

CLINICAL PEARLS IN HEADACHE FOR THE GP

Anhar Hassan, MB BCh, BAO, FRACP, FAAN
Consultant Neurologist, Beacon Hospital
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Primary Headaches Are The Most Common

- **>90% primary**
 - Migraine
 - Tension-type
 - Cluster
 - Trigeminal autonomic cephalgias
 - Other primary headaches
- <10% secondary

Case Study 1: What Is This Headache?

- 25 yo female
 - Reports recurrent sinus headaches x 2 yrs
 - No relief with paracetamol, ibuprofen, sinus medication
 - Moderate
 - Frontal, R>>L
 - Last up to 2-3 days
-
- Normal exam
 - Normal CT sinuses and MRI brain



Migraine Diagnostic Criteria

At least 5 attacks
4-72 hours

HEADACHE

- **Unilateral**
- **Pulsatile**
- **Moderate- Severe**
- **Limits activity**
- **Photophobia**
- **Nausea / Emesis**

Stages of Migraine



- Anorexia
- Food cravings
- Mood changes
- Fatigue

- Visual
- Sensory
- Dysphasia
- Brainstem
- Motor

- Unilateral
- Pulsatile
- Moderate - Severe
- Limits activity
- Photophobia
- Nausea / Emesis

- Fatigue
- Anorexia
- Irritable

Brief 3-item Screen For Migraine

1. Are you **nauseated** or sick to your stomach when you have a headache?
2. Does **light** bother you when you have a headache?
3. Has a headache limited your **activities** for a day or more, in the last 3 months?

2 of 3 "yes", PPV 93%

All 3 "yes", PPV 98%

Lipton RB, et al. Neurology. 2003;61:375-382.

Case Study 1: Episodic Migraine, Without Aura

- What is the best treatment for attacks?



Acute Treatment of Episodic Migraine

- Paracetamol
- Codeine/ caffeine/ paracetamol or ibuprofen
- Naproxen, ibuprofen, aspirin



Acute Treatment of Episodic Migraine

- Paracetamol
- Caffeine/ codeine/ paracetamol
- Naproxen, ibuprofen, aspirin

- Triptans

- Antiemetics



Case Study 1: Episodic Migraine, Failed Triptan

- Sumatriptan 50mg tried once, no benefit
- What next?



TRIPTAN	FORMULATION	STRENGTH (mg)	TYPICAL DOSE (mg)	MAY REPEAT (hrs)	MAXIMUM DOSE PER 24 hrs (mg)
Almotriptan	Tablet	12.5	12.5	2	25
Eletriptan	Tablet	20, 40	40	2	80
Frovatriptan	Tablet	2.5	2.5	2	5
Naratriptan	Tablet	2.5	2.5	4	5
Rizatriptan	Tablet	5, 10	10	2	30
	Oral disintegrating	5, 10			30
Sumatriptan	Tablet	50, 100	50-100	2	200
	Nasal spray	10, 20	20	2	40
	S/C injection	6	6	1	12
	(named basis)				
Zolmitriptan	Tablet	2.5	2.5	2	10
	Oral disintegrating	2.5	2.5	2	10

Case Study 2: Frequent Headaches

- 40 yo mother-of-2
- Established migraine headaches, every 2 months
- Zolmitriptan 2.5mg effective
- Last 6 months headaches more frequent
 - 1-2 severe migraine/wk
 - 2 mild/wk



When To Start A Migraine Preventative Medication?

- 1) Frequent (1+ headache days/week)
- 2) Contraindication or failure of acute treatment
- 3) Uncommon subtypes
 - Hemiplegic migraine
 - Migraine with brainstem aura
 - Migraine with prolonged aura



Choosing a Migraine Preventative



- **A**ntihypertensives: ACE-I, ARB
- **B**-blockers (propranolol, nadolol)
- **C**alcium channel blockers (verapamil, flunarizine)
- **D**epression drugs: tricyclics, venlafaxine, duloxetine
- **E**pilepsy drugs (topiramate, gabapentin, pregabalin, valproate)

- Riboflavin, Mg
- Botulinum toxin

- Lifestyle measures

Case Study 2: Chronic Migraine, Failed Preventatives

- Amitriptyline 10mg
- Propranolol 40mg
- No benefit

- What next?



Optimizing Success Of Preventative Medication

- Start low and INCREASE
- Trial ~2-3 months
- $\geq 50\%$ reduction
- If effective, taper after 6-12 months

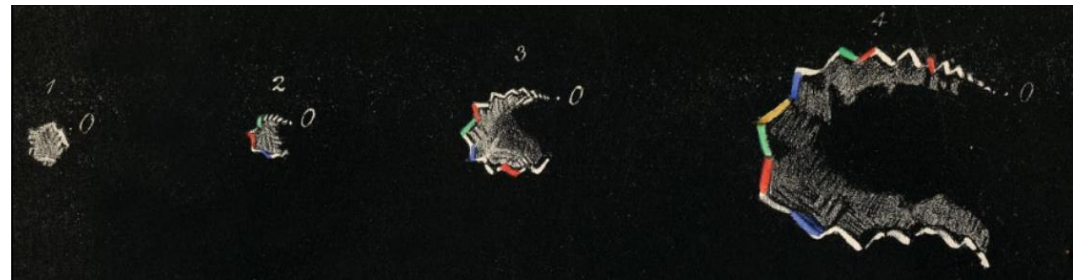
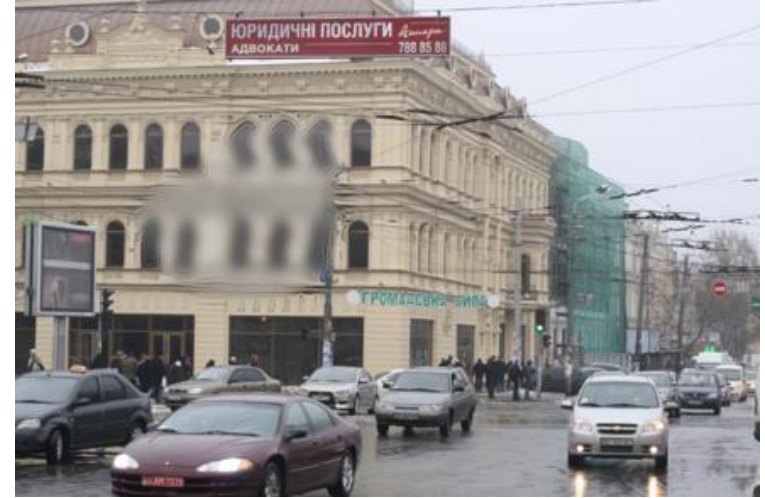
- If fails, try another



Preventative	Initial dose (mg)	Typical range (mg)
Amitriptyline	10	25-70
Nortriptyline	10	25-70
Propranolol	40-60	40-240
Nadolol	40	120-240
Verapamil	80-160	160-480
Gabapentin	300	900-2400
Valproate	250-500	750-1500
Topiramate	25	75-200
Candesartan	4	16

Case Study 3: Visual Aura Without Headache

- 60 yo female
- 5 visual spells since age 60
- PHx migraine headaches without aura, resolved after menopause



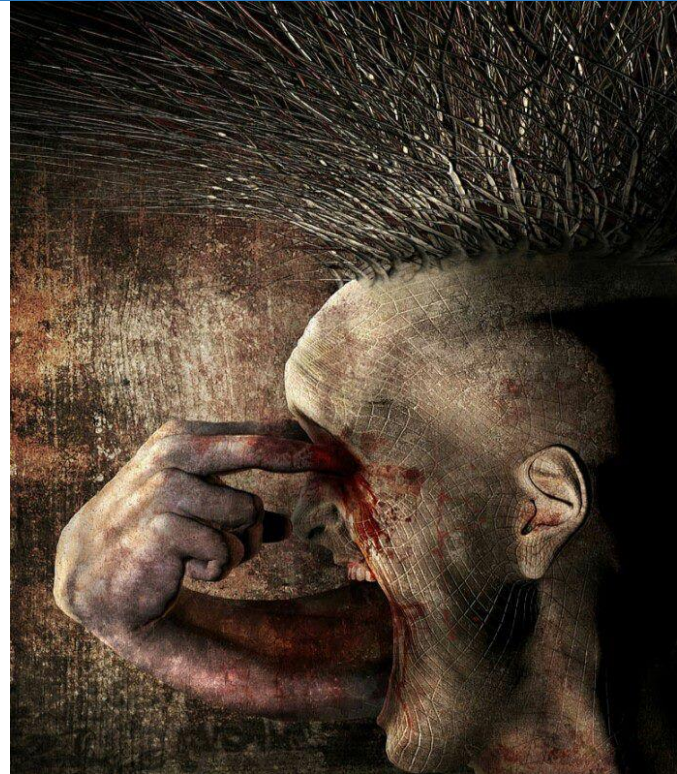
Treatment Of Visual Aura Without Headache

- None
- Preventive
 - Aspirin
 - Magnesium
 - Verapamil
 - Antiseizure meds

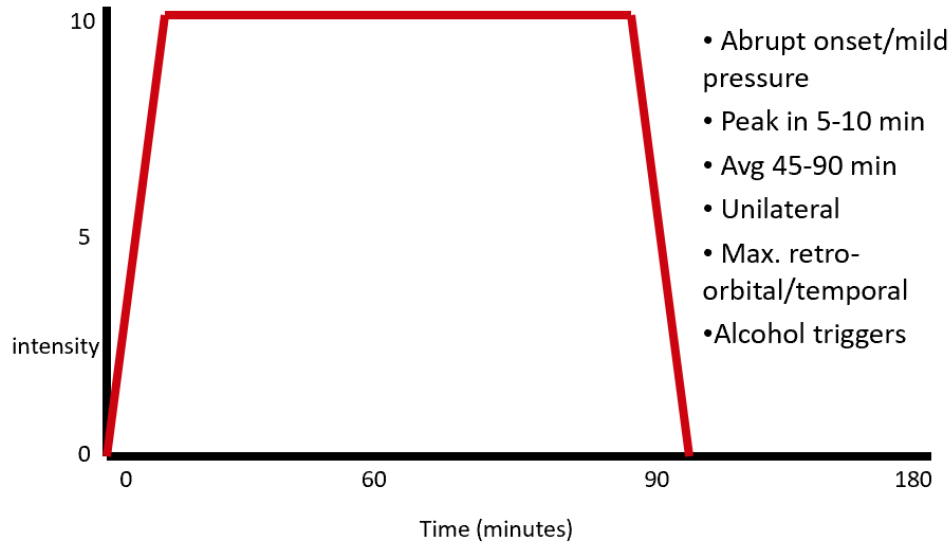


Case Study 4:

- 28 yo male
 - 3/7 of severe daily headaches
 - 1-3 per day/night
 - 10/10, behind eye, non-throbbing
 - Eye waters, redness, eyelid droop, small pupil
 - No aura
 - Similar attack 2 yrs ago lasted 2 months

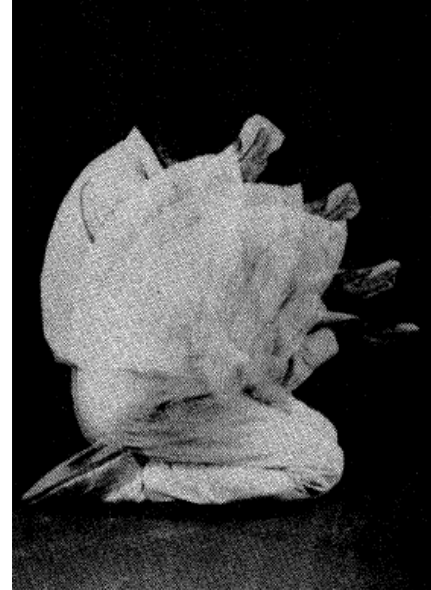


Cluster Headache



Cluster Headache-Diagnostic Aids

Behavior- 93% restless
“Suicide headache”



Treatment of Cluster Headache

Acute

100% O₂, at least 7 L/min x 15 min

Fast-acting triptan (S/C, nasal spray)

Prophylactic

Verapamil \geq 240mg/day

Transitional-Steroids

Lithium

Melatonin

Key Points

1. 3 item questions for migraine: nausea, light sensitivity, activity
2. Acute treatment: timing, switch triptan
3. Adequate dose of preventative(s)
4. Visual aura can occur without headache
5. Cluster – restlessness

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Thank you