

# Headaches

**Tension headache:** most common. Occurs when person contracts neck → facial muscles for long periods of time

- **path:** tensed muscles sensitize **nociceptors** (pain-relaying nerves in head), transmit neurochemicals to brain, which registers presence & location of discomfort  
→ can be sx of other conditions (meningitis, ↑ ICP, brain tumor, sinusitis)
- **assessment:**
  - pressure/steady constriction on both sides of head
  - diffuse, mild-mod pain w/ **tight band** sensation
- **med management:**
  - NSAIDs, rest, stress management
  - for severe, recurrent: counseling/psychotherapy to help w/ stressors

**Migraine headaches:** recurrent, severe, last >1 day, vascular origin

→ can be result of hormones, barometric pressure change, food, illness, visual disturbance

◦ **3 sequential contributing factors:**

- changes in serotonin receptors: promotes **dilation** of cerebral blood vessels & pain intensification from neurochemicals released from **trigeminal** nerve
- fluctuations in reproductive hormones — more common **women**
- chemicals in certain foods, food-related allergy, drugs

◦ **assessment:**

- aura
- prodromal — change in mood, difficulty concentrating, unusual fatigue, h/v.
- vertigo, sensitivity to light

◦ **med management:**

- prophylaxis: methysergide, topiramate
- **Triptans:** interrupts migraines that have already developed  
**side effects:** ↑BP, myocardial ischemia, ischemia

**Cluster headache:** variant of migraine headache, **episodic** — recurring over **6-8 weeks**, with only brief periods of recovery between multiple daily attacks

→ **unilateral pain**; M>W ~ **15 min - 3 hrs**

◦ **path:** cause unknown; triggered by **vasodilating** agents, **nitroglycerin**, histamine, **oic**, acetylcholine

◦ **assessment:** — not relieved by rest — hospitalization if prolonged

- unilateral pain **"ice pick"**, stabbing; retroorbital or temporal
- nasal congestion, rhinorrhea
- redness in eye

◦ **med management:**

- **vasoconstricting:** sumatriptan
- oxygen: ↓ vasodilating compensatory response occurring in brain
- **rhizotomy:** remove sensation from a painful nerve by killing nerve fibers responsible for sending pain signals to brain.  
→ fibers destroyed by severing them w/ surgical instrument or burning them w/ chemical or electrical current

**Trigeminal neuralgia:**

◦ **path:** involves **5th** cranial nerve (trigeminal nerve) — 3 branches — mandibular, maxillary, & ophthalmic

→ sensory & motor nerve (chewing, facial movement, sensation)

→ **slightest stimuli** (vibration of music, passing breeze, temp changes) causes pain

↳ **forehead** over eyebrow common trigger point

◦ **cause**: unknown; rit **compression** of trigeminal nerve root

◦ **assessment**: sudden, severe, burning pain

◦ 1-10 seconds

◦ face twitches & eye will tear up

◦ exacerbated by **jaw maneuvers** - chewing, talking, yawning, brushing teeth

◦ **diagnostic**: based on sx

◦ **med management**: **carbamazepine**

→ if unsatisfactory: **surgical division** of sensory root of trigeminal nerves provides permanent relief

◦ **nursing management**:

◦ inspect oral cavity for signs of injury

◦ dental referral to correct alignment