Headache Update 2015

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Topic 1
Acute Migraine Management Guidelines

- **Level A**
  - **NSAIDs**
    - Aspirin
    - Naproxen
    - Ibuprofen
    - Diclofenac
    - Aspirin/acet/caff
  - **Analgesics**
    - Acetaminophen (mild)
    - Butorphanol
  - **Triptans**
    - Sumatriptan
    - Rizatriptan
    - Zolmitriptan
    - Naratriptan
    - Almotriptan
    - Eletriptan
    - Frovatriptan
    - Sumatriptan+Naproxen
  - **Ergots**
    - DHE nasal

Marmura et al. Headache 2015;55:3-20
• Sumatriptan patch 6.5mg (approved)
• DHE pulmonary inhaler 1mg (nearing approval)
• CGRP antagonists
  – Telcagepant
• 5HT1F agonists
  – Lasmiditan

Marmura et al. Headache 2015;55:3-20
Schulte et al. Lancet Neurol 2015;14:6-7
Topic 1
Acute Migraine Management Guidelines in the ED

- Recommended agents
  - Prochlorperazine 10mg IV
  - Metoclopramide 10-20mg IV
  - Sumatriptan 6mg SQ
  - Ketorolac 30mg IV to 60mg IM

Topic 2
Migraine Prevention Guidelines

• Level A
  – AEDs
    • Valproate
    • Topiramate
  – Beta blockers
    • Propranolol
    • Timolol
    • Metoprolol
  – Other
    • Petasites
    • Frovatriptan

• Level B
  – Antidepressants
    • Amitriptyline
    • Venlafaxine
  – Beta blockers
    • Atenolol
    • Nadolol
  – Other
    • Naratriptan (MAM)
    • Zolmitriptan (MAM)

Silberstein et al. Neurology 2012;78:1337-1345 and 1346-1353
Topic 2
Migraine Prevention – New Treatments

• Onabotulinum toxin A (chronic migraine)
• Cefaly Device
• CGRP-related agents
  – CGRP monoclonal antibodies
  – CGRP-receptor monoclonal antibodies
Topic 2
Extracranial Modulation of Migraine

Burstein et al. Cephalalgia 2014;34:853-869
Topic 3
Red Flags in Headache
Topic 3
Secondary Headaches

- Secondary headaches: 1-3%
- Migraine: 94-95%
- Other primary headache syndromes: 3-4%
Topic 3
Headache Classification

**Primary Headaches**
- Migraine
- Tension-type
- Cluster
- Other primary headaches

**Secondary Headaches**
- Trauma
- Vascular disorders
- Non-vascular intracranial disorder
- Substances/withdrawal
- Infection
- Disorder of homeostasis
- Disorder of extracranial structures
- Psychiatric disorder
- Cranial neuralgia

ICDH-III beta Cephalalgia 2013;33:609-828
Topic 3
Profiling Secondary Headache

- First/worst headache
- Abrupt onset headache
- Progression or fundamental change in pattern
- New headache in those <5yo, >50yo
- New headache with cancer, immunosuppression
- Headache with syncope or seizure
- Headache triggered by exertion/valsalva/sex
- Neurologic symptoms >1hour in duration
- Abnormal general or neurological examination
Topic 3
Workup of Potential Secondary Headache

• Neuroimaging
  – ED – Head CT
  – Outpatient – MRI

• ESR/CRP in patients > age 50

• Special settings
  – LP
  – Vascular imaging

• No role for EEG
Topic 3
Choosing Wisely in Headache

– Don’t perform neuroimaging in patients with stable headaches meeting criteria for migraine
– Don’t perform CT for headache when MRI is available, except in emergent settings
– Don’t recommend surgical procedures for migraine outside the context of a clinical trial
– Don’t prescribe opioid or butalbital-containing medications as first-line treatment for recurrent headache disorders
– Don’t recommend prolonged or frequent use of over-the-counter pain medications for headache

Loder et al. Headache 2013;1651-1659
Migraine and White Matter Lesions

- CAMERA study
  - Migraine with aura associated with increased risk of brainstem and cerebellar lesions
  - O.R 13.7

Migraine and White Matter Lesions

- **CAMERA2 - 9-yr follow-up**
  - Migraine women showed progression deep white matter hyperintensities
  - No significant differences in progression other WM lesions
  - No significant changes in cognitive scores

Topic 4
Refractory Migraine

- Acute migraine
- Status migrainosus
- Chronic migraine
Topic 4
Refractory Acute Migraine

• Injectable medications
  – Sumatriptan SQ
    • Stat-dose pen
    • Vials
    • Sumavel needle-free device
  – DHE-45
  – Ketorolac
  – Promethazine, metoclopramide

• Nasal sumatriptan, zolmitriptan and DHE

• Promethazine, prochlorperazine suppositories
Topic 4
Status Migrainosus

• Corticosteroids
  – Prednisone, dexamethasone, methylprednisolone

• Ergot agents
  – DHE, methylergonovine

• Long-acting NSAIDs
Topic 4: Chronic Migraine

- Discontinuation of overused agent
- Natural migraine prevention
- Medical migraine prevention
- Appropriate medication for acute attacks
Concluding Remarks