Migraine – a brief guide for clinicians UHL ESM Guideline	University Hospitals of Leicester NHS NHS Trust **Trust ref C2/2021**

1. Introduction and Who Guideline applies to

This clinician guide is part of a wider QI program to improve the care of patients with headache in UHL. It was developed by Neurology, in partnership with Acute Medicine, targeted for use by General Physicians at the front door, to enable patient self-management and standardise initial management by non-Neurologists. This is intended for use with an associated Trust-approved patient information leaflet (Managing migraines).

2. Guideline Standards and Procedures

See next page for recommendations.

3. Education and Training

Are there any new skills required to implement the guideline? Is a training programme being provided to support implementation or is it more a case of 'awareness raising'

If there are no education or training requirements please state 'None'.

None

4. Monitoring Compliance

What will be measured to monitor compliance	How will compliance be monitored	Monitoring Lead	Frequency	Reporting arrangements
No specific monitoring advised				

5. Supporting References (maximum of 3)

NONE

6. Key Words

Headache, migraine, medication overuse, self management

CONTACT AND REVIEW DETAILS	
Guideline Lead (Name and Title) Dr Amit Mistri, Head of Service Neurology Dr Sukaina Asad, Consultant Neurologist Dr Tina Ramnani, Consultant Neurologist	**Executive Lead** Dr Rachel Marsh, CD ESM
Details of Changes made during review: First submission V1.2, ESM Board approval 27/01/21 Reviewed December 2023: minor formatting changes, Nortriptyline added as alternative to amitriptyline, after consultation with Neurologists (Drs Ramnani & Asad).	

MIGRAINE – a brief guide for clinicians

Migraine is a common disorder that usually presents with disabling headache, generally associated with *nausea* &/or *photo-/phono-phobia*. 1 in 5 people also have aura, usually in the form of *positive* visual disturbance. Status migrainosus is a debilitating attack lasting for >72 hours, where IV fluids and parenteral medications may be needed.
Patients with migraine present to emergency settings:

a) With unusually severe attacks or status migrainosus, and
b) Where initial treatment has failed to provide relief

Those with less severe attacks may present due to:

- *Lack of awareness of the condition and self-management options (i.e. need education), or*
- *Lack of access to primary care review (i.e. encourage to access GP or register with GP)*

Approach to treatment of acute Headache:

➢ **EDUCATION**

Educate migraine sufferers about their condition and its treatment
Encourage them to participate in their own management.
Provide them with the Trust-approved patient information leaflet, if not already had one.
[This can be printed from the printing kiosk in ED or acute medical areas.]

➢ **NON PHARMACOLOGICAL INTERVENTIONS**

Fluids: Advise to drink plenty of fluids if a migraine is starting
Carbs: Encourate a carbohydrate snack (eg banana, biscuits, toast)
Triggers: Rest away from noise and light, and avoid any other known triggers
Menthol (e.g. menthol stick or plaster) or heat pack may be helpful
Recommend a symptom diary (to monitor headache frequency and analgesic use).

➢ **PHARMACOLOGICAL INTERVENTIONS**

ANALGESICS	ANTIEMETICS/PROKINETICS	PROPHYLAXIS
•SINGLE DOSE OPTIONS • Paracetamol 1g • Ibuprofen 400-800mg • Aspirin 900mg • Naproxen 250-500mg • Sumatriptan 50mg po or 6mg sc **•+/- REGULAR ANALGESIA** • for <=48 hours* **•LIMITED PRN USE*** • Paracetamol <10d/month • Triptans <6d/month	•Metoclopramide 10mg tds (in over 18s) for 3-5 days •Prochlorperazine 5-10mg tds •Stop as soon as symptoms settle •Avoid long term use	•Consider if the patient continues to experience an unacceptable burden of severe migraines e.g. •Acute attack treatments are not effective enough •Increasing attack frequency •Significant impact on work, school, or home life •(Refer to table next page)

***Excessive analgesic use increases risk of *medication overuse headache* and reduces the efficacy of prophylactic migraine medication by 80%.**

DO NOT USE Opiates	DO NOT USE Ondansetron	AVOID Sumatriptan if	AVOID NSAIDS if
•High risk of rebound headaches	•Little evidence for effectiveness in migraine. •High incidence of headache as a side effect	•History of vascular disease (IHD, Stroke, PAD) or SBP>160.	•h/o recent GI ulcers or bleed •(consider PPI cover if remote history) •Caution if h/o asthma

➢ PROPHYLACTIC THERAPY

- **Medication overuse is common, and stopping medication overuse is a pre-requisite for starting prophylactic medication**
  - Excessive analgesic use increases risk of *medication overuse headache* and reduces the efficacy of prophylactic migraine medication by about 80%.
  - Analgesic medications should be used sparingly for more severe headaches, which have failed to improve with non-pharmacological management.
  - Patients often find advice to avoid 'medication overuse' counter-intuitive and significant discussion and reassurance is required.
  - Warn patients that an initial period of worsening is often seen before improvement occurs.

- Consider individualised use of prophylactic medication as tabulated below
  - Try one of the medications for at least 3 months at target dose (or maximal tolerated dose), before judging the efficacy of each treatment
  - If ineffective, wean off the medication, and try a different medication (similarly, target/maximal tolerated dose, for at least 3 months).
  - If below options have been tried and significant symptoms persist, consider seeking advice from a Neurologist (usually GP referral via PRISM).

	Propranolol SR	**Amitriptyline (Nortriptyline*)**	**Topiramate**
Contraindication	Asthma Bradycardia or low BP Raynaud's / peripheral artery disease	Arrhythmias Heart block Recent MI	H/o kidney stones H/o glaucoma
Cautions		Caution in patients with BPH or bladder retention Caution in patients with pre-existing mental health disorders	Women of childbearing potential: Do not use without Neurologist approval, and document full risk-benefit discussion Use with extreme caution in patients with pre-existing mental health disorders
Starting dose	80mg	10mg nocte	25mg
Dose escalation	80mg every 2-3 weeks	10mg every week	25mg every 2 weeks
Target dose **(if tolerated)**	80mg bd	25-50mg nocte (Tailor to response)	50mg bd
Maximal daily dose	240mg (120mg bd)	100mg (100mg nocte)	200mg (100mg bd)
Side effects	Cold peripheries, nightmares, light headedness, fatigue and precipitating asthma.	Anticholinergic syndrome Drowsiness, blurred vision, dry mouth, urinary retention, weight gain, poor sleep Withdrawal symptoms with abrupt cessation – reduce dose gradually over 4 weeks	Alopecia Tingling in extremities, speech disturbance Low mood, cognitive slowing, suicidal ideation Weight loss Kidney stones Acute glaucoma (seek urgent ophthalmology advice for painful red eye with reduced vision)
Women	**All women of childbearing age taking regular medications should be counselled about contraception. These medications should generally be avoided in pregnant women; and should be discontinued in the event of pregnancy (please seek Neurology advice, if high symptom burden).**		
Disclaimer: This is a summary of key relevant information provided as a guide. Please refer to the BNF for details. The final decision for treatment and medication choice rests with the responsible clinician.			

* Nortriptyline has limited evidence, however often used as an alternative to amitriptyline as it is less sedating/better tolerated.

For more detailed information, refer to reliable sources e.g. The Walton Centre's 'Migraine – a comprehensive guide'