Headache

Barry Snow

- A 22 year old woman has 2 types of headaches since age 17.
- One type occurs about twice per week. It is a dull occipital pain associated with an aching stiff neck lasting 5-8 hours. It is eased by chiropractic manipulation. Sometimes it never really goes away.

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The other type occurs about once per month - sometimes with menstruation. The pain is frontal, severe, and often on one side or the other. It is made worse by effort. It is often associated with nausea and sometimes vomiting. She is intolerant of noise and light. She usually takes to her bed; if she sleeps the pain eases.

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 - what is/are the diagnoses?
 - how would you manage her?

Migraine

- 94% pts seen in primary care settings for HA have migraines
- Familial
- 17 18.2% of adult females. Onset puberty
- 6 6.5% adult males. Onset 20-30
- Peaks ages 22-55.
- ½ migraine sufferers not diagnosed.

Common misdiagnoses for migraine:

- Sinus HA
- Stress HA
- Cervical headache

- Referral to ENT for sinus disease and facial pain.
- New glasses
- Pulled teeth
- Endless chiropractic treatment

Migraine is a hypersensitivity disorder

- Migraineurs more likely to have motion sickness.
 - Half of Meniere's patients have migrainous symptoms.
- Nausea
- Photophobia
- Osmophobia
- Phonophobia
- Allodynia

Migraine is a genetic disorder

- ~70% positive family history
- Rs1835740 marker on 8q22.1
- Located between two genes involved in glutamate homeostasis

Modifying and Precipitating factors

- stress
- head and neck infection
- head trauma/surgery
 - post traumatic migraine
- caffeine withdrawal
- aged cheese
- dairy
- red wine
- nuts
- shellfish
- vasodilators
- perfumes/strong odors
- irregular diet/sleep
- light

Migraine

 A genetically-based hypersensitivity disorder that is modified by environmental factors

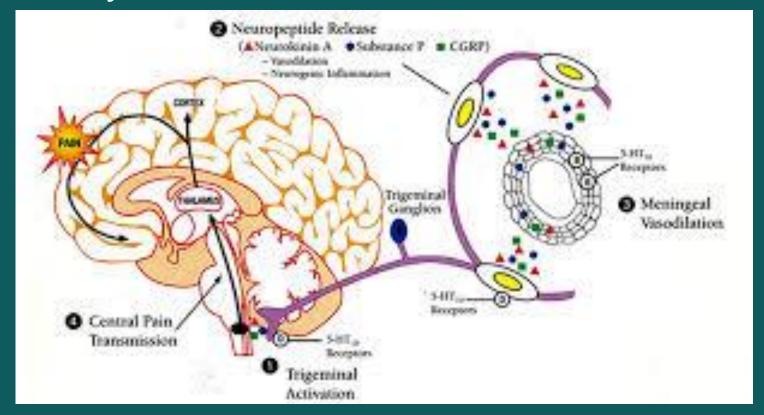
Migraine

 A genetically-based hypersensitivity disorder that is modified by environmental factors

- Excuses the patient from blame
- Explains associated symptoms
- Justifies the addressing of associated factors, but indicates why this is only partially successful

Migraine mechanism

- Primary brain disorder
- Modulated by serotonin
- Secondary vascular mehanisms



What happens?

- 549 Danish patients over 12 years
- Migraine
 - 42% remission
 - 38% low frequency
 - 20% poor outcome
 - (predictors: high frequency, age <20)
- TT headache
 - 45% remission
 - 39% frequent
 - 16% poor outcome
 - (predictors: co-existing migraine, unmarried, poor sleep)

Progression of migraine

- 6% move from low-frequency into highfrequency episodic migraine/year
- 3% episodic to chronic migraine / year

Chronic daily headache

- 3-4% of adults
- Chronic tension-type headache
- Transformed migraine
 - Drug-induced headache
- Often cutaneous allodynia
- Transformation rate ~2.5%/year

Risk of Transformation

- lower levels of education and household income.
- older
- higher body mass indexes
- snoring
- anxiety
 - (depression accounted for by disability)
- stressful life events
- high baseline attack frequency
- overuse of certain classes of medication
- caffeine overuse
- head injury
- allodynia

Medication overuse headache

- >8 days/month opiates
- >10 days/month tryptans
- NSAIDS protect at frequency of <10 days/month, but exacerbate in high frequency >15 days
- Worse on analgesic withdrawal

Vascular disease and Migraine

- Migraine increases risk of stroke by 1.73 (2.08 in women)
- Aura 2.2, no aura 1.2
- Increased risk of myocardial infarction and other vascular disease (approx 2)

Migraine treatment

- Control pain
- Control other symptoms
- Prevent attacks
- Prevent progression to CM
- Prevent co-morbidities

- determine the frequency and duration of attacks
- determine associated symptoms
- consider triggers, especially stress
- think about the time-linked headaches

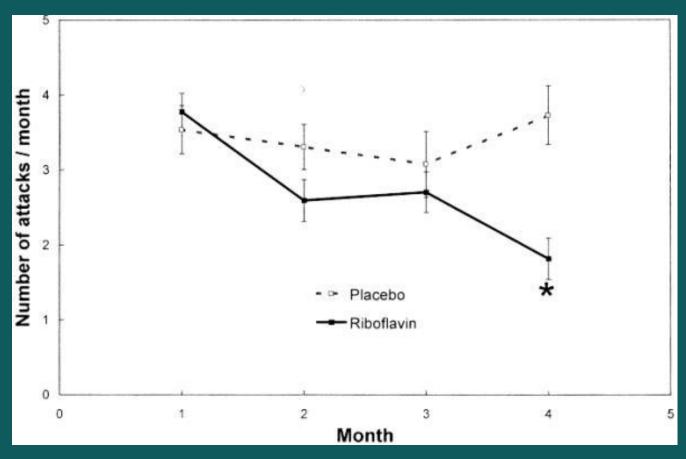
- Non-pharmacologic management
 - -exercise
 - -normalize sleep
 - -address stress
 - -(?biofeedback, relaxation techniques)

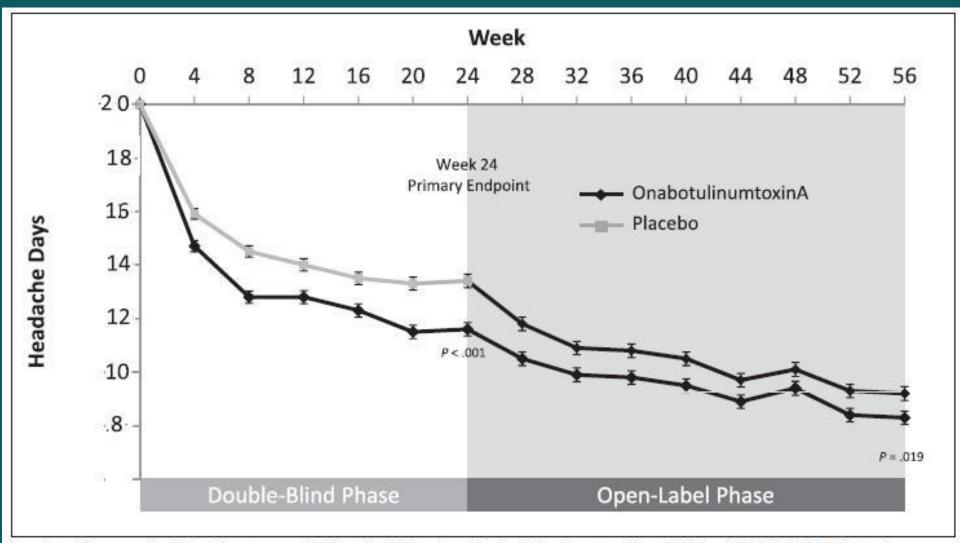
- Abortive therapy high dose and early
 - paracetamol
 - -NSAIDs
 - -sumatriptan, rizatriptan, zolmitriptan
 - -metoclopramide, prochlorperazine

- Prophylaxis high dose and for a month at least
 - riboflavin
 - tricyclic antidepressants
 - beta-blockers
 - topiramate
 - calcium antagonists
 - valproate
 - gabapentin
 - (MAO inhibitors, other anticonvulsants, methysergide)
 - Botulinum toxin

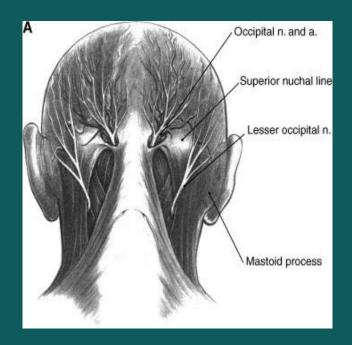
Riboflavin

• 55 patients. RCT





OnabotulinumtoxinA for Treatment of Chronic Migraine: Pooled Analyses of the 56-Week PREEMPT Clinical Program. Sheena K. Aurora et al Headache 2011;51:1358-1373





Brief intervention for medication-overuse headache in primary care. The BIMOH study: a double-blind pragmatic cluster randomised parallel controlled trial

Espen Saxhaug Kristoffersen, 1,2 Jørund Straand, 1 Kjersti Grøtta Vetvik, 3,4,5 Jūratė Šaltytė Benth, 2,4 Michael Bjørn Russell, 3,4 Christofer Lundqvist 2,4,5

J Neurol Neurosurg Psychiatry 2015;86:505-512.

- Do you think your use of headache medication is out of control?
- Does the prospect of missing a dose make you anxious?
- Do you worry about your use of your headache medication?
- Do you wish you could stop?
- How difficult would you find it to stop or go without your headache medication?

