### Sidebar 3: Primary Headache Disorders Criteria

<table>
<thead>
<tr>
<th>Attack Duration and Frequency</th>
<th>Tension-type Headache</th>
<th>Migraine Headache</th>
<th>Cluster Headache</th>
</tr>
</thead>
<tbody>
<tr>
<td>Duration</td>
<td>30-minutes – 7-days</td>
<td>4 – 72 hours</td>
<td>15 – 180 minutes</td>
</tr>
<tr>
<td>Frequency</td>
<td>Variable</td>
<td>Variable</td>
<td>Variable</td>
</tr>
</tbody>
</table>

### Associated Features

- Photophobia and phonophobia
- Nausea and/or vomiting
- Autonomic features

### Other Features

- May occur, but are often subtle and not noticed by the patient

### Headache Characteristics

- Severity: Mild to moderate
- Location: Bilateral/Unilateral
- Quality: Pressing or tightening, non-pulsating

### Aggravated by Routine Physical Activity

- Aggravated by routine activity
- Not aggravated by routine activity

### Prominent Autonomic Features

- Noticeable

### Tension-type headache

- Onset abrupt
- Duration: 15 – 180 minutes
- Frequency: Variable
- Severity: Severe or very severe
- Location: Unilateral
- Quality: Pressing or tightening, non-pulsating

### Migraine Headache

- Onset abrupt
- Duration: 4 – 72 hours
- Frequency: Variable
- Severity: Moderate to severe
- Location: Unilateral
- Quality: Pressing or pulsating

### Cluster Headache

- Onset abrupt
- Duration: 7-days
- Frequency: 4 – 72 hours
- Severity: Severe
- Location: Ipsilateral
- Quality: Throbbing or pulsating

### Cluster Headache - Prominent Autonomic Features

- Ipsilateral supraorbital, and/or temporal
- May notice, but are often subtle and not noticed by the patient

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### Sidebar 4: Treatment Options for Tension-type Headache

#### Treatment

- Amitriptyline
- Botulinum toxin/neurotoxin
- Ibsuprophene 400 mg or acetaminophen 1,000 mg
- Physical therapy

### Sidebar 5: Common Medications and their Association with MOH

<table>
<thead>
<tr>
<th>MOH Type</th>
<th>Medication Overuse Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetaminophen overuse</td>
<td>≥15-days/month for &gt;3-months</td>
</tr>
<tr>
<td>NSAID overuse</td>
<td>≥10-days/month for &gt;3-months</td>
</tr>
<tr>
<td>Other non-opioid analgesic overuse</td>
<td>≥10-days/month for &gt;3-months</td>
</tr>
<tr>
<td>Ergotamine overuse</td>
<td>≥10-days/month for &gt;3-months</td>
</tr>
<tr>
<td>Opioid overuse</td>
<td>≥10-days/month for &gt;3-months</td>
</tr>
<tr>
<td>Combination-anginal overuse</td>
<td>≥10-days/month for &gt;3-months</td>
</tr>
</tbody>
</table>

### Sidebar 6: Treatment Options for Migraine Headache

- AbobotulinumtoxinA and onabotulinumtoxinA
- Candesartan or telmisartan
- Combination pharmacotherapy
- Erenumab, fremanezumab, or galcanezumab
- Frovatriptan or rizatriptan
- Gabapentin
- GON block
- Ibuprofen, naproxen, aspirin, acetaminophen
- IV magnesium
- Lasmoprine
- Magnesium, oral
- Nimodipine or nifedipine
- Nutraceuticals: CoQ10, feverfew, melatonin, omega-3, vitamin B2, and vitamin B6
- OnabotulinumtoxinA
- Propranolol
- Sumatriptan, sumatriptan/naproxen, or zolmitriptan
- Topiramate
- Triptans
- Valproate

### Sidebar 7: Treatment Options for Cluster Headache

- Galcanezumab
- Lovastatin
- Non-invasive vagus nerve stimulation
- Oxygen therapy
- Pharmacotherapy for acute treatment
- Pravastatin
- Sumatriptan SQ (not oral)
- Zolmitriptan nasal spray

### Sidebar 8: Treatment Options for Headache in General

- Acupuncture
- Aerobic exercise/progressive strength training
- CBT or biofeedback
- Dietary trigger education
- Dry needling
- Elimination-based diet testing
- Dry diet therapy
- Diet therapy
- Exercise therapy
- Nutraceuticals: CoQ10, feverfew, melatonin, omega-3, vitamin B2, and vitamin B6
- OnabotulinumtoxinA
- Propranolol
- Sumatriptan, sumatriptan/naproxen, or zolmitriptan
- Topiramate
- Triptans
- Valproate

### Treatments

- Pharmacologic therapy – abortive
- Non-pharmacologic therapy – preventive
- Non-pharmacologic therapy – abortive
- Pharmacotherapy – abortive
- Pharmacotherapy – preventive
- Pharmacotherapy – preventive

### Pseudovagotomy or SNS

- Pulsed radiofrequency or SPG

### Abbreviations

- CBT: cognitive behavioral therapy
- CoQ10: coenzyme Q10
- CoQ10: coenzyme Q10
- CPG: clinical practice guideline
- ED: emergency department
- FDA: U.S. Food and Drug Administration
- GON: greater occipital nerve
- HIT-6: Headache Impact Test, 6th edition
- IV: intravenous
- mg: milligram
- MIDAS: Migraine Disability Assessment Test
- MOH: medication overuse headache
- Migraine – Specific Quality of Life questionnaire
- NSAID: nonsteroidal anti-inflammatory drug
- OIC: oral immunodeficiency virus
- PULS: Pulsed radiofrequency or SPG
- PULS: Pulsed radiofrequency or SPG
- RNS: vagus nerve stimulation
- SQ: subcutaneous
- TTH: tension-type headache
- UMN: upper motor neuron
- USP: United States Pharmacopoeia
- WHO: World Health Organization