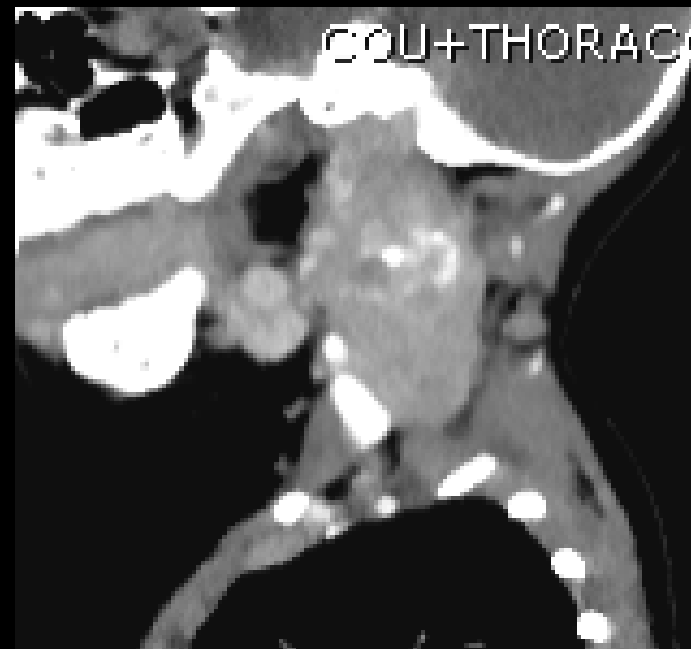
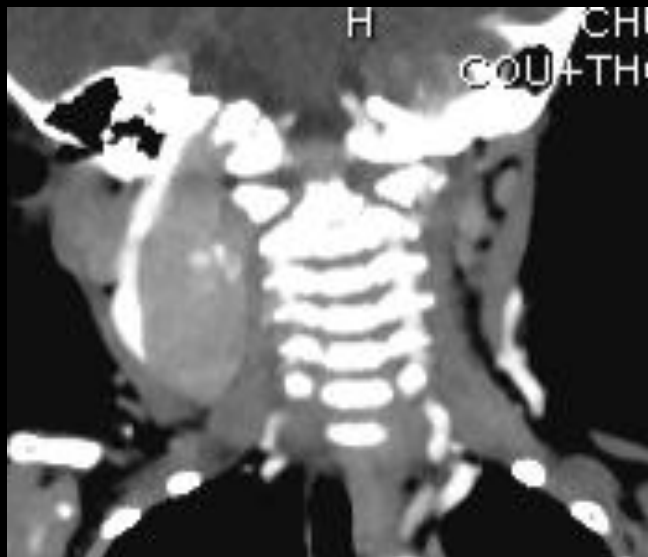
Lésion tumorale de l'apex pulmonaire droit envahissant la plèvre pariétale, venant au contact de l'artère subclavière

Garçon de 10 mois, claude bernard horner droit et masse cervicale à la palpation

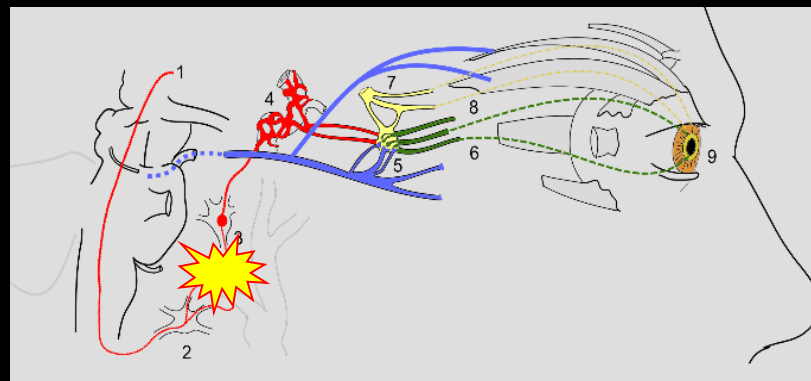
Echographie cervicale



TDM injecté d'emblée



Tumeur latéro cervicale droite, refoulant l'axe jugulo carotidien
Prise de contraste hétérogène, calcifications

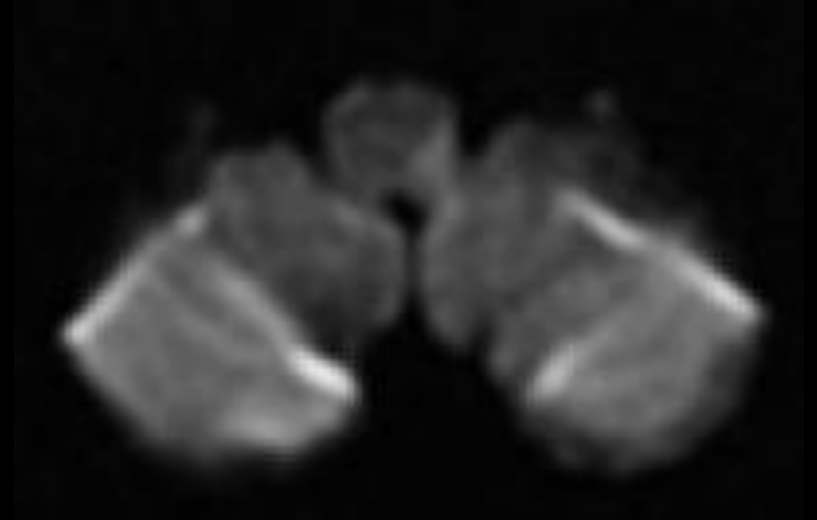


Hyperfixation au MIBG
Augmentation des catécholamines urinaires

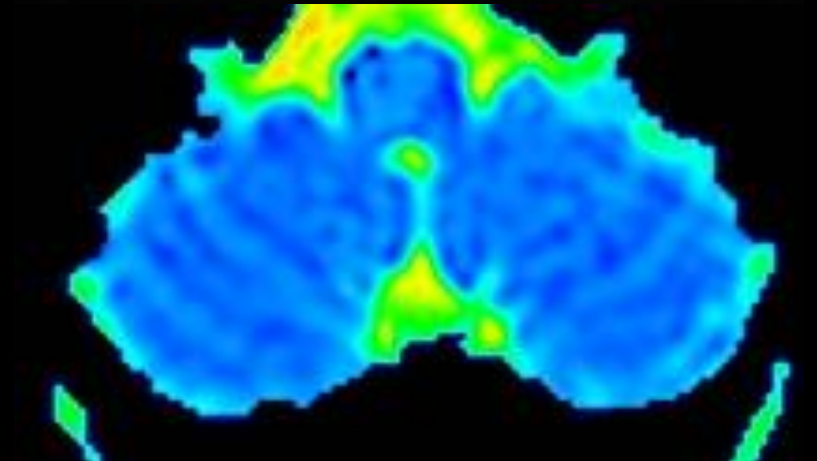
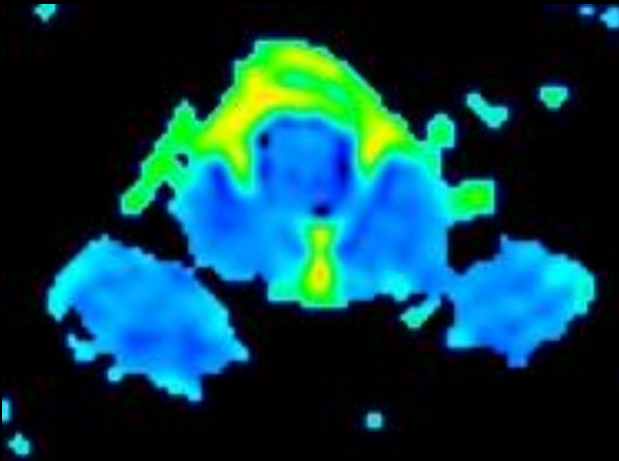
→ Neuroblastome cervical

Homme de 54 ans, déficit de début brutal : claudication horner gauche, vertiges, syndrome cérébelleux et paralysie faciale (?) gauche

Diffusion



ADC



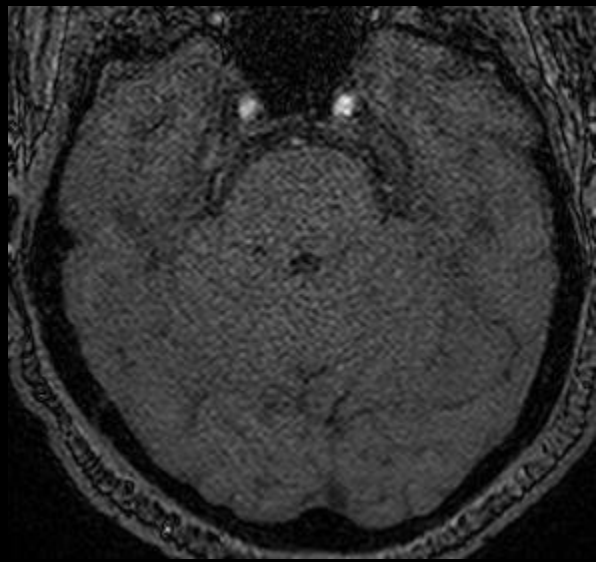
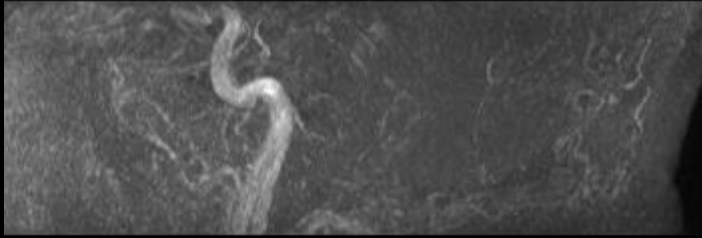
Lésion ischémique du territoire rétro olivaire gauche



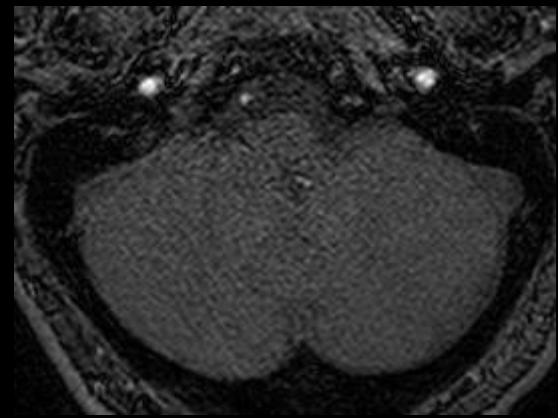
3D TOF



EFGRE

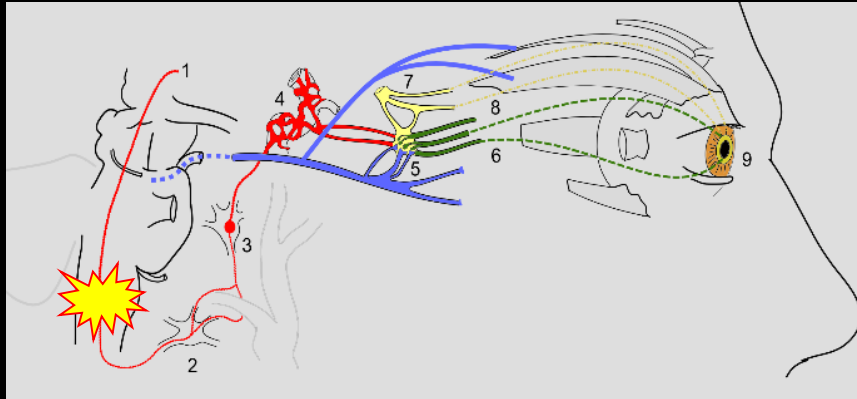


Occlusion de l'artère
vertébrale gauche
Tronc basillaire grêle

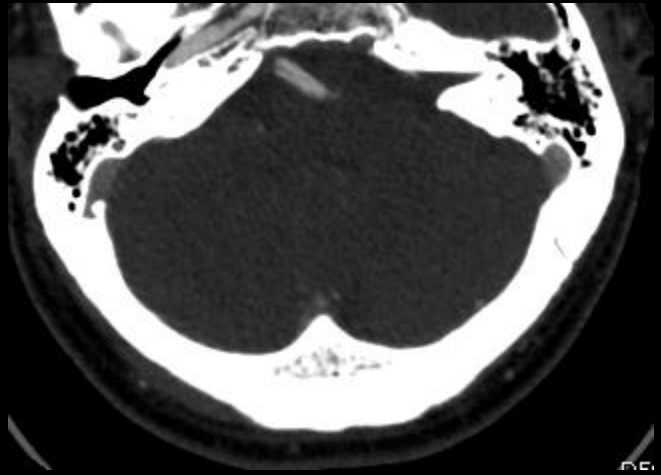




→ Syndrome de Wallenberg



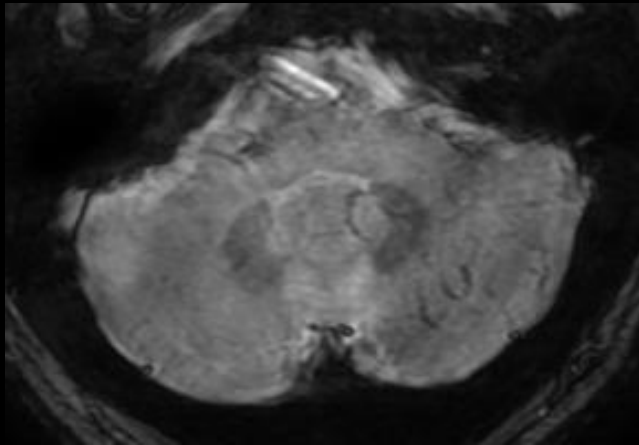
Homme de 36 ans, céphalées et vertiges brutaux, claudication horner gauche incomplet (myosis et énoptalmie)



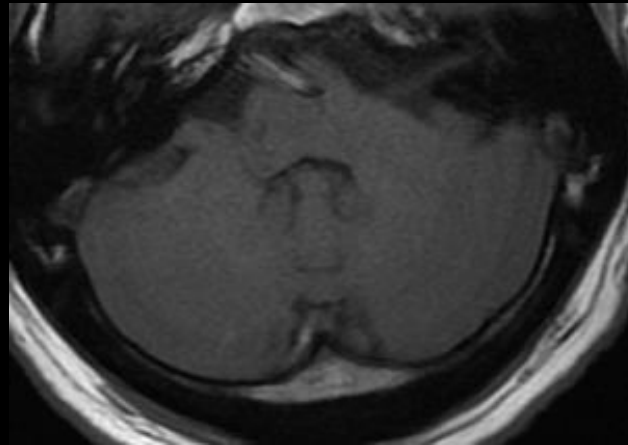
Angio TDM



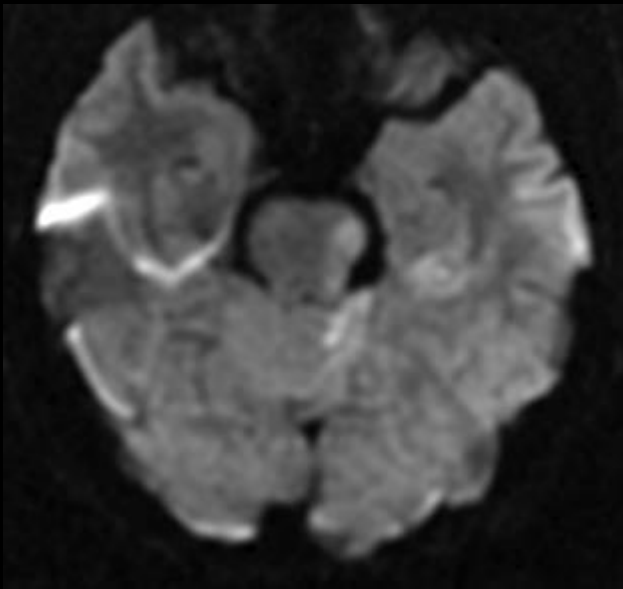
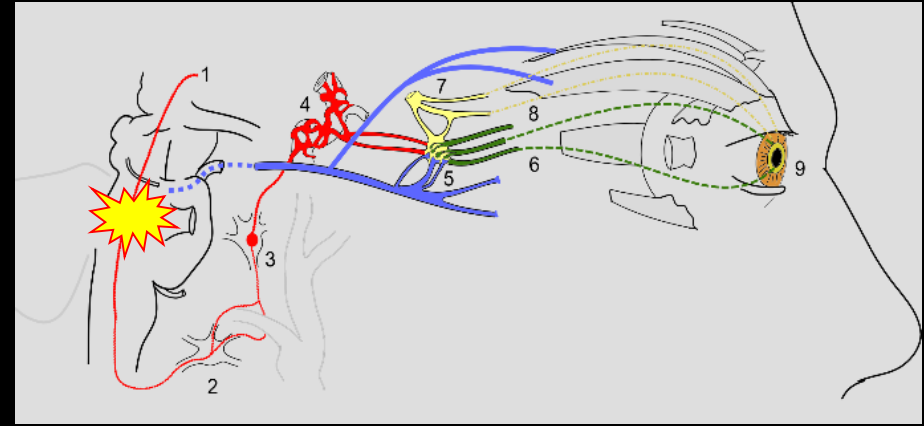
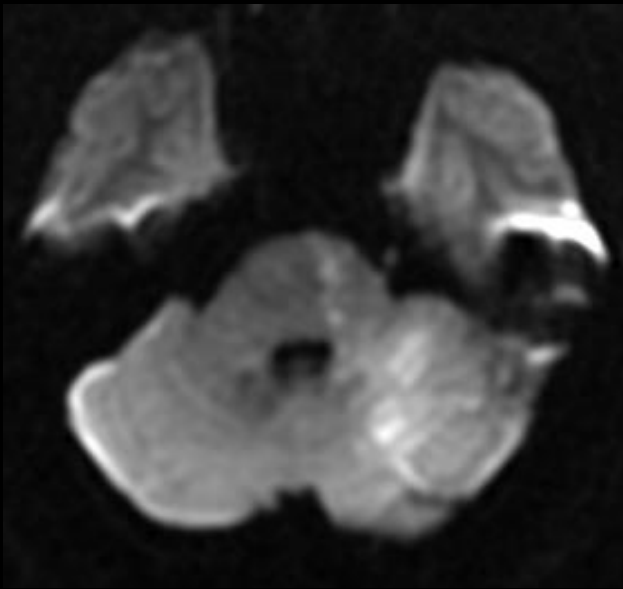
T2



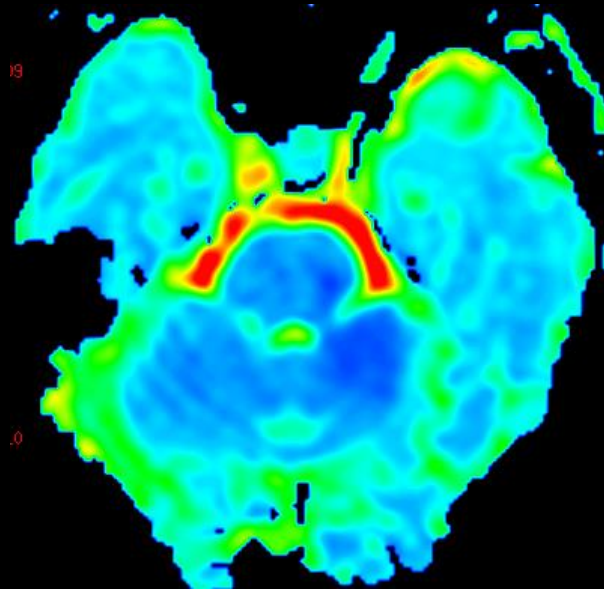
SWAN



T1

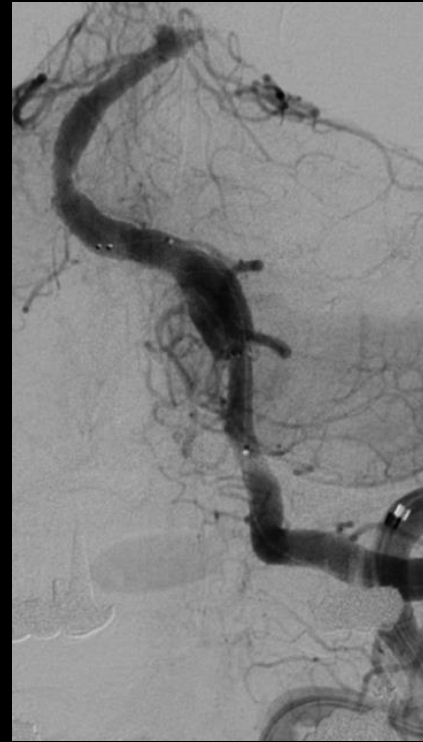
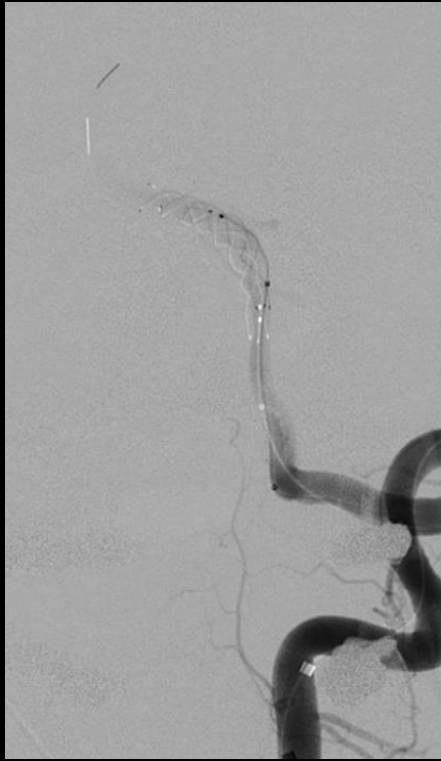
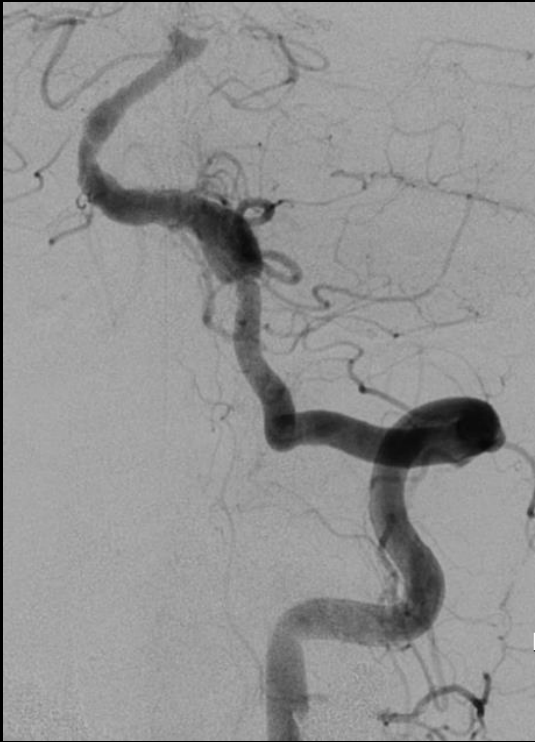


Diffusion



ADC

Lésions ischémiques
récentes protubéro
mésencéphaliques et
cérébelleuses
supérieures gauches



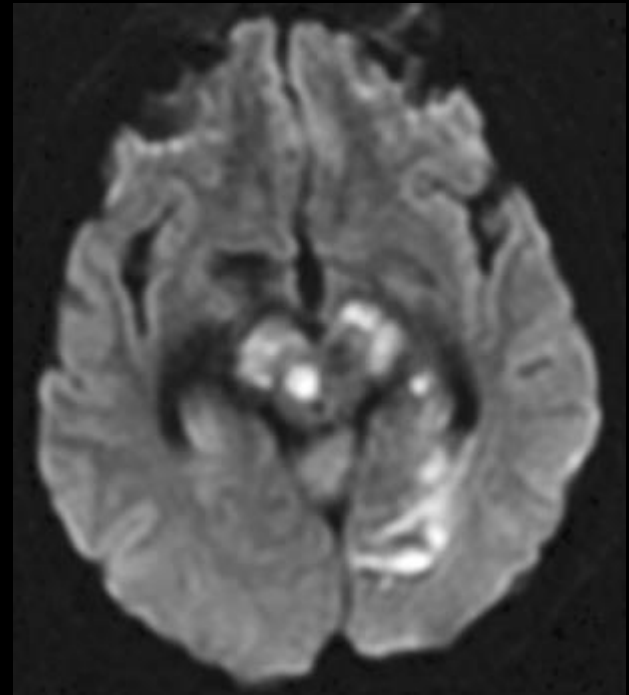
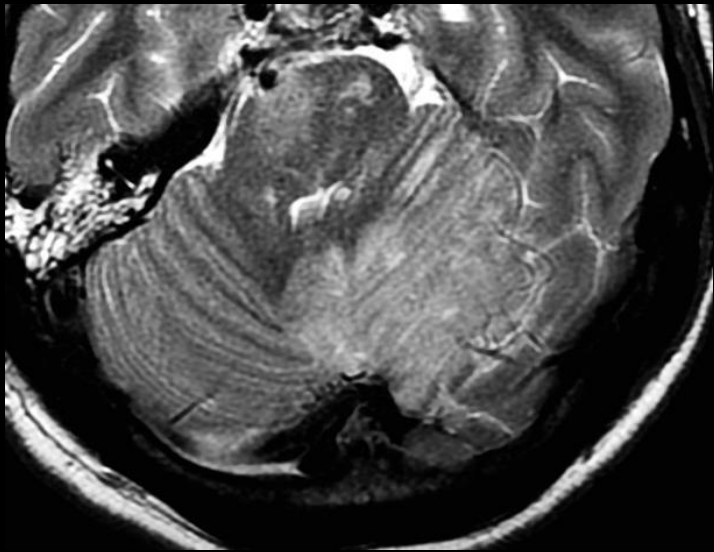
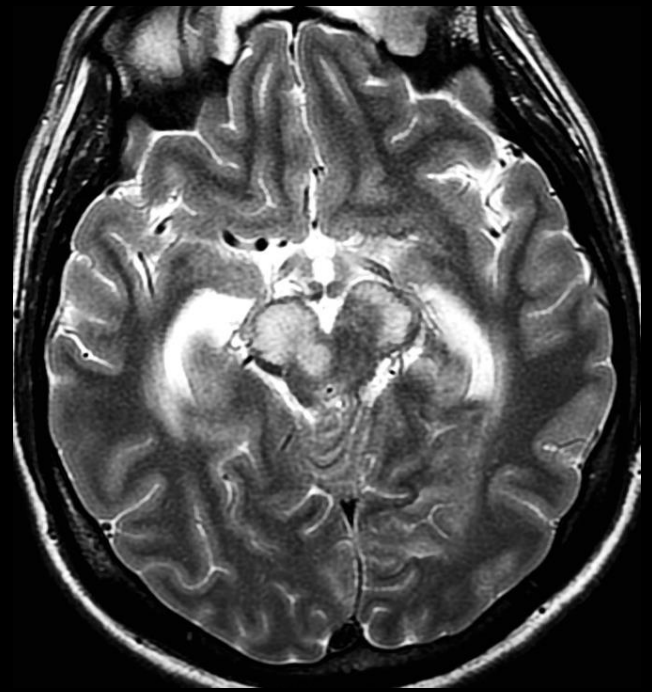
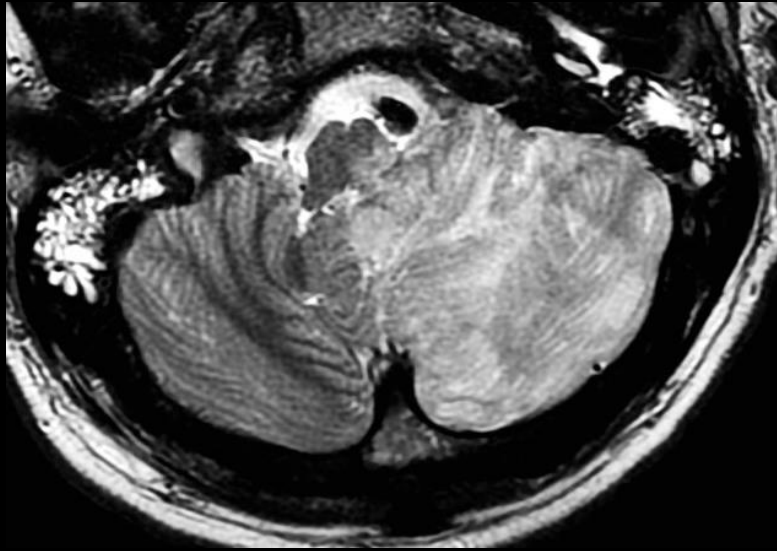
Angiographie et pose de stent



Angioscanner



Dégradation neurologique 2 semaines plus tard



Take Home Messages

- Syndrome de Claude Bernard-Horner : ptosis – myosis – énoptalmie
- Si CBH aigu et/ou douleur cervicale : **dissection carotidienne ++**
- Si **chronique** : tumeur de l'apex, ORL, ADP
- **Enfant** : neuroblastome

