Controversy III: Migraine prophylaxis during medication overuse

Discussants
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Disclosures

• Watson: Dr. Watson has received honoraria from Allergan, Zogenix

• Finkel: With regards to this session, the discussant has no financial disclosures to make

• The off-label use of medications for chronic migraine and medication overuse will be discussed
Disclaimers: Watson

I am a skeptic
When Evidence Fails

• Eminence based medicine? – What the oldest guy in the room thinks. “making the same mistakes with increasing confidence over an impressive number of years.”

• Vehemence based medicine? – “The substitution of volume for evidence”

• Diffidence based medicine? – seeing the problem without a solution and leaving it at that. May be better than doing something just because.

• Nervousness based medicine? – litigation phobia leading to overinvestigation and overtreatment

• Confidence based medicine? – I do because I can, and you probably can’t. This category restricted to surgeons only

Disclaimers: Finkel

I am a glutton
Gluttony

• Professor, University of North Carolina
  – Practice Headache Medicine in Academics 1989 - 2009
• Director, Carolina Headache Institute, Chapel Hill, NC
  – Start a small business in Medicine in 2009
• President and CEO, The Carolina Headache Foundation, Chapel Hill, NC
  – Start something else to keep me busy
• Chair, PTH Section, American Headache Society
  – Follow the money without getting any of it
• Contractor supporting the Defense and Veteran Brain Injury Center (DVBIC), Womack Army Medical Center, Ft Bragg, NC
  – Who is it who really has PTSD?
Goals and Objectives

• Goals
  – To understand the current status of the use of preventive medications in patients with Medication Overuse Headache (MOH)
  – To share clinical expertise and opinion regarding the treatment of complex headache patients

• Objectives
  – To discuss the “real time” experience of treating MOH
  – To describe possible scenarios to improve the quality of practice and patient care
Migraine

Vinken and Bruyn, 1984

The Blind Men and the Elephant
Plan for the Session

• Brief introductions

• Brief general review and platform lecture

• Audience participation
  – The discussants will try to restrain and guide the discussion
Chronic Migraine: Risk factors

Headache Frequency

Factors associated with the onset and remission of chronic daily headache in a population-based study

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Chroni{cization} (sic)
{ -fication} {-cification}

• Non-modifiable
  – Demographic
• Modifiable
  – Attack frequency
  – Obesity
  – Medication overuse
  – Sleep disorders
  – PTSD
  – “specific psychological patterns, behavioral issues…”
  – Family History
• Putative

Additional risk factors

- “wrong conducts
  - Absence of referral to headache centers during the worsening period
  - Lack of education in avoiding trigger factors
  - Inadequate life-style rhythms (fasting, sleepiness)....”

- “the recommendation that drugs be taken as early as possible...increases the risk that patients will take more of the drug than is necessary....”

8.2 Medication-overuse headache (MOH)

Previously used terms:
Rebound headache; drug-induced headache; medication-misuse headache.

Coded elsewhere:
Patients with a pre-existing primary headache who, in association with medication overuse, develop a new type of headache or a marked worsening of their pre-existing headache that, in either case, meets the criteria for 8.2 Medication-overuse headache (or one of its subtypes), should be given both this diagnosis and the diagnosis of the pre-existing headache. Patients who meet criteria for both 1.3 Chronic migraine and 8.2 Medication-overuse headache should be given both diagnoses.
Medication Overuse Headache

Diagnostic criteria:

A. Headache occurring on ≥15 days per month in a patient with a pre-existing headache disorder
B. Regular overuse for >3 months of one or more drugs that can be taken for acute and/or symptomatic treatment of headache\(^1\)
C. Not better accounted for by another ICHD-3 diagnosis.

ICHD-3 beta, 2013
Medication-overuse Headache: Typical Patient Profile

- Meta-analysis of 29 studies including 2612 patients with MOH
- Primary headache type
  - Migraine: 65%
  - Tension-type: 27%
  - Both headache types or other headache types: 8%
- 3.5:1 ratio of women to men
- Mean duration of primary headache at time of MOH diagnosis: 20.4 years
- Mean duration of drug overuse: 10.3 years
- Mean duration of daily headache: 5.9 years
- Average number of different, simultaneous pharmacologic components: 2.5 to 5.8 (range 1-14)

Medication-overuse Headache: Clinical Features

- Usually preceded by episodic headache disorder that is treated with frequent use of acute medications, often in excessive quantities.
- Refractory, daily (or nearly daily).
- Varies in severity, location, and type from time to time.
- Low threshold for head pain.
- May be brought on by physical or mental effort.
- Accompanied by nausea, asthenia, or other GI symptoms; restlessness, anxiety, or irritability; difficulty with memory or concentration; depression.
- Drug-dependent rhythmicity; predictable frequent early morning headaches.
- Symptomatic medications provide some short-term (few hours) relief.
- Previously effective preventive medications no longer work.

What causes MOH?

- Patient based
  - Addiction
  - Pseudo-addition
- Clinician based
  - Lack of knowledge
  - Lack of time
  - Chronic Migraine
    - Primary
    - Secondary
Some patients were using more than one compound (total >100%).

*Aspirin and acetaminophen alone or in compounds except for Excedrin, which was considered separately. Excedrin is a registered trademark of Bristol-Myers Squibb Co.

Prevention during MOH

• What is the Evidence?
  – AMPP
    • 2.5%/yr progression rate from episodic to chronic migraine
    • Opioids and butalbital risk factors
    • Triptans not risk factor
    • NSAIDs protective?

In the population: Barbiturates

Opioids

Triptans

Diener HC. Detoxification for medication overuse headache is not necessary. Cephalalgia. 2012 Apr;32(5):423-7
Diener HC. Detoxification for medication overuse headache is not necessary. Cephalalgia. 2012 Apr;32(5):423-7
Prevention during MOH

• What is the evidence?
  – Onabotulinum Toxin A:
    • Consistent significant reduction in subgroup of medication overuse
    • Only 1.7% overused opioids
  – Topiramate:
    • EU – significant reduction even in patients overusing acute medication, but medication of overuse most often triptans
    • US – trend toward reduction, but much greater analgesic use vs triptans, and almost all using combination of abortives

Diener HC. Detoxification for medication overuse headache is not necessary. Cephalalgia. 2012 Apr;32(5):423-7
Diener HC et al. Utility of topiramate for the treatment of patients with chronic migraine in the presence or absence of acute medication overuse. Cephalalgia 2009; 29:1021–1027
What Evidence?

– In European study where triptan “overuse” was the predominant abortive, topiramate was effective
  • AMPP suggests that triptans aren’t have a different risk for transformation

– US trial, where other abortives more prominent, no statistical significance (trends don’t count)

– Onabotulinum showed significant improvements, but very few opioid users – not a very realistic sampling for members of the Southern Headache Society
What Evidence?

- In European study where triptan “overuse” was the predominant abortive, topiramate was effective
  
  • Do we all have patients who use triptans daily or near daily.
    
    – Anecdotally, they are high functioning

- What the US trial did show was that CM is a moving target and that FEM is probably not different

- The placebo groups also improved with and without MOH
So Do Nothing?

What are the options: doing no harm!

• Prevention
  – Possible Harm:
    • Unnecessary exposure to medication and side effects without benefit
    • False medication failures
      – What does this mean?
    • Misplaced locus of control
  – Possible Benefit:
    • Reduced headache burden
    • Increased ability to reduce abortive use
What are the options: doing no harm!

• No Prevention
  – Possible Harm:
    • Inability to successfully detox
    • Delay in headache reduction
    • Loss of patient to less qualified provider
  – Possible Benefit:
    • No use of unnecessary daily medication
    • Patient empowerment
How should we do it?

– Tough love cold turkey
  • “We’ll discuss treatment options once you’ve stopped taking so much medicine”

– Tough love tapering

– Limited abortives only during detox

– Prevention with limited abortives during detox
Conclusions

• MOH doesn’t come from nothing
  – Why do patients start taking too much medicine?
• The evidence is sufficiently insufficient to make it moot
• Detox without prevention might work, but will often delay significant headache improvement
• Starting preventives in the face of MOH, without directed detox is spitting in the wind
• The potential benefits of starting preventive therapy while reducing medications of overuse outweigh the risks
The Man Who Lost His Head. by Claire Huchet Bishop and Robert McCloskey, 1942
The Man Who Lost His Head. by Claire Huchet Bishop and Robert McCloskey, 1942
Once Established, Full Blown Migraine Activates the CNS

Chronic Migraine Causes Changes in the Brain

What then is Migraine?

- Migraine is an attack based disorder
  - Triptans work
    - Does better treatment of acute attacks lead to a better life course outcome? (AMPP, IHC Boston 2013)
  - Topamax works
    - Not an add on therapy in Chronic Migraine: NINDS
  - Botox doesn’t
    - In Episodic Trials
    - In Chronic Tension Type Headache
      - Continuous headache (not allowed)
    - No other preventives (not allowed)
What are the questions?

- Is migraine an inevitably progressive disorder?
  - Scher et al, AMPP
  - Welch et al
  - Secondary Headaches

- What about Frequent Episodic Migraine

- What about Continuous Headache?
What are the questions?

- If there are two headaches, which one improves?

- If there is one headache where does it go?
Thanks for your attention

NOW IT'S YOUR TURN!