# Mastering Headache Assessment

RCP Nurses Headache Masterclass
03/10/2025

Croydon Health Services NHS

# Declaration and conflict of interest

- Nil

# Aims

1. A brief introduction to the science of headache and assessment.
2. My practical experience of a clinical service

- General Neurology
- Headache clinic
- LP service
- GON blocks

3. How to make neurological examination simple and meaningful

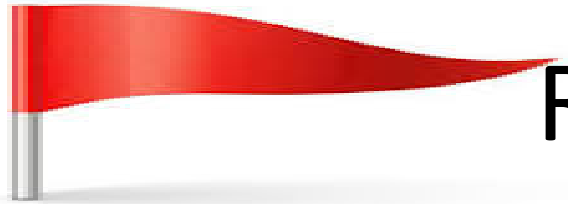
# Science Of Headache

Headaches occurs

- When sensitive nerve endings called nociceptors react to headache triggers (such as stress, certain foods or odors, or use of medicines)
- These in turns send messages through the trigeminal nerve to the thalamus, the brain's "relay station" for pain sensation from all over the body (NINDS)

# Good History Taking

Guides ones Assessment (Fawcett et al 2012 and smith 2003).



# Red Flags

- **Age**
- New onset or different headaches in a person >50yrs
- **Onset**
- Sudden, abrupt onset of a severe headache (thunderclap headache)
- **Severity**
- "Worst headache of my life"
- **Progression**
- Headaches that are rapidly getting worse over time
- **Systemic symptoms**
- Fever, neck stiffness, rash, weight loss
- **Neurological signs**
- Papilloedema, focal signs, confusion, impaired consciousness
- **Aura**
- Fixed or prolonged aura >1 hour
- **Triggers**
- Headaches that start with exercise, sexual intercourse, coughing or sneezing
- Alters with position (orthostatic headache)
- **Risk factors for 2$^{o}$ headaches**
- HIV, cancer, malignant hypertension, post-traumatic headache

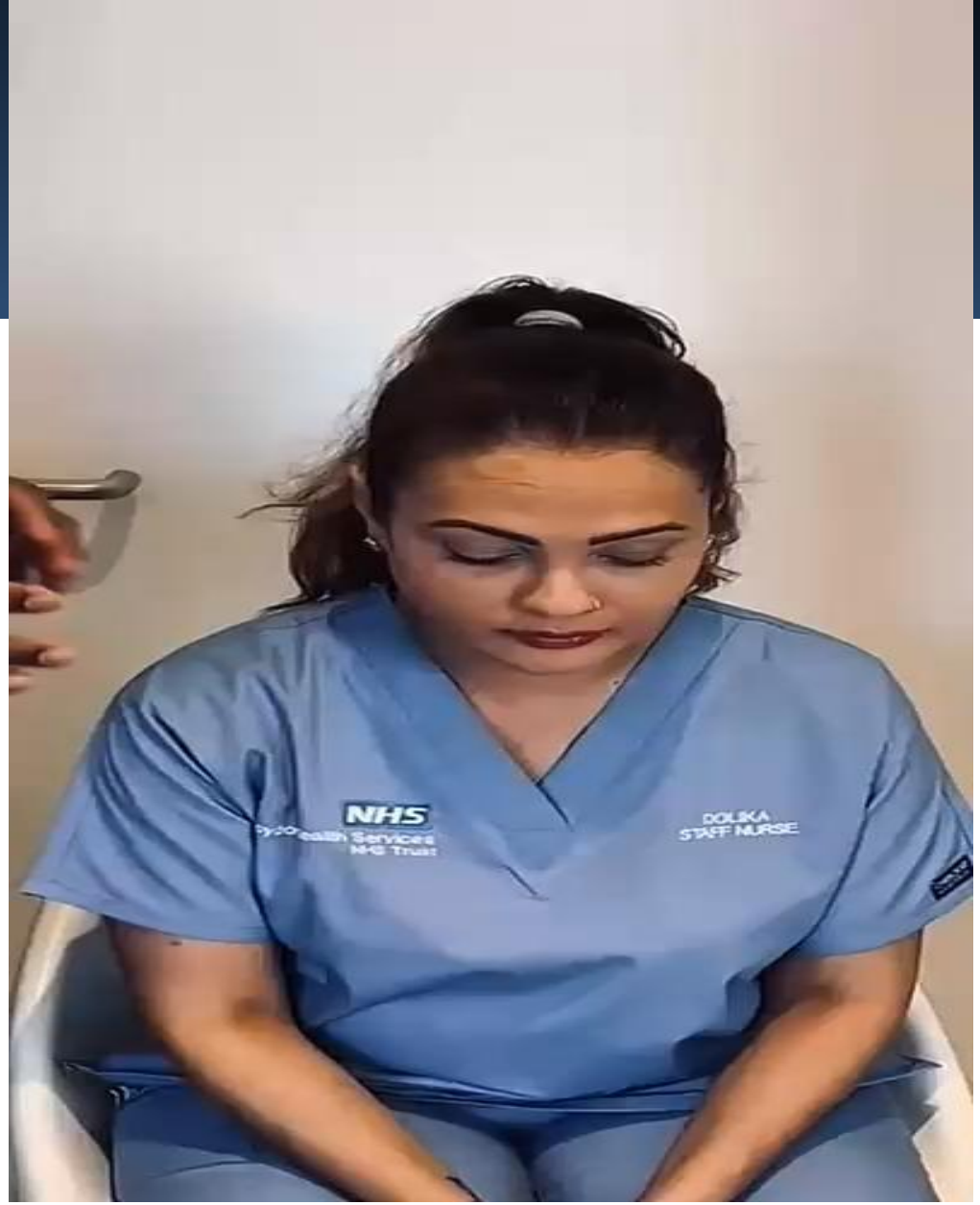
# Migraine aura v TIA

1. Tightly time locked 10-30mins
2. Moves /spreads
3. Positive phenomena lights not darkness

# Neurological assessment
# Video

- Inspection-look for asymmetry and neurology look at shoulder and upper limbs
- Palpation-skeletal structures spinous process cervical intrathoracic facets shoulder joint and surrounding skeletal structures, Sinuses, TMJ,Muscles-temporalis and masseter, Scalp
- Movement- neck, shoulder, upper limbs, TMJ
- Reflexes, coordination, provocation, sensation
- Cranial nerves examination
- Eyes and funduscopy

# Video



# Remember Possible Sites of Pain

- EXTRACRANIAL

Muscles around scalp
Extra cranial arteries (GCA)
Nasal Sinuses
Orbits
TMJ

- INTRACRANIAL

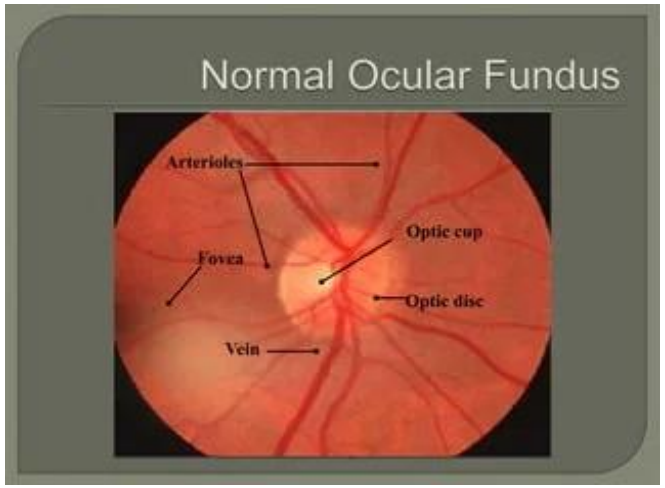
Meninges
Large veins and venous sinuses

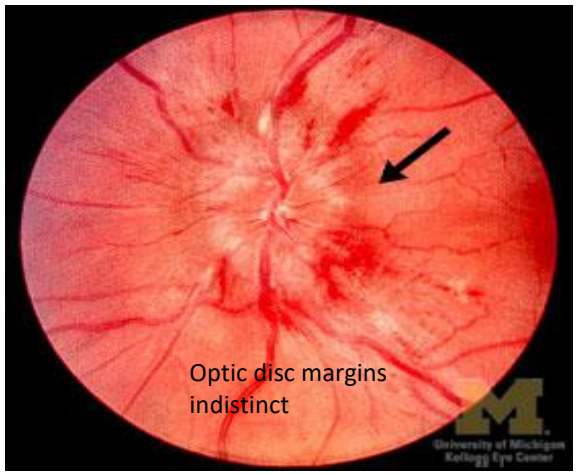
- Neck- Kids with medulloblastoma can present with neck pain

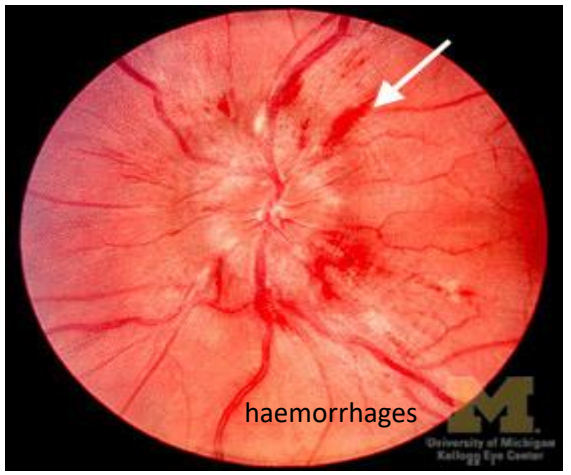
- Eyes

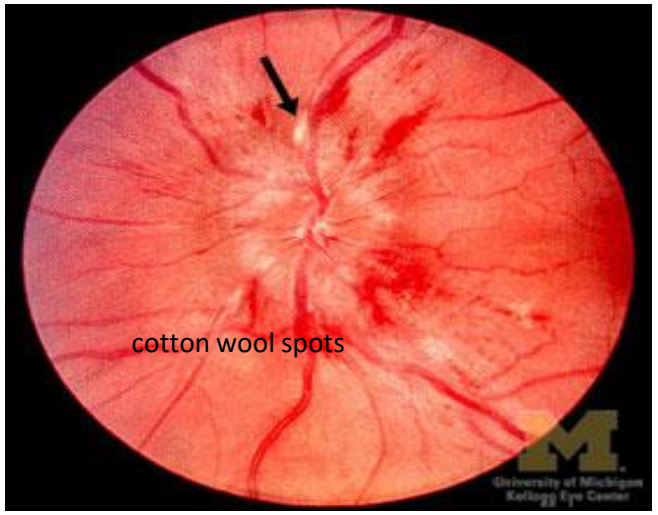
# Fundoscopy and Papilledema

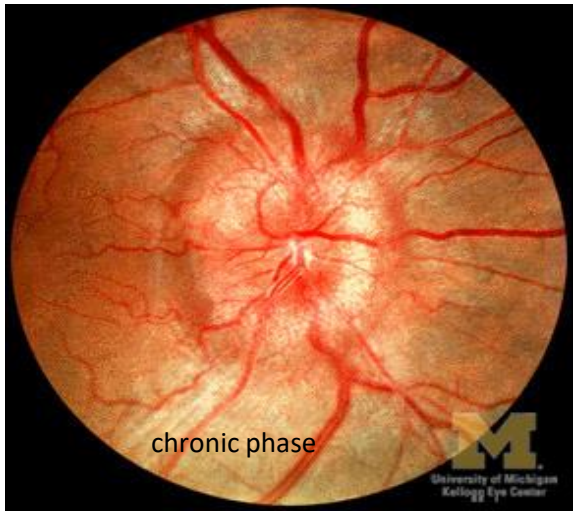
https//kellogg.umich.edu/theeyeshaveit/opticfundus/papilledema.html

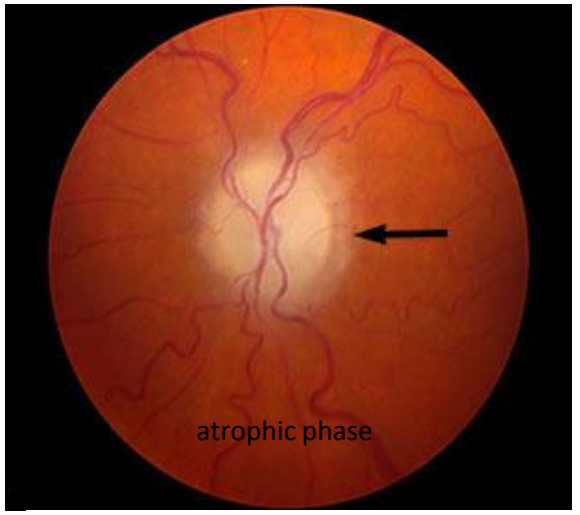


# Fundoscopy and Papilledema

- Patient may report transient black-outs of vision, especially upon standing
- Optic disc margins indistinct
- Optic disc elevated above retinal surface
- These signs may be ophthalmoscopically subtle
- In acute phase, may see hemorrhages and cotton wool spots
- In chronic phase, optic disc elevation and blurred margins, but no hemorrhages or cotton wool spots
- In atrophic phase (optic nerve axons have died), optic disc shows mixture of pallor and swelling
- Vision usually normal or near normal unless atrophy has set in

# Don’t Forget

- Blood pressure

# Medication and Social History

- Not only advise on new medications but also advising on reducing or stopping medications/medication review
- Social history- about family, work, sleep, stress.

# Take home message

- We can make neurological examination very difficult or very simple.
- Good history taking will guide your assessment and tests
- If in doubt do not hesitate to seek help.
- In my opinion holistic headache assessment also helps to formulate a better treatment plan.

# Refe*ren*ces


1. Fawcett T *et al.;* Taking a patient history: the role of the nurse Nursing Standard (2012)
2. Smith R; Thoughts for new medical students at a new medical school. BMJ. 2003 Dec 20;327(7429):1430-3.
3. https://kellogg.umich.edu/theeyeshaveit/opticfundus/papilledema.html
4. https://www.ninds.nih.gov/health-information/disorders/headache#:~:text=Headaches%20occur%20when%20pain%2Dsensitive,from%20all%20over%20the%20body.

# Any Questions

# Thank You