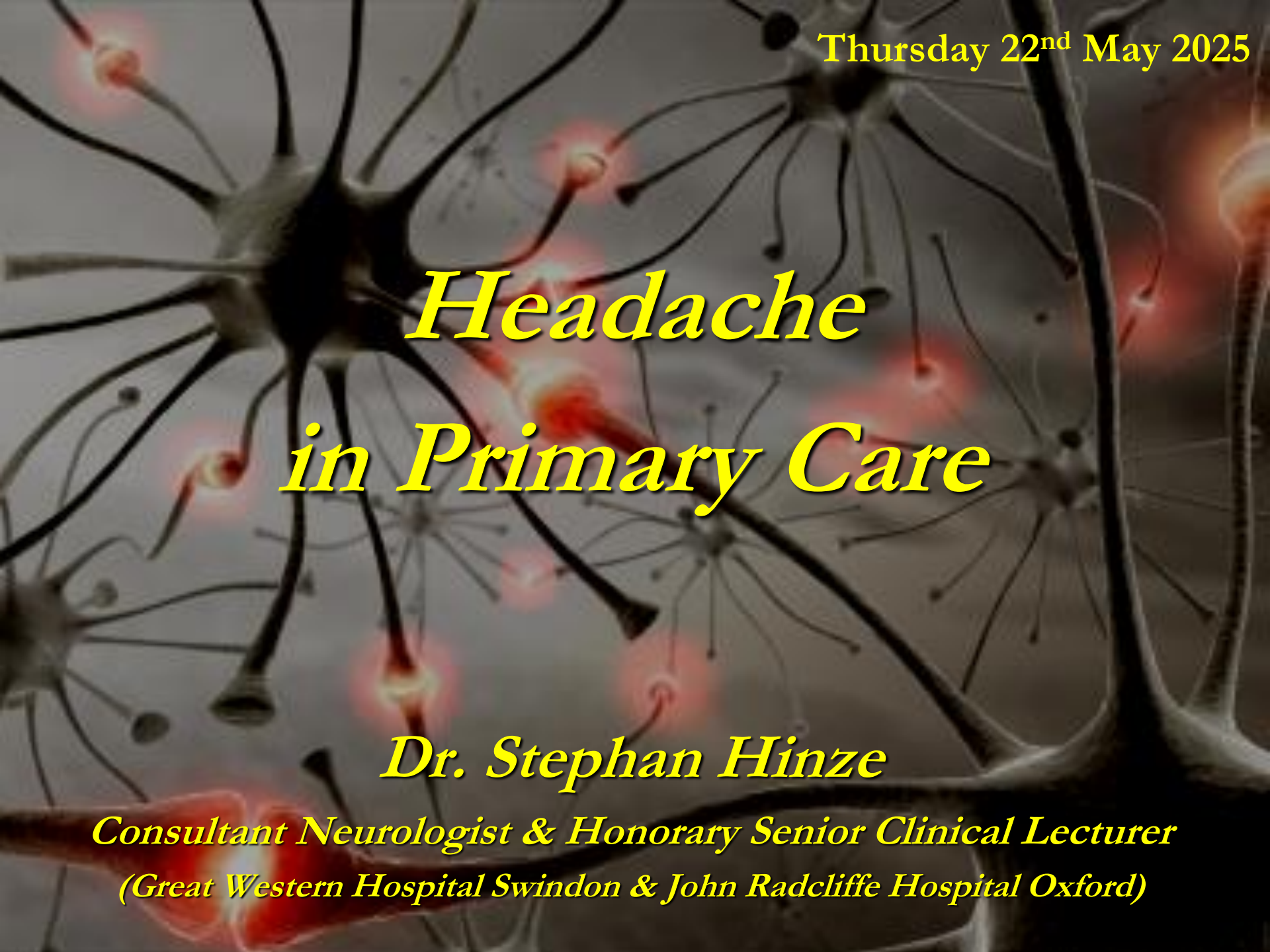


Thursday 22nd May 2025

Headache in Primary Care

Dr. Stephan Hinze

Consultant Neurologist & Honorary Senior Clinical Lecturer

(Great Western Hospital Swindon & John Radcliffe Hospital Oxford)

Headache

1. Confidently diagnose primary headaches
2. Treatment of headaches in primary care
3. Pregnancy and Breast Feeding

Differential diagnosis of 906 patients who presented to a general neurology clinic with headache or facial pain as the major or only symptom

Diagnosis	Number	%
Tension headache	296	32
Migraine	241	27
Headache ? Cause	139	15
Post-traumatic	71	8
Facial pain ?cause	38	4
Depression	29	3
Trigeminal neuralgia	29	3
Cluster headache	19	2
Malignant IC Tumour	14	1.5
Benign IC Tumour	9	
Temporal arteritis	6	
Post-herpetic neuralgia	5	
Benign IC hypertension	4	
Cough headache	3	
Subdural haematoma	2	
Sinus infection	1	

General Approach to Headache Management

1. **Is it Serious?** Patient/Doctor. Red Flags
2. **What is it?** Diagnosis. Understanding. Explanation
3. **Treatment?** Options? Cure? Realistic Goals? What does the patient want?

Red flag symptoms

When do you currently get concerned?

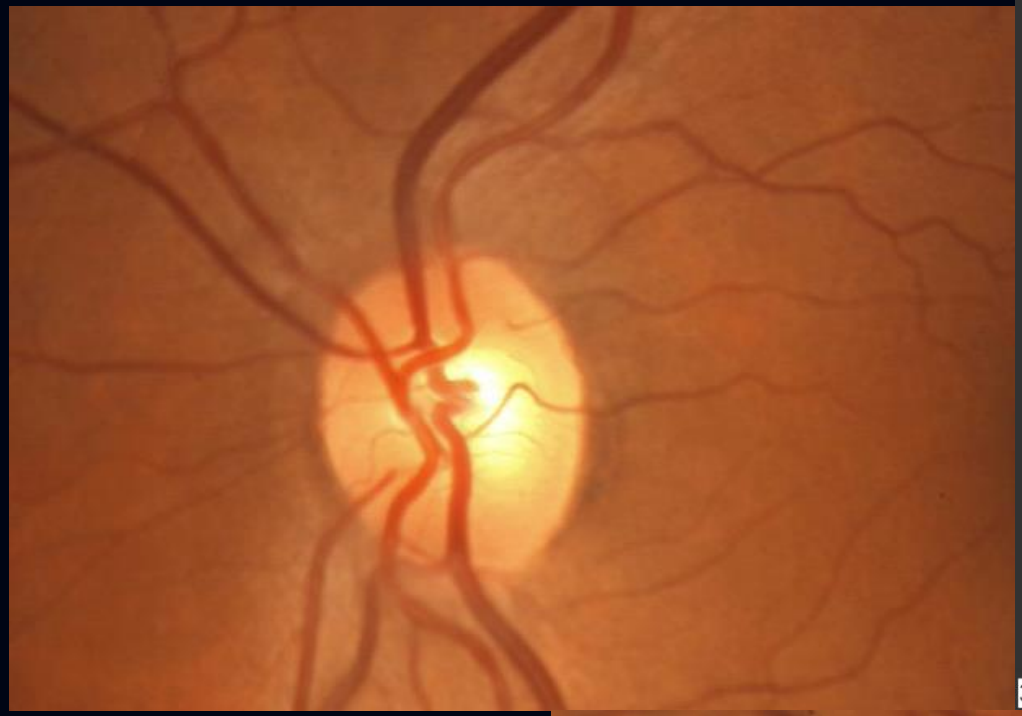
Red flag symptoms

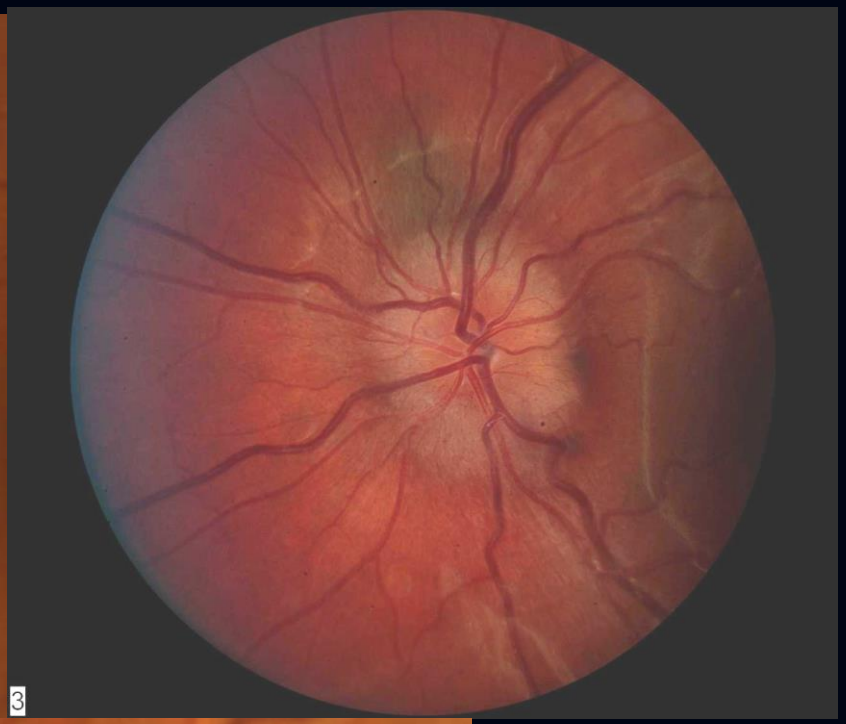
1. Sudden onset, severe headache (SAH)

2. New headache in elderly person (GCA)

3. Postural related headache (low pressure)

4. Headache with immunosuppression/ cancer

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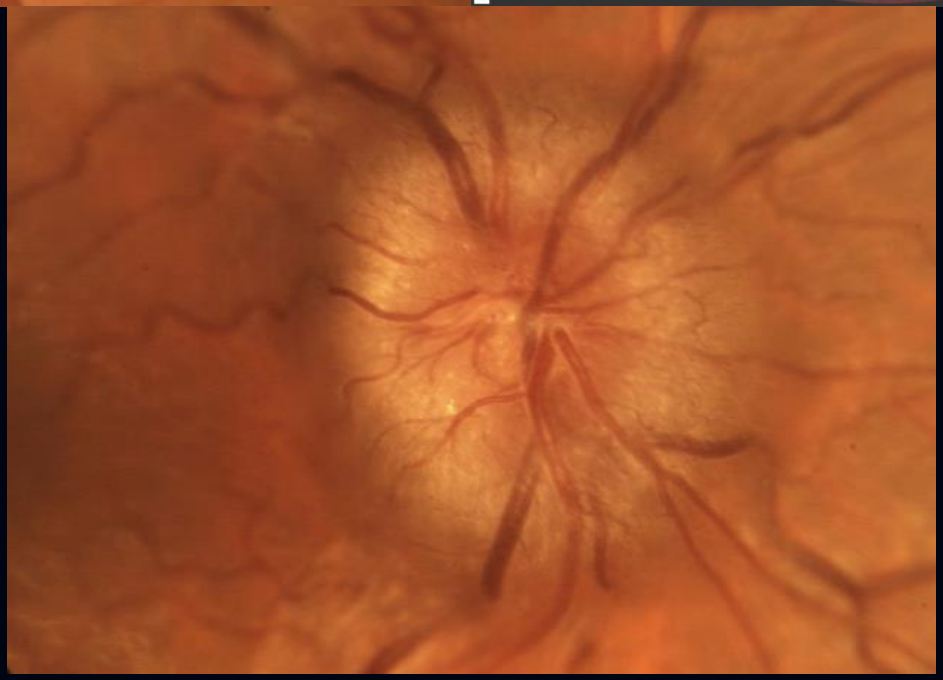
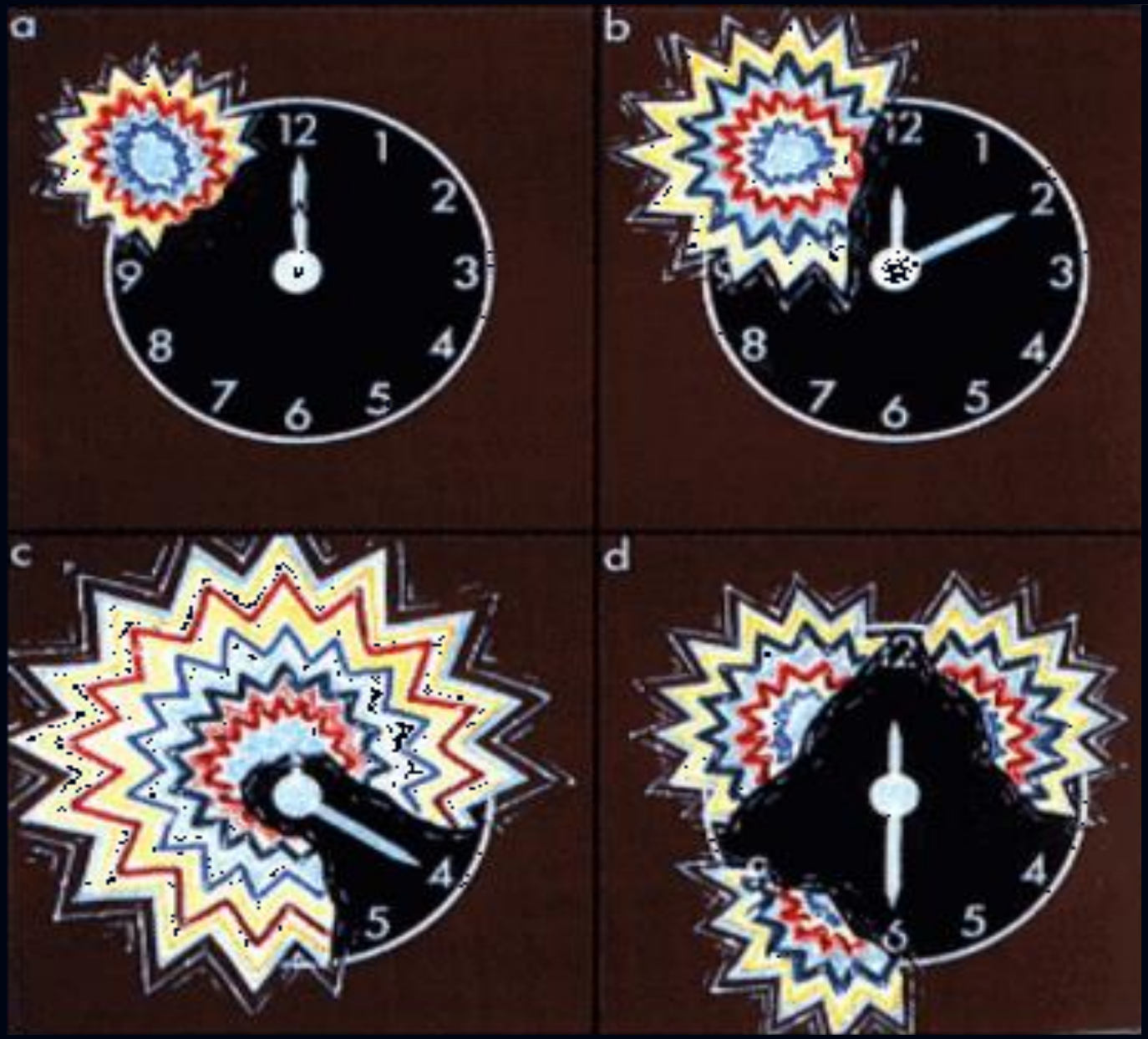


What is Migraine?

1. **> 4 hours**
2. **Need to rest/sleep**
3. **N/V/photophobia/phonophobia/osmophobia**
4. **Aura**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d
12
4
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6

Triptans

- Maximum: 8 – 10 days/ month (up to 2x/d)
- Only once headache started

DRUG	FORMULATION	STRENGTH	SINGLE DOSE	MAX/24 HOURS
ALMOTRIPTAN[168,169]	TABLET	12.5 mg	12.5 mg	25 mg
ELETRIPTAN[170]	TABLET	40 mg	40 mg	80 mg
FROVATRIPTAN[171]	TABLET	2.5 mg	2.5 mg	5 mg
NARATRIPTAN[172]	TABLET	2.5 mg	2.5 mg	5 mg
RIZATRIPTAN[173]	TABLET ORODISPERS LYPOPHILLISATE	5 mg/10 mg 10 mg 10 mg	10 mg 10 mg 10 mg	20 mg 20 mg 20 mg
SUMATRIPTAN[137,174]	TABLET SPRAY SUBCUT INJ	50 mg/100 mg 100 mg/ml or 200 mg/ml 6 mg	50-100 mg 10 - 20 mg 6 mg	300 mg 12 mg
ZOLMITRIPTAN[175-177]	TABLET ORODISPERS SPRAY	2.5 mg/5 mg 2.5 mg/ 5 mg 50 mg/ml	5 mg 5 mg 5 mg	10 mg 10 mg 10 mg

New: Rimegepant 75mg

BASH guidance 2019

Triptans costs

Drug name	Cost	Pack size	Strength and Formulation
Rizatriptan	£13.37	3	10mg oral lyophilisates
	£5.85	3	10mg orodispersible tablets
	£6.88	3	10mg tablets
	£31.97	6	5mg tablets
Sumatriptan	94p	6	50mg tablets
	£1.22	6	100mg tablets
Zolmitriptan	£17.80	6	2.5mg orodispersible tablets
	£27.94/£55.90	6/12	2.5mg tablets
	£18.60	6	5mg orodispersible tablets
	£36	6	5mg tablets
Rimegepant	£25.80/£103.20	2/8	75mg oral lyophilisates
Frovatriptan	£21.21	6	2.5mg tablets

Migraine Management - Prophylaxis

- Might take 2-3 months on higher dose to be effective
- Taper over 2-3 weeks
  - Propranolol 20 – 240mg or LA 80mg - 160mg bd
  - Amitriptyline 50 – 150 mg
  - Candesartan 2 – 16 mg
  - Topiramate 25 – 50mg bd
    - ☠ weight-loss, cognition, mood, pregnancy

The new CGRP antagonists

- Calcitonin gene-related peptide receptor antagonists
  - Injection site reaction, constipation, hypertension

- Subcut injections - monthly (medication holiday after 1 year):
  - Fremanezumab
  - Galcanezumab
  - Erenumab

- Oral
  - Rimegepant - acute treatment (+ preventative)
  - Atogepant - preventative

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- Calcitonin gene-related peptide receptor antagonists
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  - Fremanezumab
  - Galcanezumab
  - Erenumab

- Oral
  - Rimegepant - acute treatment (+ preventative)
  - Atogepant - preventative

Botox

every 3 months

Chronic Migraine Prevention Pathway

Bath and North East Somerset, Swindon and Wiltshire Together

Does the patient have chronic migraine?

≥ 15 or more headache days a month for more than 3 months with at least 8 of those having features of migraine

The patient has tried at least 3 preventative drugs and has failed, or these are contraindicated or not tolerated
- Beta blockers - Antidepressants - Anticonvulsant drugs

See BSW Chronic Migraine Pathway for further information on primary care and pre-biologic management options.

No → Consider alternative prevention

Yes

Botulinum Type A
NICE TA260
155-195 units IM given as 0.1ml (5 units) to 31-39 sites every 12 weeks.

→ Review after 2 treatment cycles

Atogepant
NICE TA973
60mg once daily PO

→ TLS Amber

Anti-CGRP mabs

Erenumab
Targets CGRP receptor
Prefilled syringe 140mg
NICE TA 682
140mg s/c once monthly
HOMECARE
bluetec

Galcanezumab
Targets CGRP ligand
Prefilled syringe 120mg
NICE TA 659
240mg s/c loading then 120mg s/c once monthly
HOMECARE
bluetec

Fremanezumab
Targets CGRP ligand
Prefilled syringe 225mg
NICE TA 764
225mg s/c once monthly or 675mg s/c every 3 months
HOMECARE
bluetec

Eptinezumab
Targets CGRP ligand
Vial 100mg/ml
NICE TA 871
100mg IV every 12 weeks. Some patients may benefit from escalated dosing of 300mg IV every 12 weeks.
bluetec

→ TLS Red

→ Specialist review at 12 weeks

Has the monthly migraine frequency reduced by at least 30%

No → **Discontinue**
If moving to a 2nd line, consider an alternative mode of action or route of administration

Yes → **Continue**
Anti-CGRP mabs – annual specialist review required.
Atogepant – annual specialist review not required. Primary care clinician to monitor regularly and seek neurology advice if frequency of migraines does not remain reduced by at least 30%

Treatment choice should be made on an individual patient basis. Where more than one treatment is suitable, the least expensive should be chosen.
N.B. Please note gammaCore is not routinely commissioned for treatment of migraine. IFR is required. GammaCore is commissioned for cluster headache NICE MTG46

NHS Bath and North East Somerset, Swindon and Wiltshire Integrated Care Board. Acknowledgements: BNSSG ICB. Adapted with permission. Oct 2024

Episodic Migraine Prevention Pathway

Bath and North East Somerset, Swindon and Wiltshire Together

Does the patient have episodic migraine?

< 15 or more headache days a month but ≥ 4 migraine days per month

The patient has tried at least 3 preventative drugs and has failed, or these are contraindicated or not tolerated
- Beta blockers - Antidepressants - Anticonvulsant drugs

See BSW Chronic Migraine Pathway for further information on primary care and pre-biologic management options.

No → Consider alternative prevention

Yes

Rimegepant
NICE TA906
75mg alternate days PO

Atogepant
NICE TA973
60mg once daily PO

TLS Amber

Anti-CGRP mabs

Erenumab
Targets CGRP receptor
Prefilled syringe 140mg
NICE TA 682
140mg s/c once monthly
HOMECARE
blueteq

Galcanezumab
Targets CGRP ligand
Prefilled syringe 120mg
NICE TA 659
240mg s/c loading then 120mg s/c once monthly
HOMECARE
blueteq

Fremanezumab
Targets CGRP ligand
Prefilled syringe 225mg
NICE TA 764
225mg s/c once monthly or 675mg s/c every 3 months
HOMECARE
blueteq

Eptinezumab
Targets CGRP ligand
Vial 100mg/ml
NICE TA 871
100mg IV every 12 weeks. Some patients may benefit from escalated dosing of 300mg IV every 12 weeks. blueteq

TLS Red

Specialist review at 12 weeks

Has the monthly migraine frequency reduced by at least 50%

No → **Discontinue**

If moving to a 2nd line, consider an alternative mode of action or route of administration

Yes → **Continue**

Anti-CGRP mabs – annual specialist review required.
Rimegepant & Atogepant – annual specialist review not required. Primary care clinician to monitor regularly and seek neurology advice if frequency of migraines does not remain reduced by at least 50%

Treatment choice should be made on an individual patient basis. Where more than one treatment is suitable, the least expensive should be chosen.
N.B. Please note gammaCore is not routinely commissioned for treatment of migraine. IFR is required. GammaCore is commissioned for cluster headache NICE MTG46

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Migraine Management - Hormonal

"Acute prevention" (start 1-2/7 before – continue for 5/7)

- Regular NSAIDs around period
  - Mefenamic acid 500mg tds – qds
- Frovatriptan (5mg -> 2.5mg bd)
- Zolmitriptan (2.5mg tds)

- Tricycling of combined OCP ?☠ Migraine with aura?

Topiramate

☠

Congenital malformations, Neurodevelopmental disorders, Fetal growth

☠

Highly effective contraception - preferably

a) copper intrauterine device (Cu-IUD)
b) levonorgestrel intrauterine system (LNG-IUS)
c) or two complementary forms of contraception including a barrier method

Step 1: Establish whether the patient is at risk of the reproductive harms of topiramate

- The risks apply to all patients who can get pregnant (from when first period occurs to menopause) and are taking any medicine containing topiramate
- If there is a possibility of pregnancy, patients will need to follow the conditions of the Pregnancy Prevention Programme

If you consider there is a compelling reason that indicates there is no potential for pregnancy, tick which reason applies and record here. In this event, step 2 does not need to be completed.

To be completed by the healthcare professional when they consider the topiramate Pregnancy Prevention Programme (PPP) is not needed	
☐	The absence of pregnancy risk is permanent for the following reason (insert reason):
☐	There are other reasons that conditions of the topiramate Pregnancy Prevention Programme are not applicable (insert reason):
Signature of patient to confirm that PPP is not needed at this time	**Date**

Step 2: Explain the risks and document awareness

Healthcare professionals and patients must both complete this section of the form. This records that you have discussed the risks of taking topiramate during pregnancy and the measures needed to reduce the risks. The patient must also sign the form to confirm they are aware of these risks.

Information to be discussed with the patient	**Healthcare professional to initial to confirm you have discussed**	**Patient to initial to confirm you are aware**
Their medication should be reviewed regularly (at least once a year). At this review your healthcare professional will decide with you whether topiramate continues to be the best treatment for you. This will take into account any change in your circumstances.		
Topiramate can cause serious harm to an unborn baby if taken by a mother during pregnancy. For babies of mothers who take topiramate while pregnant the risks are: • Around 4 to 9 babies in every 100 will have birth defects compared with 1 to 3 babies in 100 of mothers in the general population. • A 2-3 times higher risk of autism spectrum disorder, attention deficit hyperactivity disorder and intellectual disabilities compared with babies born to women without epilepsy not taking epilepsy medicines. • Around 18 babies in every 100 will be born small for gestational age compared with around 5 in every 100 babies of mothers in the general population.		
Need for a pregnancy test to exclude pregnancy before starting topiramate. Further pregnancy tests may be needed during treatment.		
Need to use effective birth control (contraception) at all times during treatment with topiramate and for four weeks after stopping topiramate.		
The importance of discussing any plans for a pregnancy with their healthcare professional as soon as they are planning pregnancy to ensure timely discussion.		
In case of suspected or unplanned pregnancy, and patient is only taking topiramate to prevent migraine, they need to: • stop taking topiramate straight away. • contact their healthcare professional.		
A copy of the Patient Guide has been offered		
Signature of healthcare professional:	**Date**	
Signature of Patient:	**Date**	

Migraine in Pregnancy

- Improvement esp 2 and 3rd trimester
  - esp. without aura
- Possible protective effect of breast feeding

Migraine in Pregnancy

- Improvement esp 2 and 3rd trimester
  - esp. without aura
- Possible protective effect of breast feeding

⇒ Magnesium (200-400mg/day)

⇒ Sumatriptan (safe)

⇒ GON (Greater Occipital Nerve Block)

⇒ Betablocker

⇒ Amitriptyline

Migraine and Breast Feeding

- Sumatriptan seems safe
- Propranolol seems safe

Migraine and Stroke risk

- Migraine with aura + COCP x6 risk (esp older patients and frequent attacks)

- HRT
  - Transdermal patch is safe (only increased risk with oral oestrogen)
  - Patch better for migraine due to stable dose throughout the day


TYLENOL
Regular Strength
Acetaminophen
Motrin
Advil
Ibuprofen
Infants' TYLENOL
Children's Motrin
Children's TYLENOL
Tempra
Sale
Headache Relief

Medication Overuse Headache

- Simple analgesia no more than 2x/ week
- Triptans max 8-10 days per month (max 2x/d)

⇒ Might require:

⇒ Naproxen 250 tds – 500 bd for 3-4/52

TTH/Chronic daily headache

(Tension type)

- Up to 80% of population
  - Episodic vs chronic

⇒ Non-pharmaceutical approach

⇒ TCA

  ⇒ (e.g. Amitriptylin 50 -150 mg)

TABLE 10-5 Comparison of the Trigeminal Autonomic Cephalalgias Based on Studied Cohorts and Patients Seen in Practice[a,b,c]

	Cluster Headache	Paroxysmal Hemicrania	SUNCT/SUNA
Sex ratio	3 Males to 1 female	Males = females	1.5 Males to 1 female
Pain			
Quality	Sharp/stab/throb	Sharp/stab/throb	Sharp/stab/throb
Severity	Very severe	Very severe	Severe
Distribution	V1>C2>V2>V3	V1>C2>V2>V3	V1>C2>V2>V3
Attacks			
Frequency (per day)	1 to 8	11	100
Length (minutes)	30 to 180	2 to 30	1 to 10
Triggers			
Alcohol	+++	+	-
Nitroglycerin	+++	+	-
Cutaneous	-	-	+++
Agitation/restlessness	90%	80%	65%
Episodic versus chronic	90:10	35:65	10:90
Circadian/circannual periodicity	Present	Absent	Absent
Treatment effects			
Oxygen	70%	No effect	No effect
Sumatriptan (6 mg)	90%	20%	<10%
Indomethacin	No effect	100%	No effect
Migraine features with attacks			
Nausea	50%	40%	25%
Photophobia/phonophobia	65%	65%	25%

SUNCT/SUNA = Short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing/short-lasting unilateral neuralgiform headache attacks with cranial autonomic features; C = cervical; V = trigeminal.

[a] Data from Cittadini E, et al, Brain.[28] *brain.oxfordjournals.org/content/131/4/1142.long.*

[b] Data from Cohen AS, et al, Brain.[29] *brain.oxfordjournals.org/content/129/10/2746.long.*

[c] Data from Bahra A, et al, Neurology.[30] *www.neurology.org/content/58/3/354.abstract?sid=53e3ad69-54b5-4be2-88c2-137ba6412639.*

Cluster Headache

- “like clockwork” for 2-6 weeks
- Often night time: for 30-60 minutes

Acute:

- ✓ Sumatriptan sc 6mg bd daily (no rebound) (Sumatriptan/Zolmitriptan nasal)
- ✓ 100% oxygen for 10 - 15min

Prophylaxis:

- ✓ Verapamil 80mg tds – 950mg daily
- ✓ Prednisolone 60 – 100mg for 5/7 -> ↓ by 10mg every 2-3 days
- ✓ Lithium 600-900mg
- ✓ Topiramate 50 – 200mg

www.bash.org.uk

(British Association for the Study of Headache)

www.i-h-s.org

(International Headache Society)

www.ouchuk.org

(Organisation for the Understanding of Cluster Headache)