The Difficult Headache Patient

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Dr. Hudson Declarations:

- ABFP Certified Family Physician employed by Advantage Health/ St. Mary's Medical Group
- Working under contract with The Pain Center at Mary Free Bed Hospital and Rehabilitation Center
- Planning for the opening of The Heartside Pain Center in 2016 to serve the Medicaid population
- Fellow of The American Board of Pain Medicine
- Clinical Instructor in Family Practice at Michigan State College of Human Medicine

No financial interests or commercial contracts related to this topic or presentation other than my employment

Dr. Lidderdale Declarations:

- Licensed Clinical Psychologist
- Employed with The Pain Center at Mary Free Bed Hospital and Rehabilitation Center
- Employed with River City Psychological Services
- Member of the American Psychological Association
- Member of the American Academy of

Objectives

- 1) Be able to describe the characteristics of the difficult headache patient.
- 2) Be able to differentiate Cortical Spreading Depression from Central Sensitization.
- 3) Identify appropriate options for patient's failing standard care.

The Difficult Headache Patient

- 46% of Women and 38% of Men have ETTH
- 17.6% of Women and 5.7% of Men have Migraine
- 4-5% of General Population have CDH
- 0.5% have severe daily headaches
- 80% of Clinic Based Studies in U.S. have CDH
- IHS Classification for chronic headache is not very useful clinically

Wolff's Headache 8th Ed.

Standard Treatment for HA

Wolff's Headache 8th Ed

- Most headaches are easily treated
- Most patients never see a physician for HA Treatment
- Over-the-counter analgesics and combination headache medications work for most patients
- Abortive medications such as DHE and triptans are successful in a majority of patients(48-85% 2 hour pain relief)
- Prophylactic Migraine medications can also be successful in many patients with chronic migraine (~50% reduction in headache days with both topiramate 100mg/d and propranolol 160mg/d compared with ~23% with placebo)

The Difficult Headache Patient

- Chronic Daily Headaches (>14 Days/Month)
- Transformed Migraine or Chronic Migraine
- Chronic Tension Type Headache
- New Daily Persistent Headache(Progression < 3D)
- Medication Overuse Headache
- Post-Traumatic Headache

New Daily Persistent Headache

Li,D and Rozen,TD(2002) Cephalalgia,22:66-69

- Abrupt onset(<3 days)
- Daily or Persistent for at least 3 months
- Followed acute flu like illness in 30%
- Followed extracranial surgery in 12%
- Assoc. with a stressful life event in 12%
- >40% with no precipitating event

- Bilateral-64%, ~60% occipital-nuchal pain, 44% retro-orbital, 18% holocranial
- Throbbing in 55%, pressure-like in 54%. Nausea in 68%, photophobia in 66%, phonophobia in 61% and light headedness in 55%

Pathophysiology of Migraine

Cortical Spreading Depression(CSD) is the electrophysiologic correlate of the aura and can activate the trigemino-vascular system which is one potential mechanism initiating the pain process.

Central Sensitization is characterized by increased spontaneous discharge rate, reductions in threshold and increased responsiveness to both noxious and non-noxious peripheral stimuli, and expanded receptive fields of CNS nociceptive neurons

Schmerz, 2008 Oct;22(5):523-530

Pathophysiology of Migraine

- The characteristic unilateral pulsating headache is caused by a neurogenic inflammation in the meninges.
- Neck pain as reported by some patients is a migraine-specific feature, the anatomical basis being the trigemino-cervical complex.
- Functional changes in the pain processing system maintain the headache, among these are sensitization of trigeminal nucleus caudalis neurons and an altered anti-nociception descending from the periaquaductal grey.
- Triptans have a peripheral and central mode of action, but are no longer effective once central sensitization has occurred.

Schmerz, 2008 Oct;22(5):523-530

Evidence Based review of Migraine Preventives

AHRQ Comparative effectiveness Review April 2013

Results….245 RCTs, 76 nonrandomized therapeutic studies met eligibility criteria.

- For chronic migraine, Onabotulinumtoxin A was more effective than placebo in reducing monthly chronic migraine attacks by ≥ 50 % with inconsistent improvement in quality of life. …..for 1,000 treated adults 170 would experience ≥ 50% reduction in migraine, 155 would experience adverse effects, 26 would discontinue TX 2nd to AEs.

- Topirimate reduced disability…but failed to reduce migraine frequency by ≥ 50%. Individual RCTs compared botox A with topiramate or divalproex and found no differences in prevention.

The "*Difficult*" Headache Patient

It is much more important to understand what kind of patient has the headache than what kind of headache the patient has.

A Management Paradigm

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- Self management is paramount as with all chronic disease.
- This requires:

1) The ability to self-monitor headache-relevant information

2) Possess specific behavioral management skills as well as general problem solving skills

3) Possess the motivation and confidence to use these skills in daily life

A Management Paradigm

- Educate the patient as to how his/her emotional reaction to the headache can make it better or worse.
  - It is most common and natural to tense up when we are in pain, but that is the worse thing we can do when we have a headache.

- Goals of treatment are to manage the headaches in such a way to maximize present functioning and prevent long term complications and disability.

Physiological Effects of Stress

- Education regarding bodily manifestations of the sympathetic response to provide cues for patients to apply relaxation strategies
- Increase awareness of physical sensations:
  - Muscle tension vs. physical pain
  - Coldness in extremities
  - Dilated pupils
  - Nausea/digestive concerns
  - Increase in heart rate/respiration

Strategies to Address Pain

- Diaphragmatic breathing
  - Slowed respiration (6-8 bpm) with the diaphragm
  - Emphasize prolonged outbreath
- Progressive Muscle Relaxation
- Autogenic Relaxation
- Body Scan
- Posture Training

Psychological Aspects of Pain

- Increase willingness to allow uncomfortable emotions
  - Anxiety
  - Depression
- Interaction with thoughts
- Increase willingness to experience physical pain sensations
- Connect with values-based living, despite ongoing pain symptoms

Free Resources for Patients

- Smartphone Applications
  - Breathe2Relax, Paced Breathing
- iTunes Free Podcasts
- YouTube videos
- Suggested search terms: *Diaphragmatic breathing, deep breathing, body scan, autogenic relaxation, guided relaxation, progressive muscle relaxation*

Managing Pain

- The doctor as therapy
- “Walk me through your usual day.”
- No Pain Talk, No Exaggeration(Be Real)
- Don’t underestimate the effect you can have. Stay calm, educate the patient on the condition. Help the patient focus on managing, not catastrophizing, pay attention to sleep, anxiety and depression. Help them get moving, challenge them to control their emotions, make sure they understand the treatment plan.
- Follow up with them. Ask about how well they managed their headaches rather than how many headaches they had. Consider having a patient with severe frequent headaches come in once a week with you or your nurse to review how things are going.

Pain Center Contact Information

http://www.maryfreebed.com/rehabilitation/the-pain-center/

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