

MODERN NEUROLOGY: HEADACHE EVALUATION AND TREATMENT IN 2026

BY DAVID A. KAMINSKAS, MD

BOARD CERTIFIED NEUROLOGIST

ASSISTANT CLINICAL PROFESSOR OF MEDICINE, JOHN BURNS SCHOOL OF MEDICINE

PRESIDENT, HAWAII NEUROLOGIC SOCIETY

DISCLOSURE: PAID ADVISOR AND SPEAKER FOR ABVIEVE AND PFIZER PHARMACEUTICALS



ADVENTISTHEALTH.INTERNET

1

LEARNING OBJECTIVES:

1. Understand the major clinical features of both Migraine and Cluster headache.

2. Appreciate the varied number and appropriate use of therapeutics in treating Migraine.

3. Familiarize the learner with the unique clinical features and available treatments for Trigeminal Neuralgia.



ADVENTISTHEALTH.INTERNET

2

AGENDA

Case one: Anna

Case two: Charles

Case three: Tina

Topic four: Legacy Headache Treatments

Topic five: Novel Headache Treatments



ADVENTISTHEALTH.INTERNET

3

CASE I: ANNA

• Anna is a 67 yo female with c/o headache.

• Headache has been present for 30 + years.

• Headache localization: frontal; retro-orbital, temporal and occipital. Headache typically unilateral but may be bilateral.

• Headache character: throbbing; pounding; pulsating

• Headache frequency: pre-prophylaxis 20+ days/month; now <5 days a month

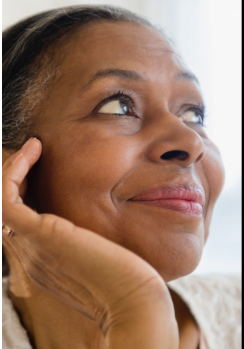
• Headache severity: 8-9/10

• Headache duration: 4+ hrs (without effective treatment)

• Associated symptoms: photophobia; phonophobia; nausea

• Triggers: "red wine"; sleep deprivation; dehydration; "MSG"...

• Alleviating factors: sleep; a dark room; ice pack; quiet...



ADVENTISTHEALTH.INTERNET

4

ANNA

Diagnosis: Chronic migraine

Failed abortive therapy: sumatriptan 50 mg; rizatriptan MLT 10 mg (chest pressure)

Current abortive therapy: Ubrogapant (Ubrelvy) 50 mg daily PRN

Failed prophylactic therapies: Topiramate (in AED) 450mg BID; AE: cognitive d/c including word finding difficulties; Amitriptyline 10 mg bedtime (a TCA) AE: lethargy; Verapamil (a CCB) AE: hypotension; Venlafaxine 37.5 mg daily (SNRI) AE: mood d/c; Gabapentin 300 mg qhs (ineffective); Erenumab (Aimovig) AE: constipation

Current prophylactic therapy: Candesartan (an ARB) 4 mg QD; Atogepant (Qulipta- a gepant blocks CGRP receptor) 60 mg daily; botulinum toxin 155 units IM q 3 months; Magnesium 400 mg in combination with calcium

PE: 97 / 87 / 18 129/78

Alert; V/D/W/N healthy appearing 67 yo female in NAD

CN II- XII wnl

Coordination: normal FTN/ RAM and foot tapping

Motor: 5/5 bilateral triceps/ W/ iliopsoas/ TA

Sensory: normal upper and lower to light touch and temp

Reflexes: 2+ throughout including BR; biceps; triceps; patella and ankles

Gait: wnl

Ancillary testing: MRI Brain w/ contrast 2/7/13 normal

ADVENTISTHEALTH.INTERNET

5

ANNA

Assessment:

Chronic Migraine: well controlled.

Plan:

Pt advised to continue current prophylactic therapy with:

• botulinum toxin 155 u. q 3 months;

• Atogepant 60 mg daily;

• candesartan 4mg daily and

• Magnesium with Calcium 400 mg daily.

• Pt will continue to use Ubrogapant 50 mg for breakthrough pain

• flu in 3 months, sooner PRN.

ADVENTISTHEALTH.INTERNET

6

CASE 2

Charles is a 62 yo man with episodic strictly unilateral peri-orbital and temporal headache described as a "hot poker" in the eye. This headache occurs everyday at 3 am for 6-8 weeks a year with no interval headache. "alarm clock headache"

The patient is visibly agitated and restless during the episode which lasts 15 minutes to 3 hrs. Patient states the pain is an "11/10" on a 10 point pain scale.



(ADVENTHEALTH/INTERNAL)

7

CHARLES

On physical examination in the ED: vitals: 98.6 HR 120; RR 20; BP 140/95

The patient is pacing, in obvious distress, hand pressing against the affected eye.

The eye is visible red, tearing and patient manifests ipsilateral sweating.

The patient has difficulty cooperating with examination but no focal abnormalities are present.

Diagnosis: Cluster Headache

Cluster headache therapies: sumatriptan 6 mg SC proves effective in aborting the attack within 10 minutes; (alternatives include- zolmitriptan IN 5 mg; sumatriptan IN 20 mg; high flow oxygen by face mask: 100 % oxygen at 15 L/min x 15 minutes)

Prophylactic therapies proven effective included: Verapamil starting at 120 mg -240 mg daily; Galcanezumab 300 mg SC and 300 mg q month

(ADVENTHEALTH/INTERNAL)

8

CASE 3

Tina is a 33 yo female with c/o recurrent unilateral, brief electrical shock-like pains involving the second branch of the trigeminal nerve on the right. (pain may involve one or more branches of CNV). Originally thought to be dental in origin she has undergone root canals and dental extractions. Pain may be triggered by chewing or a trivial contact with skin in the region of the affected nerve. Classic TN may be idiopathic or due to microvascular nerve root compression at the REZ. Secondary TN may be due to MS or tumor.



(ADVENTHEALTH/INTERNAL)

9

TINA

Diagnosis: Trigeminal Neuralgia

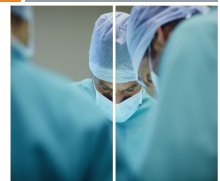
MRI Brain and MRA are typically performed to r/o: MS; mass or vascular compression.

Treatment: OXC (oxcarbazepine "Trileptal") or CBZ (carbamazepine "Tegretol")

Gabapentin "Neurontin" or Pregabalin "Lyrica"

Lamotrigine is commonly used with good results.

Microvascular decompression (Jannetta procedure) or Gamma knife can be performed to alleviate the compression of the Trigeminal nerve at the root entry zone.



(ADVENTHEALTH/INTERNAL)

10