

AAP BRS Podcast: Craniofacial Pain Syndromes

HEADACHE DISORDERS			
<p>Considerations (“red flags”) for ordering imaging in patients with headache:</p> <p>SNOOP</p> <p>Systemic signs: Fevers, chills, night sweats, myalgia, weight loss</p> <p>Neurologic changes: Focal or global symptoms- behavior/personality changes, diplopia, pulsatile tinnitus, motor/sensory deficits, ataxia</p> <p>Onset: Rapid onset/”thunderclap”</p> <p>Older: Age>50</p> <p>Positional change, pattern change, papilledema, and pregnancy</p>			
	Symptoms/Characteristics	Treatment Options	
Tension	<ul style="list-style-type: none"> Bilateral/band-like pain Tightening/pressure like quality 	<ul style="list-style-type: none"> Acetaminophen, NSAIDs, manual therapy 	
Cervicogenic	<ul style="list-style-type: none"> Secondary headache disorder Pain referred to the head from one of first three cervical spinal nerves and their rami Unilateral, non-throbbing, occipital to frontal pain Can radiate to neck, shoulder Worse with ipsilateral neck flexion and lateral rotation 	<p>New onset:</p> <ul style="list-style-type: none"> PT, NSAIDs, heat/ice, improved ergonomics <p>Subacute onset:</p> <ul style="list-style-type: none"> Nerve blocks (medial branch, occipital), which if successful → RFA of nerve that is source of pain Facet joint injection 	
Cluster	<ul style="list-style-type: none"> Severe, unilateral pain Posterior-orbital/supraorbital pain with temporal radiation Associated with forehead/facial sweating, lacrimation, eyelid edema, conjunctival injection 	<ul style="list-style-type: none"> Supplemental oxygen Galcanezumab- injectable to help reduce frequency of attacks 	
Migraine	<ul style="list-style-type: none"> Unilateral, throbbing Auras: Focal neurologic deficits preceding headaches, also unilateral <ul style="list-style-type: none"> Most commonly visual or auditory deficit Associated with photophobia, phonophobia, nausea/vomiting Symptoms aggravated by activity New proposed mechanism involves release of CGRP (Calcitonin Gene-Related Peptide) 	<p>Abortive</p> <p>Initial:</p> <ul style="list-style-type: none"> NSAIDs, -Triptans <p>Newer options:</p> <ul style="list-style-type: none"> CGRP antagonists <p>Invasive:</p> <ul style="list-style-type: none"> Occipital plexus block Sphenopalatine ganglion blocks <p>Non-invasive neuromodulation:</p> <ul style="list-style-type: none"> Transcutaneous supraorbital nerve stimulators Single-pulse transcranial magnetic stimulation Non-invasive vagal nerve stimulation 	<p>Preventative</p> <ul style="list-style-type: none"> CGRP-receptor antagonists Beta-blockers Calcium channel blockers Anti-depressants Topiramate. Botulinum toxin injections
Occipital Neuralgia	<ul style="list-style-type: none"> Secondary headache disorder Posterior head and upper neck pain, can radiate to temples Paroxysmal, stabbing type pain Pain is generated from greater and lesser occipital nerves. Result of: <ul style="list-style-type: none"> Cervical pathology (facet arthropathy) Compression Trauma Reproducible on exam with palpation of occiput 	<ul style="list-style-type: none"> NSAIDs Occipital nerve block → RFA Botulinum Toxin injection Neuromodulation of occipital nerve Surgical decompression 	

Helpful Resources:

- <https://now.aapmr.org/postconcussion-headache/>
- <https://now.aapmr.org/cervicogenic-headache/#rehabilitation-management-and-treatments>
- <https://now.aapmr.org/temporal-mandibular-joint-syndrome/#rehabilitation-management-and-treatments>
- Figure 1: Henry Gray. (1918). *Anatomy of the Human Body* (Warren H. Lewis, Ed.; 20th ed.). Lea & Febiger .

FACIAL PAIN SYNDROMES		
	Symptoms	Treatment
Trigeminal Neuralgia	<ul style="list-style-type: none"> Sudden onset, paroxysmal pain Unilateral Intermittent, sharp, neuropathic type pain Lasts 1-2 minutes Located in distribution of trigeminal nerve branch/branches Linked with multiple sclerosis Triggers: Chewing, talking, cold, light touch over the area <p>Pain distribution: Mandibular > Maxillary >> Ophthalmic branches</p> <ul style="list-style-type: none"> Can occur as combination, usually mandibular and maxillary branches, rarely all 3 together 	<p>Abortive:</p> <ul style="list-style-type: none"> No medications for acute exacerbation of pain Short term relief with lidocaine injections <p>Preventative:</p> <p>1st line: Carbamazepine and oxcarbazepine</p> <p>2nd line: Gabapentin/pregabalin, muscle relaxers, botulinum toxin, baclofen, topiramate</p> <p>Surgical/interventional: (for persistent sx)</p> <ul style="list-style-type: none"> Microvascular decompression/ablation Percutaneous RFA Percutaneous rhizotomy <p>Avoid opioids</p>
Temporomandibular Joint Syndrome	<ul style="list-style-type: none"> Pain located anterior to the ear, angle of the mandible Unilateral or bilateral Usually persistent with waxing and waning pattern Pain radiates to periorbital region, ears, temporal region, mandibular region, and neck Can have arthritic signs such as joint swelling and pain on palpation Triggers: Eating or chewing 	<p>Acute stage:</p> <ul style="list-style-type: none"> Heat Oral rest- softer diet, decrease jaw opening, repetitive motions (gum chewing) NSAIDs Oral Splinting <p>Chronic Stage:</p> <ul style="list-style-type: none"> Surgical intervention/TMJ reconstruction

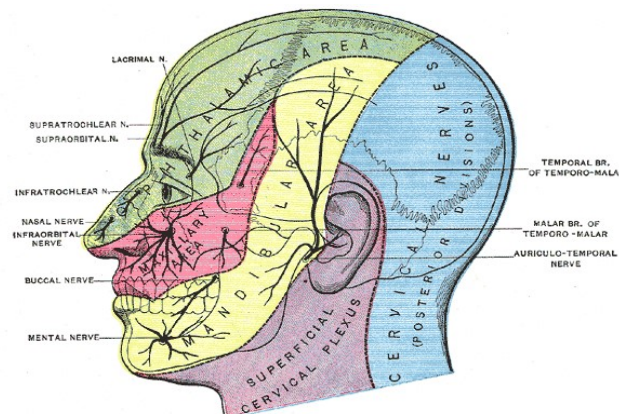


Figure 1

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- 1) <https://now.aapmr.org/postconcussion-headache/>
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- 4) Figure 1: Henry Gray. (1918). *Anatomy of the Human Body* (Warren H. Lewis, Ed.; 20th ed.). Lea & Febiger .