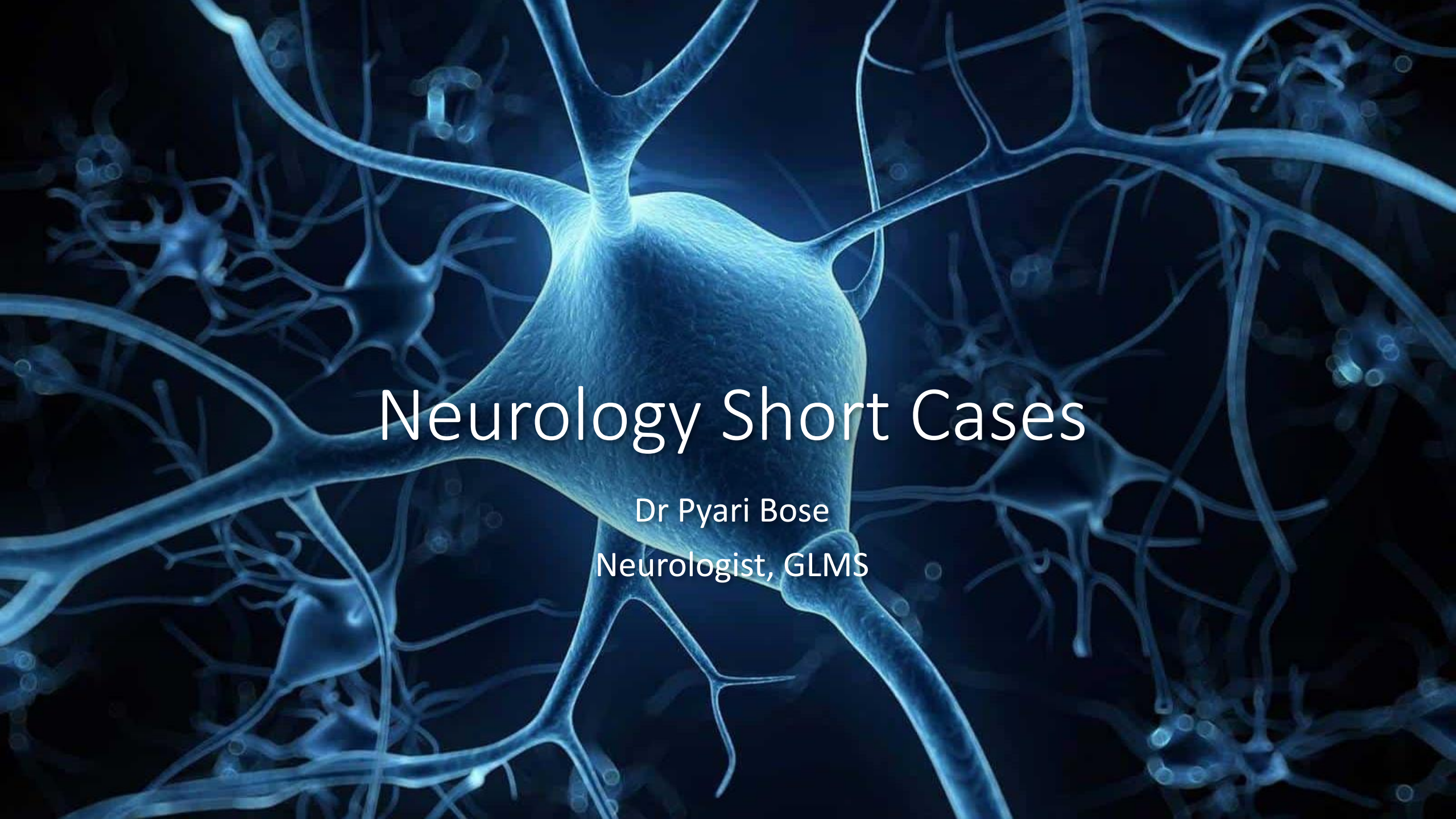


Neurology Short Cases

Dr Pyari Bose

Neurologist, GLMS

CASE 1

58 year old female lawyer

Symptoms one year

Throat discomfort

Foreign body sensation

GP- ENT

ENT- Nil Surgical

- Saw private neurologist
- Symptoms one year
- Throat pain – more left sided with globus
- Sometimes episodic lancinating pain
- Worse on crying/voice affected
- MRI brain
- Diagnosis?

Glossopharyngeal Neuralgia

- Recurring paroxysmal attacks of unilateral pain
- Lasting from a few seconds to two minutes
- Severe intensity
- Electric shock-like
- Precipitated by swallowing, coughing, talking, or yawning
- Not better accounted for by another ICHD-3 diagnosis

The International Classification of Headache Disorders, 3rd edition. Cephalalgia. 2018

MRI brain normal

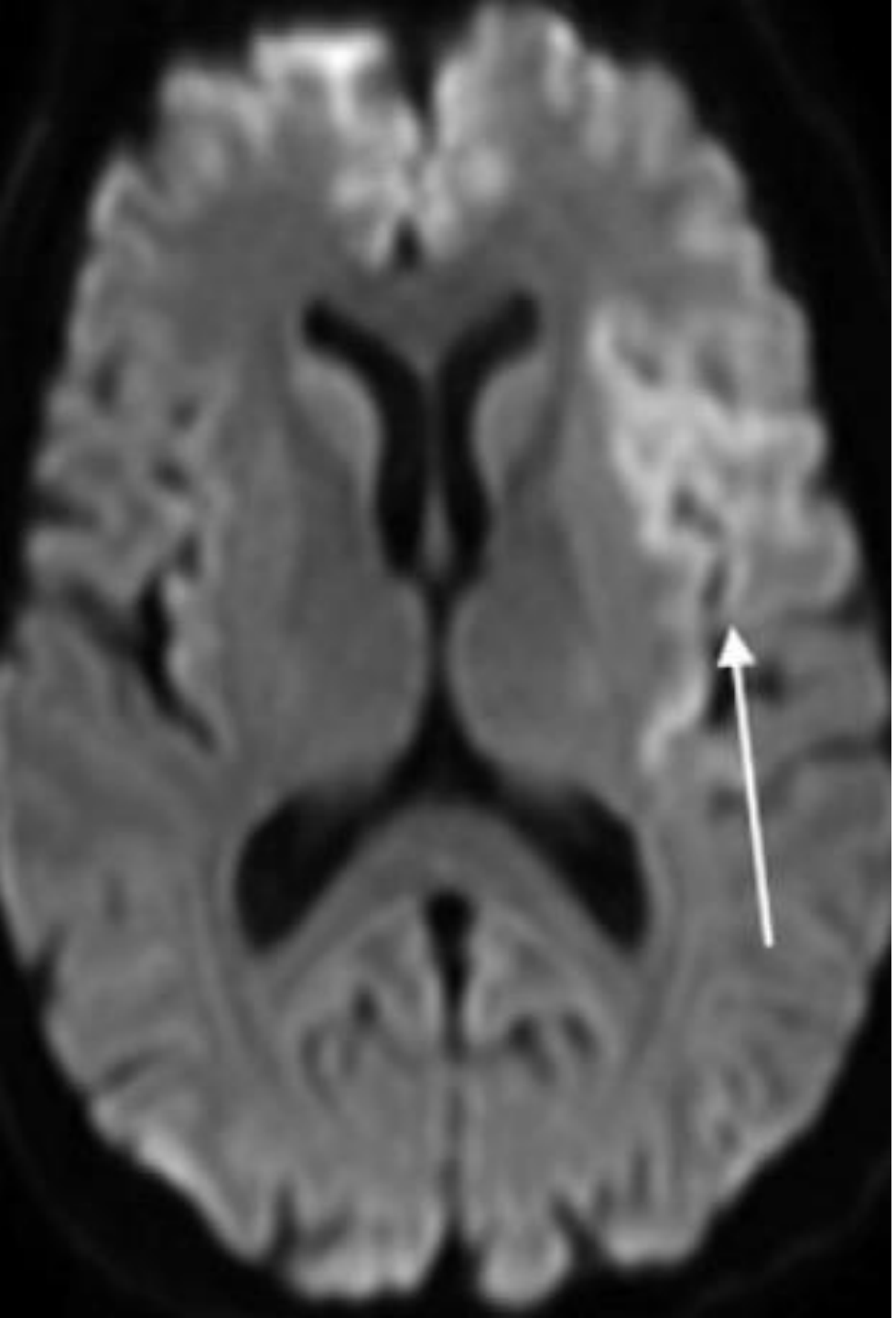
Given carbamazepine/amitriptyline

No relief- voice getting worse

Case of the month

'FUNCTIONAL DISORDER’

Psychiatry opinion



Six months later…

- Patient presents to ED
- Sudden speech disturbance and weakness
- Right hemiparesis with Horner's
- Left ICA dissection
- Radiologist
- Sues neurologist

Revisited..

1.5 years symptoms

Left throat pain and globus

Worse yawning/crying

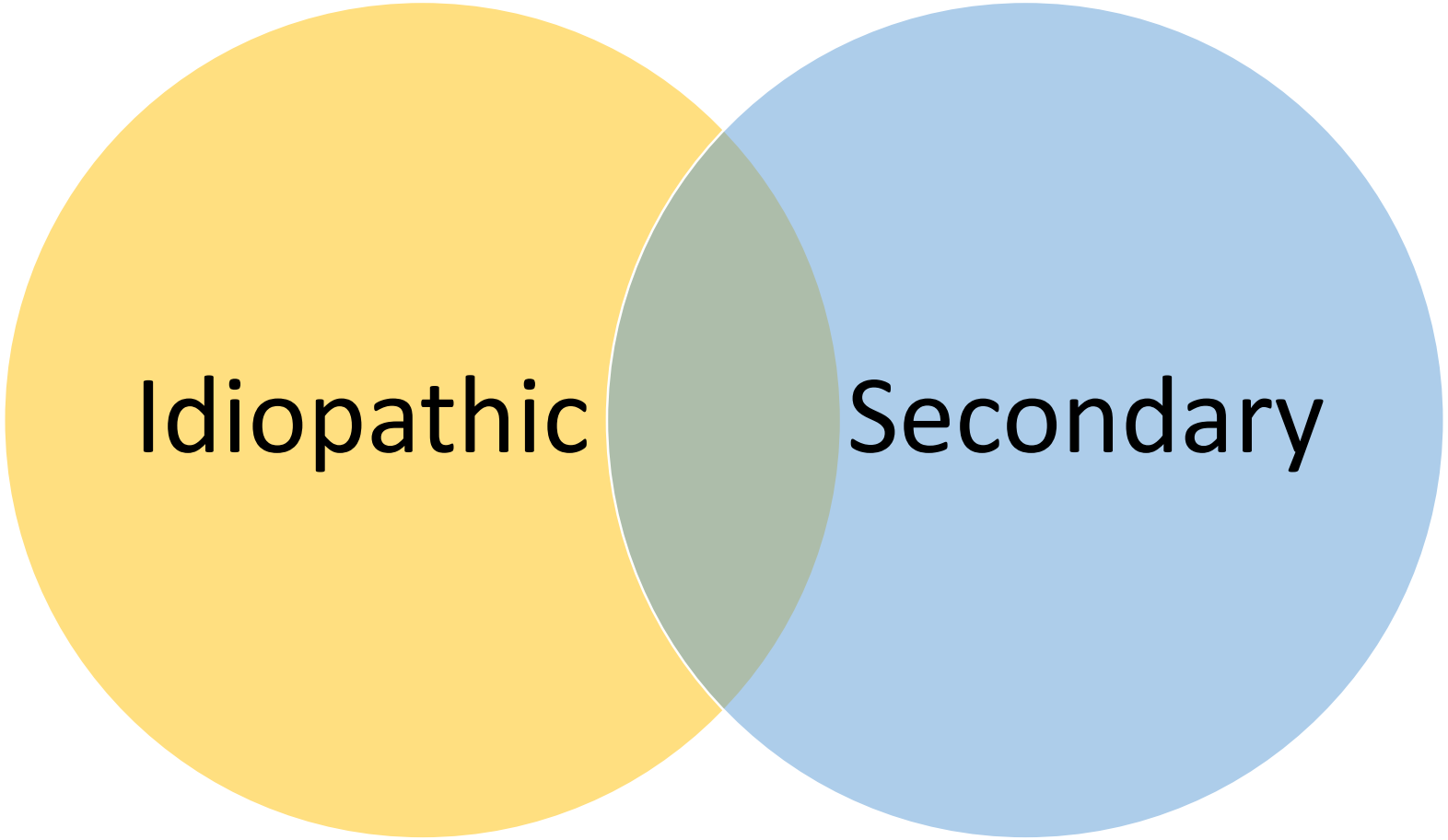
Voice changes

Pre-syncope

Stroke following left ICA dissection

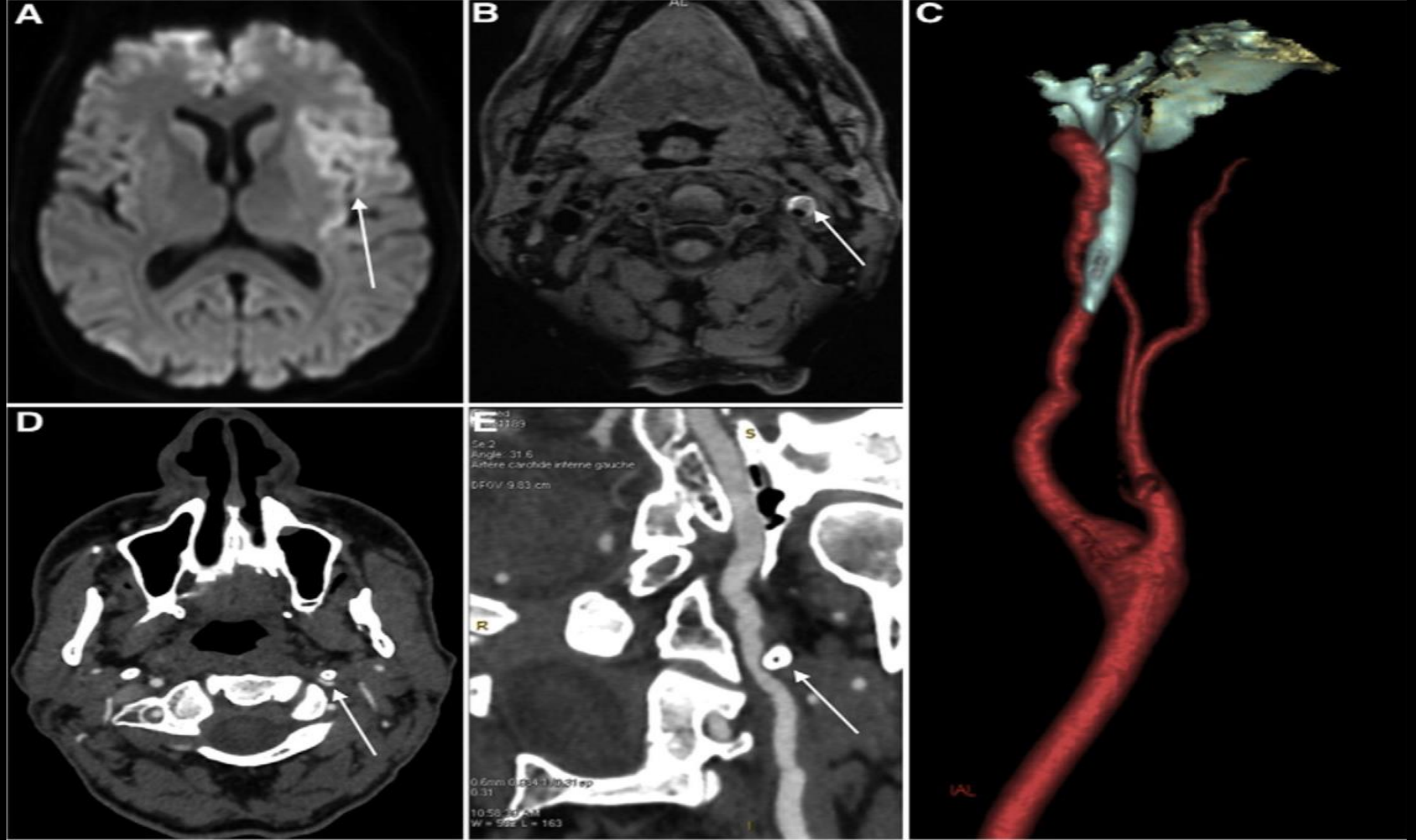
Diagnosis?

Glossopharyngeal neuralgia

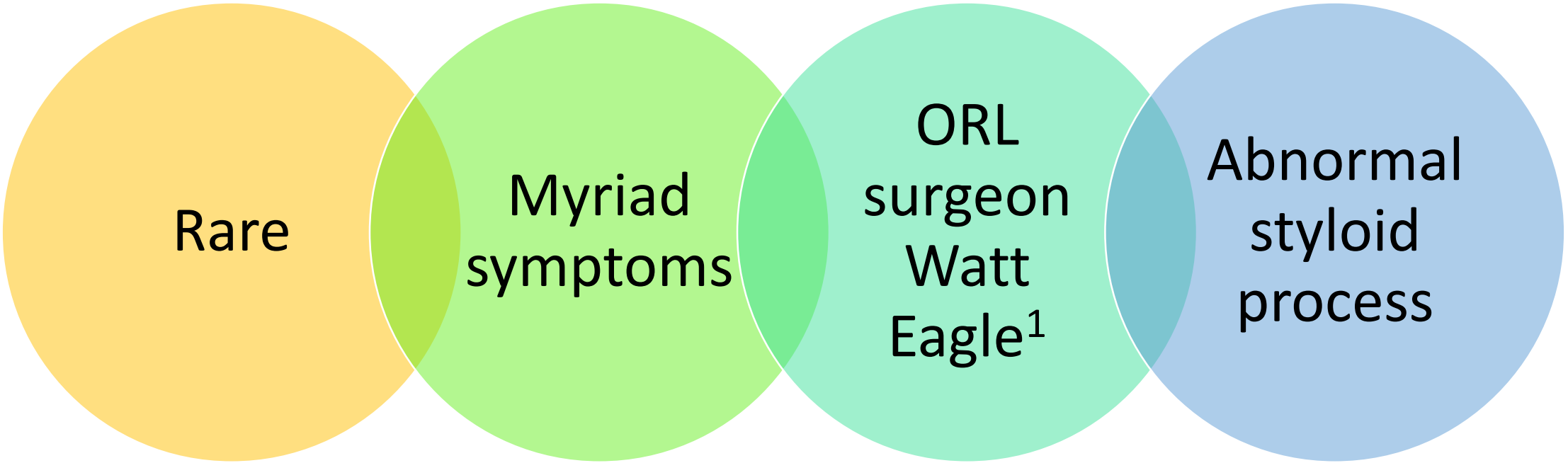


Secondary causes

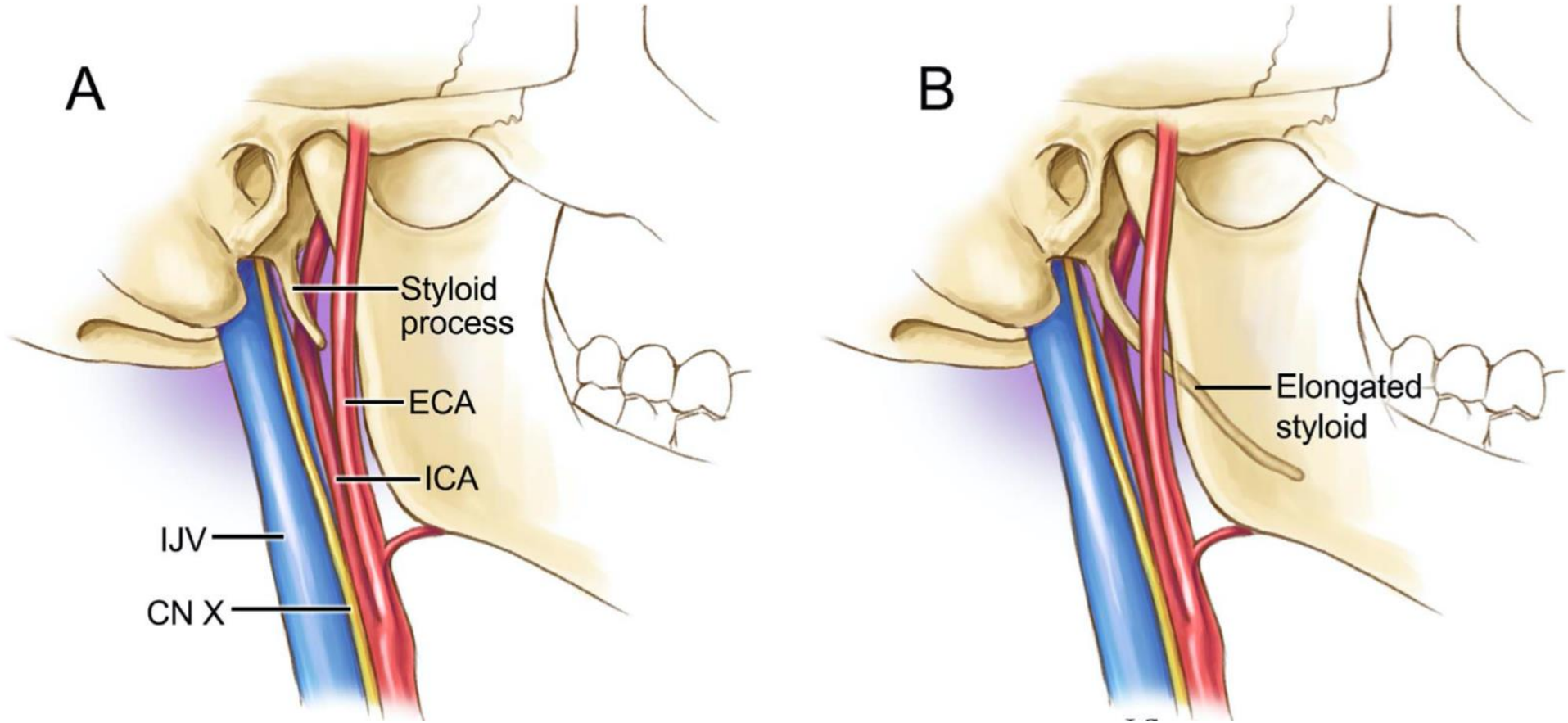
- Demyelinating lesions
- Cerebellopontine angle tumour
- Peritonsillar abscess
- Carotid aneurysm
- Eagle syndrome

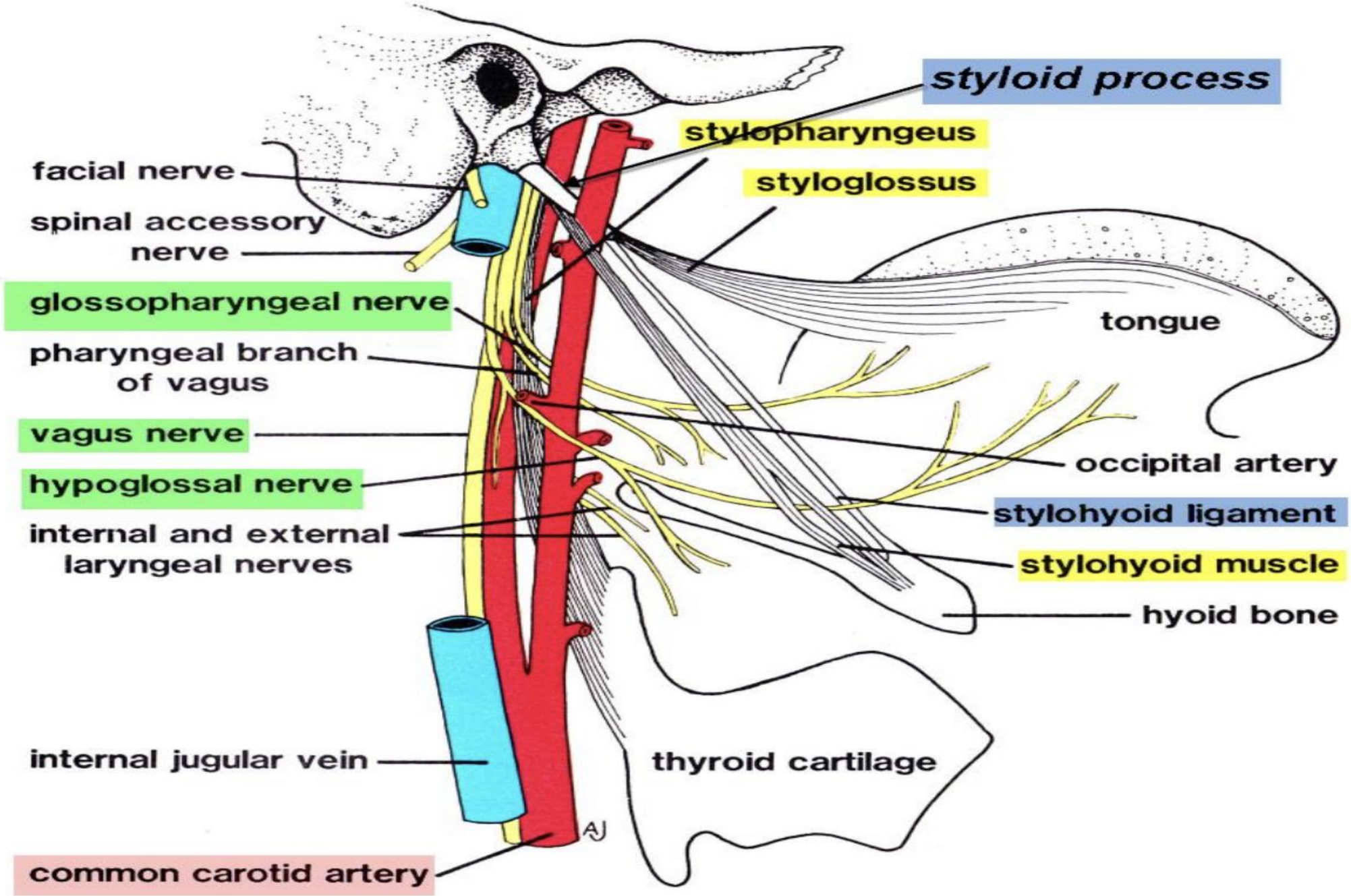

A
B
C
D
E
Se:2
Angle: 31.6
Artère carotide interne gauche
DFOV: 9.83 cm
S
R
I
AL

EAGLE SYNDROME

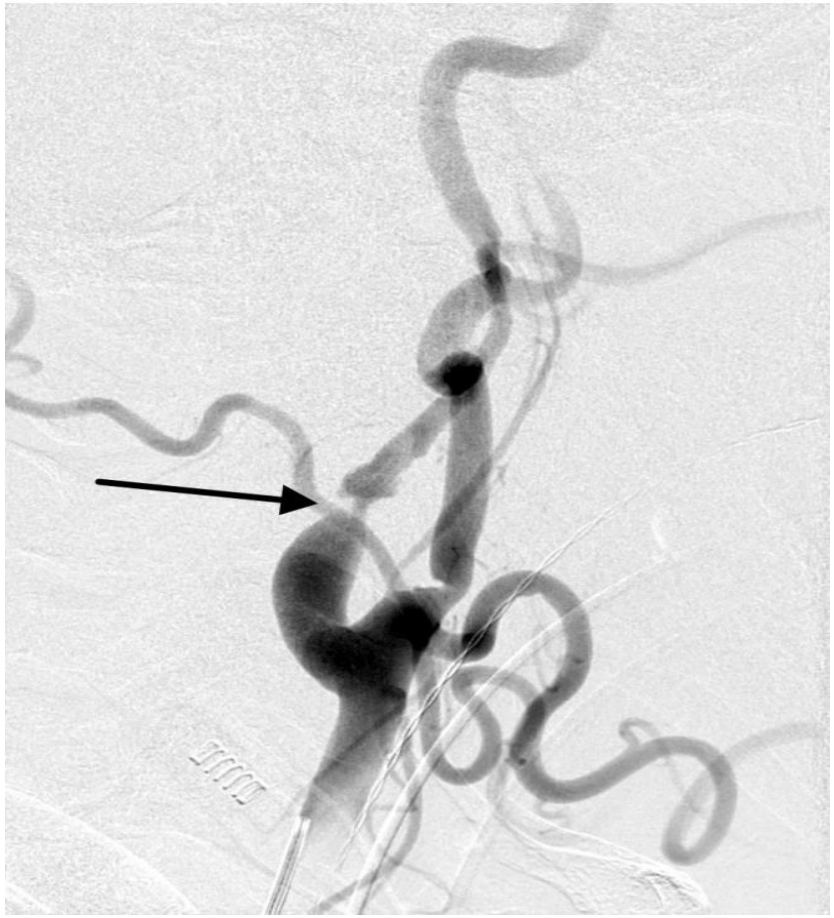


[1] Eagle, *Arch Otolaryngol.* 1937

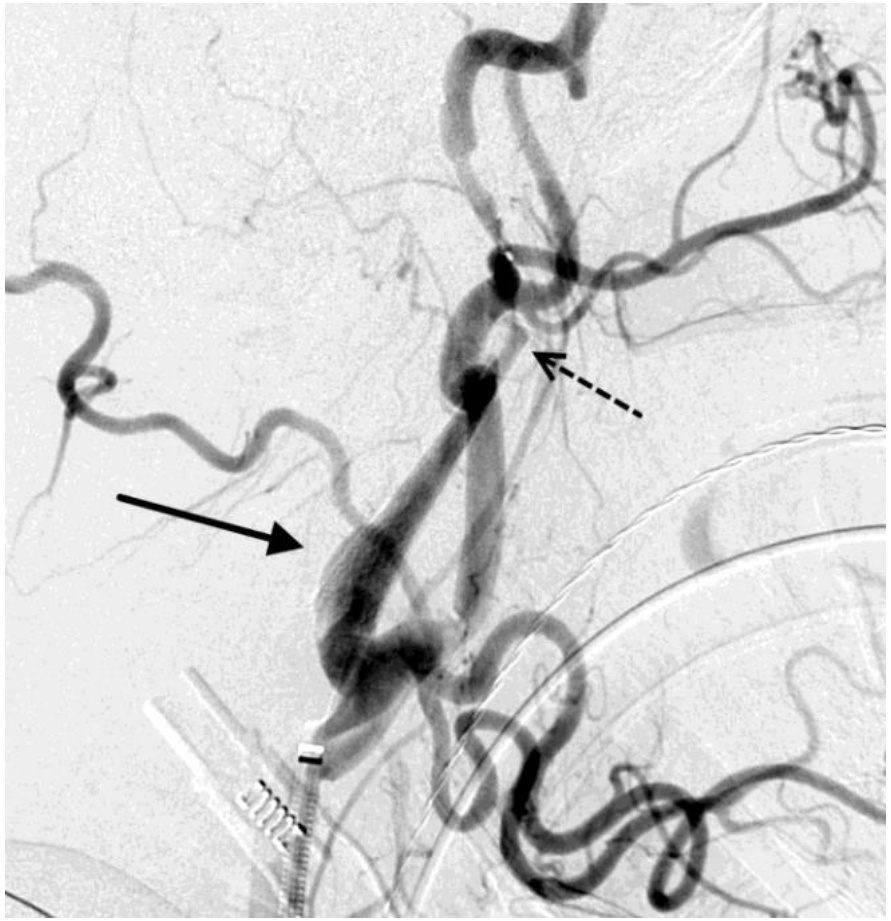

A
Styloid process
ECA
ICA
IJV
CN X
B
Elongated styloid


styloid process
stylopharyngeus
styloglossus
facial nerve
spinal accessory nerve
glossopharyngeal nerve
pharyngeal branch of vagus
vagus nerve
hypoglossal nerve
internal and external laryngeal nerves
tongue
occipital artery
stylohyoid ligament
stylohyoid muscle
hyoid bone
internal jugular vein
thyroid cartilage
common carotid artery
AJ

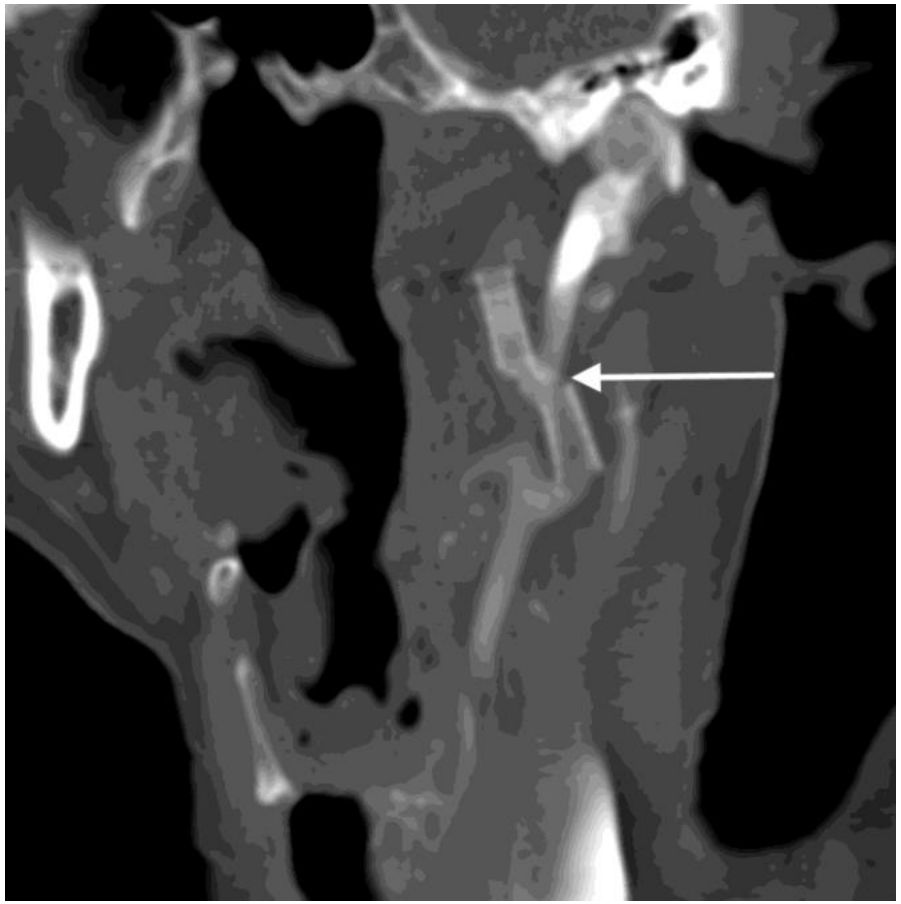
Another Scenario…

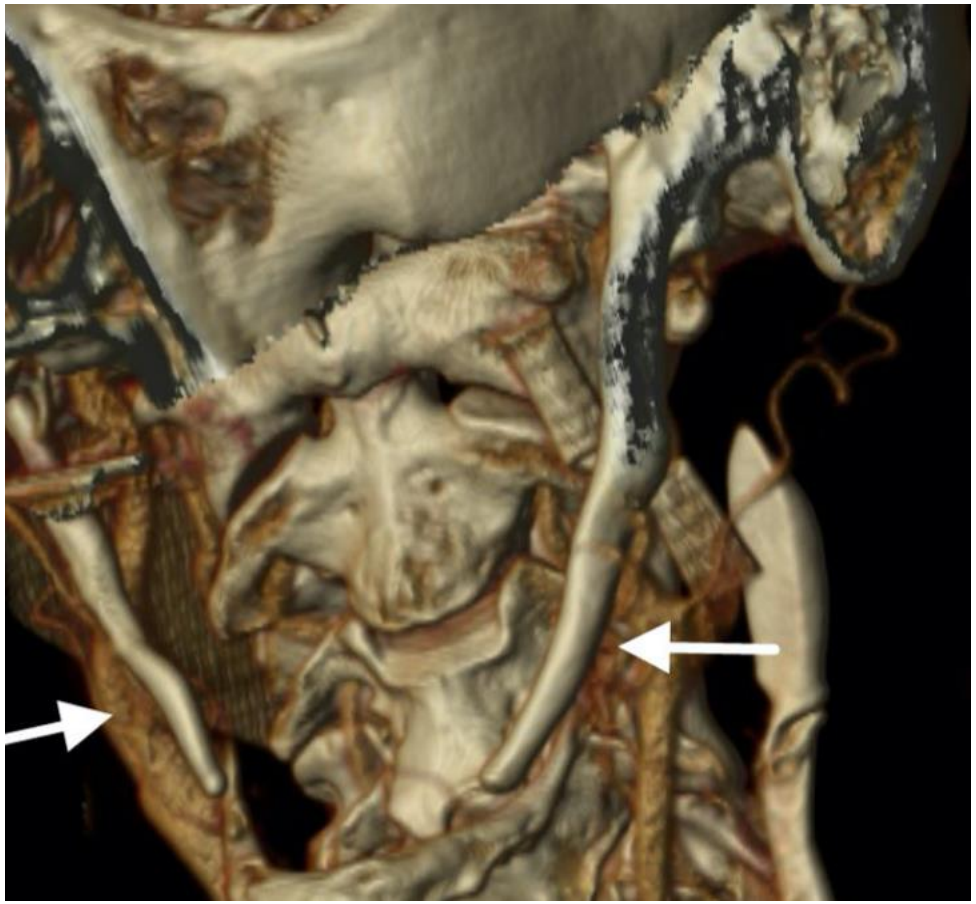


Before



After





Hooker *et al.*, Carotid Stent Fracture from Stylocarotid Syndrome. *J Radiol Case Rep*. 2016

Treatment

- Conservative
- Surgical

KEY POINTS

Eagle syndrome is rare

Myriad clinical presentations

May come to neurology

Risk factor for dissection*

*Renard *et al.,* Styloid and hyoid bone proximity is a risk factor for cervical carotid artery dissection. *Stroke*. 2013

CASE 2

27 year old male

Woke up at 3 am

Sharp retro-orbital pain left sided

Pupil size change left side

Next night pain recurred

On and off – 1 week

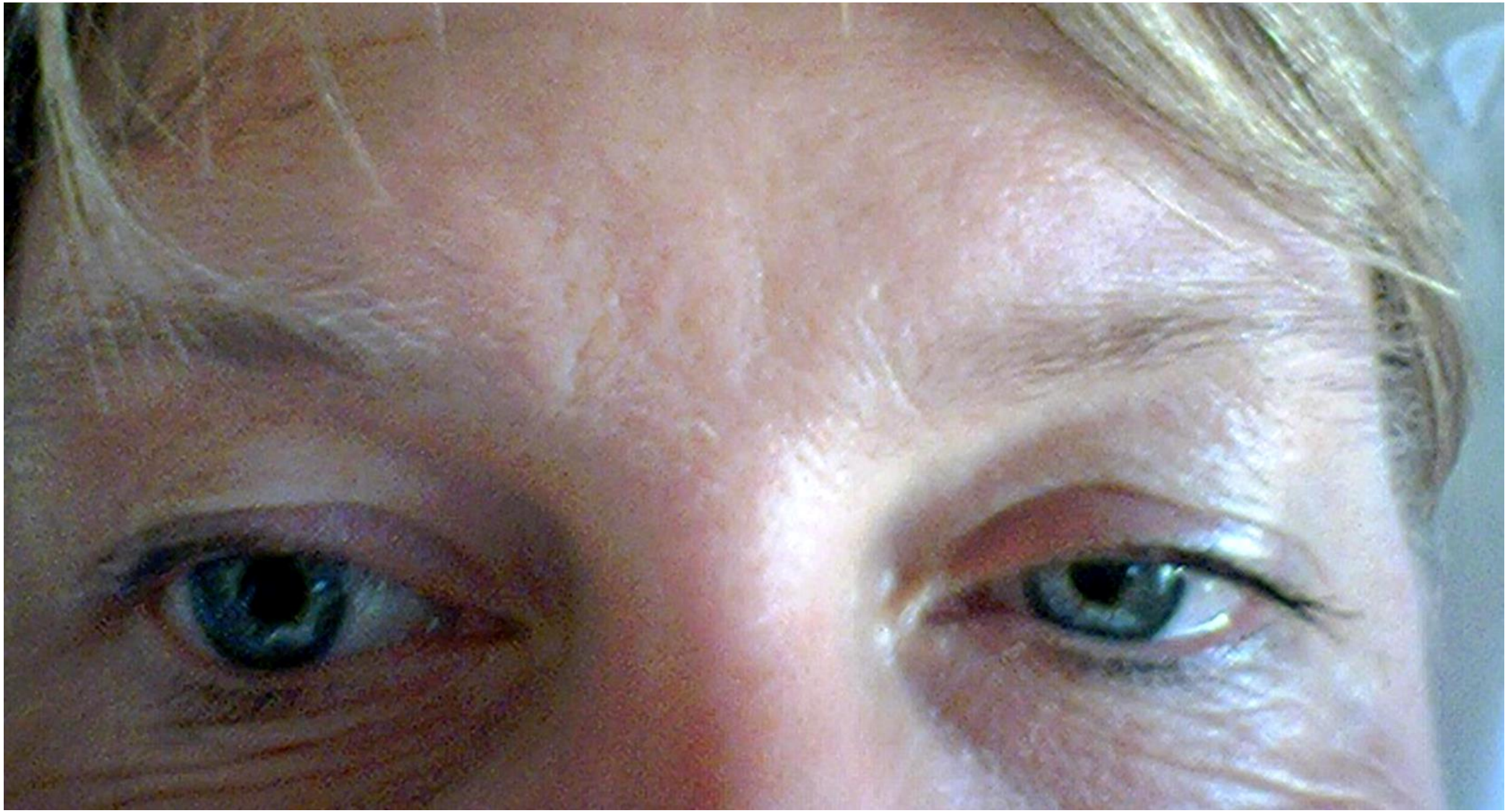
Referred to neurology

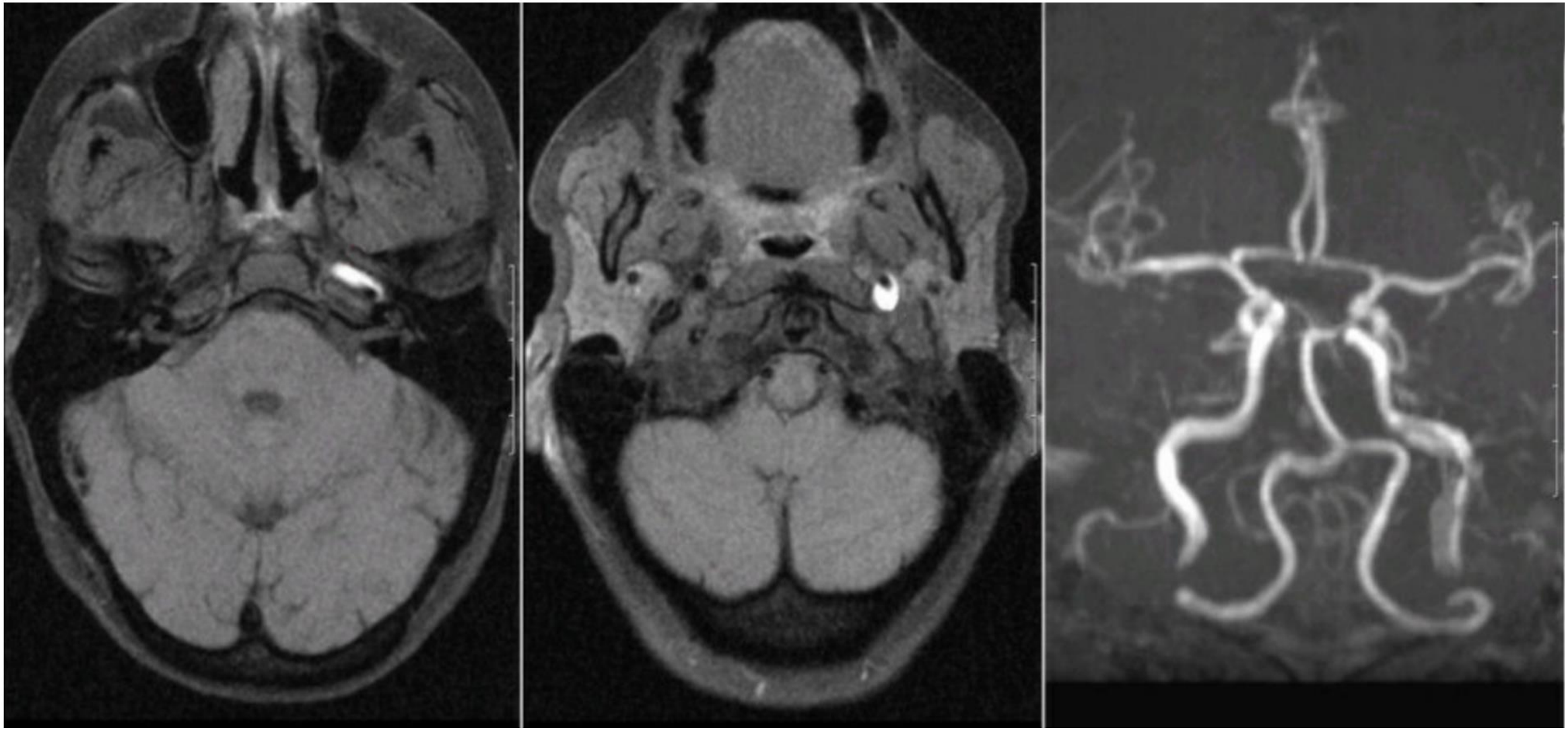
Thoughts?

CLUSTER HEADACHE

- At least 5 attacks
- Severe pain lasting 15-180 minutes (untreated)
- Unilateral orbital, supraorbital and/or temporal pain
- One or more ipsilateral cranial autonomic symptoms
- Agitation or restlessness
- Circadian or circannual periodicity*

The International Classification of Headache Disorders, 3rd edition. Cephalalgia. 2018





Headache in Carotid Dissection

- Poor localization[1]
- No specific characteristic
- Can be thunderclap, or mimic migraine/cluster headache[2]

[1]Diamanti *et al.,* Leading symptoms in cerebrovascular diseases: what about headache? Neurol Sci. 2019
[2]Mitsias *et al.,* Headache in ischemic cerebrovascular disease. Part I: Clinical features. Cephalalgia. 1992

RED FLAGS CASE 1

- Evolving nature of symptoms
- Attacks were not stereotyped
- Progression/Worsening

RED FLAGS CASE 2

- New onset
- Preceding activity
- Persistent Horner’s

RED FLAGS- SNOOP

- **S**ystemic symptoms including fever
- **N**eoplasm history/Neurological deficit
- **O**nset sudden, **O**lder age (onset after age 50 years)
- **P**attern change, **P**recipitated by sneezing, coughing, or exercise
- **P**rogressive headache, **P**regnancy or puerperium
- **P**ainful eye with autonomic features
- **P**athology of the immune system such as HIV

Red and orange flags for secondary headaches in clinical practice: SNNOOP10 list. Do et al., Neurology. 2019

- If it **doesn’t** look like a duck, **swim** like a duck, and **quack** like a duck….