Co-Evaluation and Interdisciplinary Management of Headache

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Disclosures

• Neither presenter has any relevant disclosures
Learning Objectives

• Participants will be able to describe the principles and methodology of biopsychosocial assessment of headache patients.

• Participants will be able to name at least 3 tangible benefits of headache co-assessment.

• Participants will be able to recommend appropriate interventions for persistent headache.
Presentation Overview

• Overview of the Biopsychosocial Model
• Distinction between Multi-Disciplinary and Interdisciplinary Care
• Overview of Interdisciplinary Headache Assessment
  – Neurological/Biomedical Factors
  – Psychosocial Factors
• Case Examples
Overview of the Biopsychosocial Model

- Generally attributed to George Engel
  - Roy Grinker actually predated Engel’s work
- Initially a response to the biomedical vs. psychological argument in psychiatry
- Criticized both the reductionist and exclusionist conceptualizations of disease
- Suggested that biochemical abnormalities are necessary but not sufficient for the occurrence of the human experience of disease

(Ghaemi, 2009; Engel, 1977)
Disease vs. Illness

• “Disease” – Refers to an objective bodily event that involves disruption of specific body structures or organ systems caused by pathological, anatomical, or physiological changes.

• “Illness” – Refers to a subjective experience or self-attribution that a disease is present, resulting in physical discomfort, emotional distress, behavioral limitations, and psychosocial disruption.
Collaborative care improves outcomes in conditions that requires self management, most especially chronic pain and chronic headache.

Collaborative care is particularly effective when conditions are accompanied by comorbid psychopathology.

Interdisciplinary Care and its Relevance to Headache Outcomes

“Interdisciplinary” vs. “Multidisciplinary”

- Terms are often incorrectly used interchangeably

- “Multidisciplinary” simply means numerous disciplines

- “Interdisciplinary” means that they’re actually working together

Typical Barriers to Collaborative Care

- Provider Location
- Finances, lack of reimbursement
- Schedule Coordination
- Patient Resistance
- Clinician Anxiety
- Personality
The Joys of Co-Assessment

• Innovative Model where multiple providers assess patient simultaneously

• Effectively addresses barriers:
  • Provider Location
  • Schedule Coordination
  • Patient Resistance
  • Clinician Anxiety
Elements of a Complete Interdisciplinary Headache Assessment

• Evaluation of headache in addition to general history
  – Neurologic and Medical “Red Flags”
  – 1 or more headache types

• Physical examination and medical record review

• Psychosocial Evaluation (including how pain is impacting relationships and family, signs of depression, anxiety, suicidal thoughts)
Elements of a Complete Interdisciplinary Headache Assessment

- PMP Review
- Screening Tools
  - PHQ-9, GAD-7, MIDAS, Headache Diary, ISI
- Urine Toxicology when appropriate
- Risk Assessment
Elements of a Complete Interdisciplinary Headache Assessment

- Individualized written treatment plan including functional goals.
  - Specific, Measurable, Achievable, Realistic, and Time-bound Goals

- Consultation with additional specialists when indicated (e.g., sleep specialist, physical therapy, dental, psychiatry, optho)
Interdisciplinary Care

• Why is it so important for headache patients specifically?

  – Headache is an *ongoing* illness and not simply a disease.

  • For example...
Headache Severity Progression

- Attack frequency
- Stressful life events and psychiatric comorbidity
- Effects of childhood maltreatment; physical, sexual, emotional abuse
- Medication and caffeine overuse
- Obesity
- Snoring and sleep apnea

Smitherman, Maizels, & Penzien, 2008
Psychological Issues Relevant to All Patients

- Assessment of cognitive factors
- Patient interest in medical treatment
  - beliefs/attitudes about illness /treatment
- Monitoring and managing triggers
- Treatment Adherence
  - 50%-70% of patients fail to optimally use medications
- Potential role for adjunctive behavioral treatment (e.g., biofeedback, relaxation, CBT)
  - Tension Type & Migraine

(Nicholson, 2010)
Indicators for behavioral treatment

- Presence of psychiatric co-morbidity
- Difficulties coping with headache
- Sleep Problems
- Managing Stress and Reducing Arousal
- Medication Overuse/Misuse
- History of Trauma/Abuse
- Work Loss and Disability

(Andrasik, Buse, & Grazzi, 2009)
Brazilian Adult Health Study

Migraine and MDD

- no migraine
- <1 month
- 1/M-1/wk
- 2-6x week
- Daily

## Comorbid Psychiatric Disorders

Prognosis for Refractory Headache 8-year follow-up of adolescents & young adults N=100

<table>
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<th>57% same or worse</th>
<th>29% improved</th>
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<td>7% same or worse</td>
<td>53% improved</td>
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Case 1

- 55 year old man with hx significant for hypertension and GERD, presenting with daily headaches for the last 20 years.
- Headache was holocephalic, no associated symptoms, worse in the morning
- On review of symptoms, endorsed daytime sleepiness/napping
- Questionnaires:
  - PHQ-9: WNL
  - GAD-7: WNL
  - ISI: ALARMING
Case 1 Cont.

- Relevant Physical Exam Findings:
  - Neurological Exam WNL
  - Prior neuroimaging reassuring
  - Mallampati IV

On further questioning:
distant dx of OSA, non-adherent with CPAP

.... Diagnosis?
Case 1 Cont.

• Diagnosis:
  – headache secondary to sleep apnea

• Immediate Intervention and POC
  – Brief CBT-I intervention focused on sleep hygiene
  – Referral to sleep specialist
    • Recommended CPAP adherence
    • Potential oral splint therapy
  – 4 week neurological and psychological follow up
Case 2

- 48 year old woman with hx significant for gastric bypass, PTSD, anxiety, depression, “migraines,” presenting with daily headache pain.
- Headaches started in adolescence, initially catamenial, + phono/photo/N/V.
- Managed by PCPs with fioricet, Tylenol with codeine
- Age 35, HA became “constant.”
- Now 1-2 ED visits per month (IVF, opiates, mag)
  - Taking 2-3 tabs Fioricet daily, Tylenol with codeine 1 tab QHS. Also takes lorazepam QHS for sleep.
Case 2 Cont.

- **Questionnaires:**
  - PHQ-9: Moderately Depressed
  - GAD-7: Highly Anxious
  - ISI: Moderate
  - MIDAS: 21+, MIDAS Grade IV, Severe disability
    - Missing multiple work days (5+) and family activities due to headache

- Physical exam with taut, tender bands over cervicothoracic musculature, but normal cervical ROM, neurological examination

- Neuroimaging reassuring
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<tr>
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**Temperature**

- Temperature: 92.0

**Validity Panel**

- Creatine: 43.6
- General Oxidant: 2.0
- pH: 6.70
- Specific Gravity: 1.009
Case 2 Cont.

- Additional Information:
  - PCP no longer willing to prescribe Tylenol w/ Codeine and Fioricet

- Diagnosis:
  - Hx of Migraine, now with Medication Overuse Headache, r/o rebound
  - Dual Diagnosis: Polysubstance Use Disorder, Depression/Anxiety, Chronic PTSD
Case 2 Cont.

- Recommendations and POC:
  - Inpatient vs. outpatient medication wean with subsequent outpatient Substance Abuse Treatment/CBT for Mood
  - MOH treatment: steroid pulse, initiation of migraine prophylactic (topiramate); sumatriptan SQ for abortive medication once HA became episodic
  - Ongoing follow up (MOH relapse 10% annually)
THANK YOU!

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Questions?
References