HEADACHE

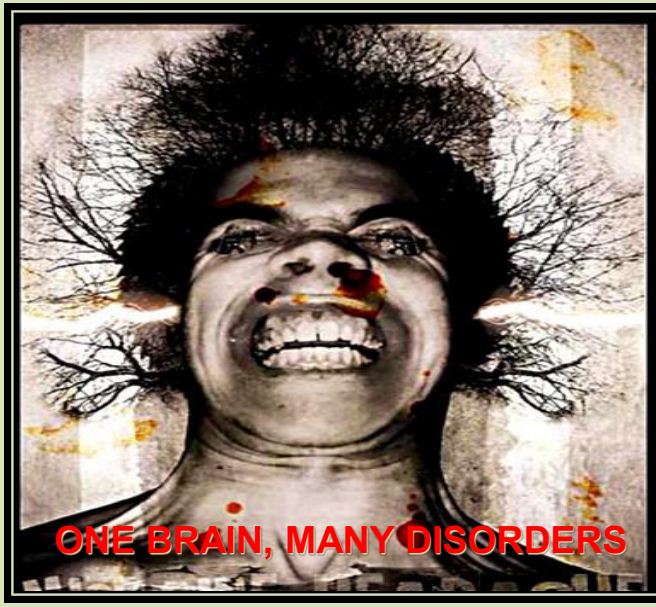
PROF. DR. G.H.M.SHAHIDUL HAQUE

PROFESSOR & HEAD

DEPT. OF ENT

CARe MEDICAL COLLEGE & HOSPITAL.

HEADACHE



- ***Most common brain disorder.***

- **'Headaches cost world economy £140 billion‘.**
- **13000 ton of aspirin are consumed worldwide per year.**
- **One in three suffer from severe headache in their life in general population.**
- **190 million work days lost per year in EU due to migraine.**

HEADACHE

It is the pain of any kind or discomfort in the head
Excluding the lower part of the face and
Including the upper part of the neck.

Pain sensitive parts

The brain itself is not sensitive to pain

Pain sensitive parts are:

- Tissues covering the cranium including the arterial walls.
- Dura mater covering the base of the skull.
- Blood vessels including the meningeal arteries, the cerebral arteries and the intracranial venous sinuses.
- Certain parts of the leptomeninges.

CLASSIFICATION OF HEADACHE

A. Primary headache disorders are:

- Migraine.
- Tension headache.
- Cluster headache.

CLASSIFICATION OF HEADACHE (CONT.)

B. Secondary headache disorders are:

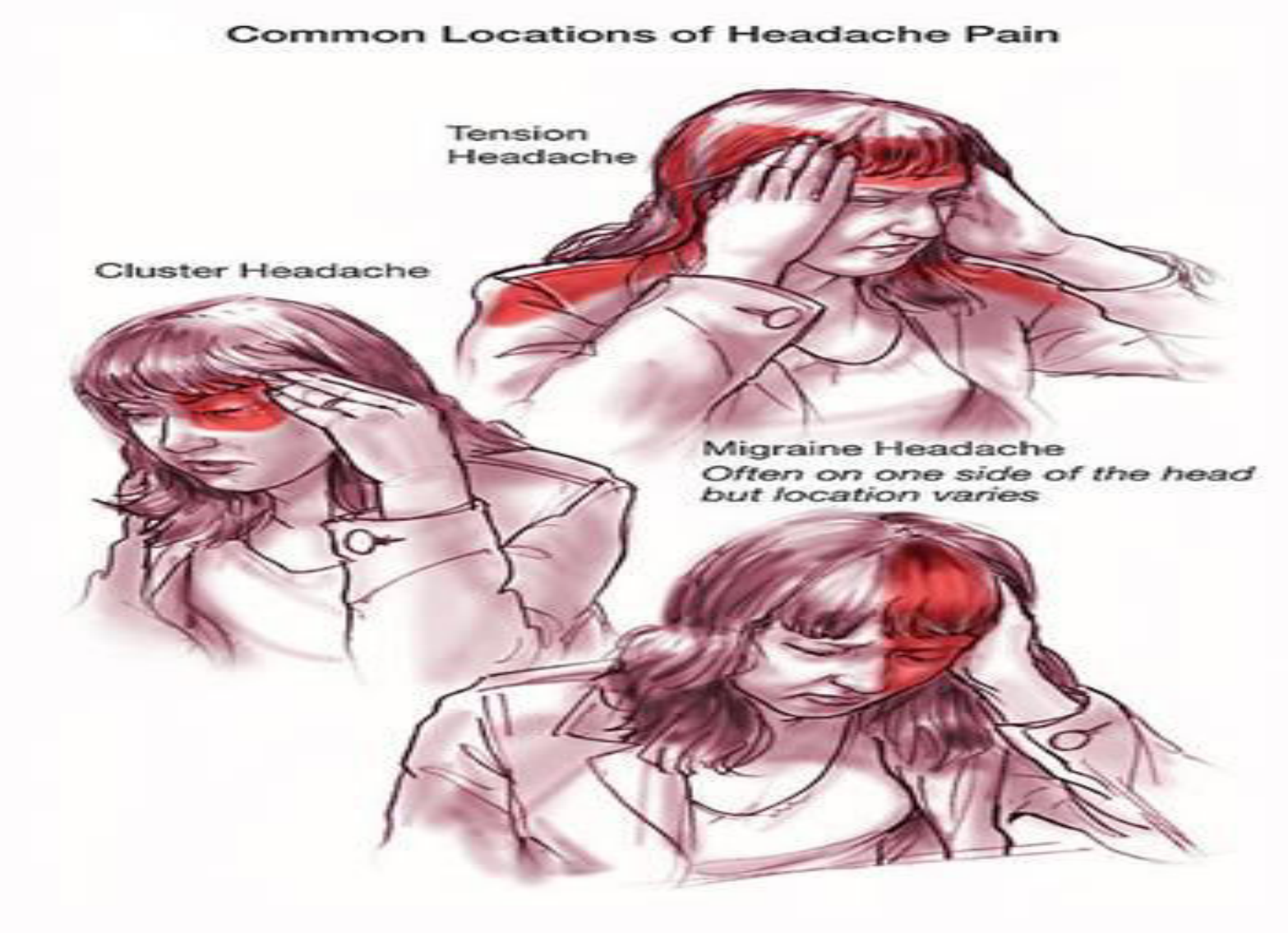
1. Raised intracranial pressure:
   - Expanding lesion- tumours, abscesses, collection of extravasated blood.
   - Inflammation of the brain and its meninges..
   - Block to the outflow of venous blood.
   - Arterial hypertension.
2. Meningitis
3. Intracranial aneurisms.- Rupture, Pressure effect.

common causes of headache

Primary headache		Secondary headache	
Type	%	Type	%
Migraine	16	Systemic infection	63
Tension-type	69	Head injury	4
Cluster	0.1	Vascular disorders	1
Idiopathic stabbing	2	Subarachnoid hemorrhage	<1
Exertion	1	Brain tumor	0.1

Source: After J Olesen et al: *The Headaches*. Philadelphia, Lippincott, Williams & Wilkins, 2005.

Common location of Headache



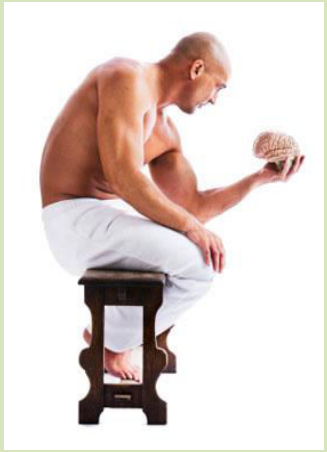
Headaches

Sinus:
pain is behind browbone and/or cheekbones

Cluster:
pain is in and around one eye

Tension:
pain is like a band squeezing the head

Migraine:
pain, nausea and visual changes are typical of classic form



MIGRAINE

- Migraine is a chronic neurological disorder characterized by moderate to severe headaches and nausea.
- Three times more common in women than in men.

Migraine (Cont.)

Aetiology:

- A congenital predisposition.
- An initiating factors:

  head injury, meningitis, emotional changes, hormonal changes (puberty, pregnancy, pill).
- Triggering factors:

  hunger, certain foods- cheese, chocolate, alcohol, citrus fruits, sleep-too much or too little.

Migraine (Cont.)

- The word derives from the Greek (*hemikrania*), "pain on one side of the head", from - (*hemi-*), "half", and (*kranion*), "skull".

- The typical migraine headache is:
  - ♦ unilateral (affecting one half of the head).
  - ♦ pulsating in nature.
  - ♦ lasting from 4 to 72 hours;
  - ♦ symptoms include nausea, vomiting, photophobia , phonophobia .

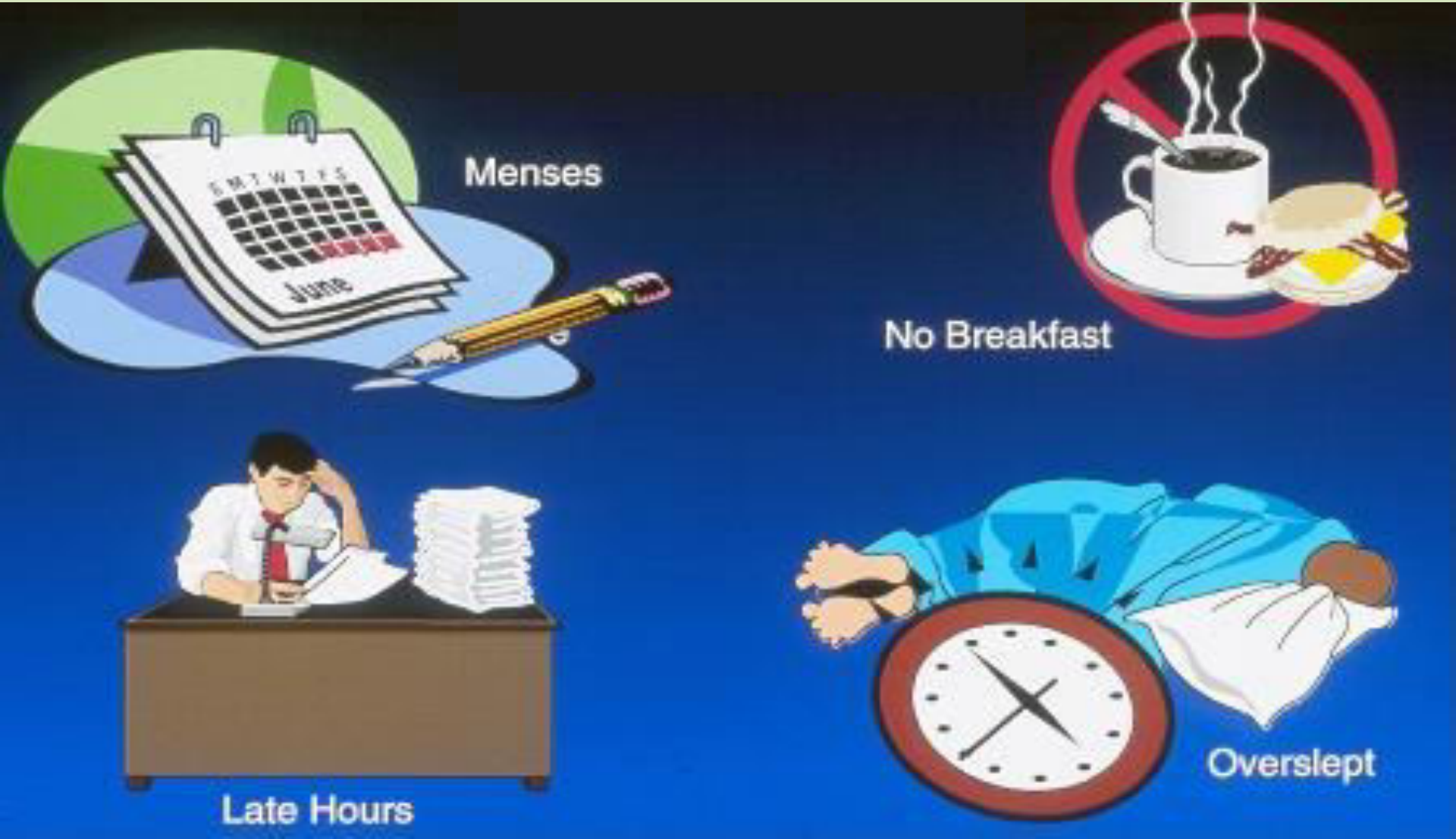
- One-third of people perceive an aura—unusual visual, olfactory, or other sensory experiences that are a sign that the migraine will soon occur.

Migraine (Cont.)

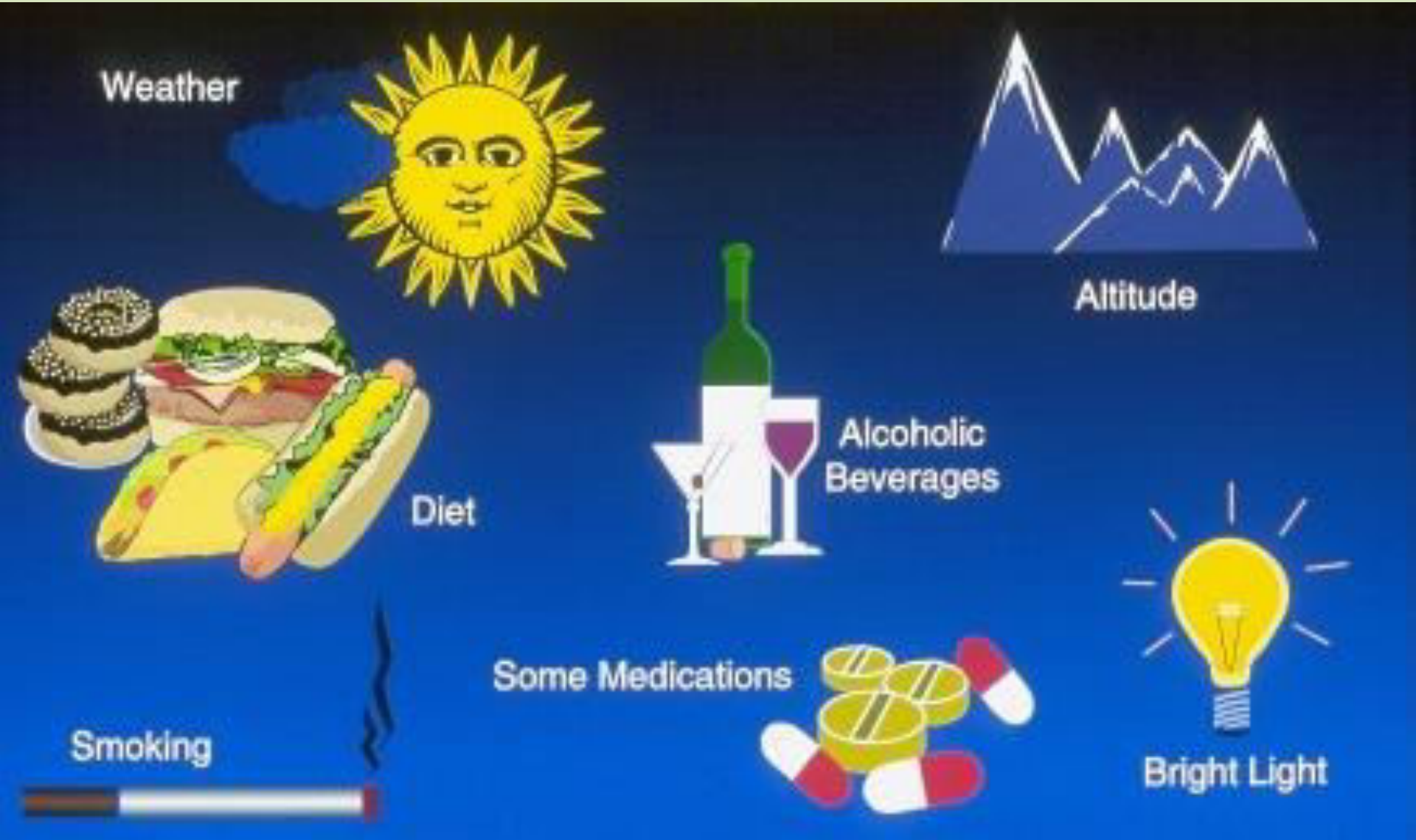
Treatment:

- Expansion and reassurance.
- Prevention by avoiding precipitating factors.
- Aborting attacks:
  - Metoclopramide for nausea,
  - Aspirin or paracetamol for pain.
- Propranolol or Pizotifen.

Triggers: changes in daily cycle



Triggers: Environment or Diet

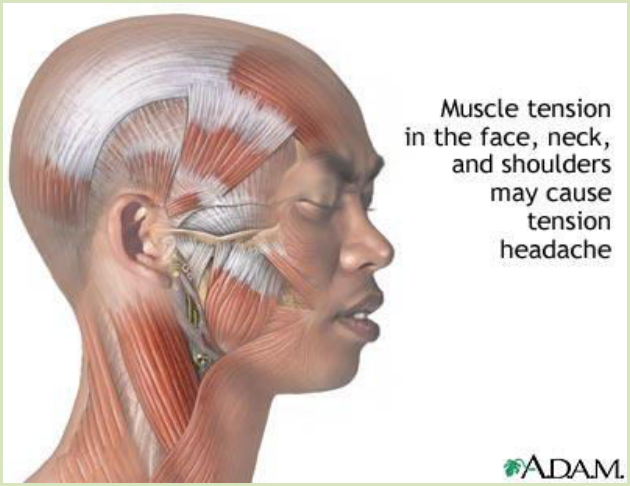


Triggers: Mental

TENSION-TYPE HEADACHE

- Chronic head-pain syndrome characterized by bilateral tight, band like discomfort.
- The pain typically builds slowly, fluctuates in severity, and may persist more or less continuously for many days.
- The headache may be episodic or chronic (present >15 days per month).

PATHOPHYSIOLOGY



- The patho physiology of TTH is *incompletely understood*.
- May be due to;
  - primary disorder of CNS pain modulation.
  - genetic contribution.
  - Muscle contraction.

Triggers of tension headaches

- Alcohol use.
- Caffeine (too much or withdrawal).
- Colds and the flu.
- Dental problems such as jaw clenching or teeth grinding.
- Eye strain.
- Excessive smoking.
- Fatigue.
- Nasal congestion.
- Overexertion.
- Sinus infection.

Symptoms of TTH

- Dull, pressure like (not throbbing).
- A tight band around the head.
- All over (not just in one point or one side).
- Less in the morning, more in the evening.
- Pain is less when the patient is occupied.
- Pain may last for 30 minutes to 7 days.
- may be triggered by stress, fatigue, noise, or glare.
- There may be difficulty sleeping.
- *Usually do not cause nausea or vomiting*.

Signs and tests TTH

- A tension headache reveals no abnormal findings on a neurological examination.
- Tender points (trigger points) in the muscles are often seen in the neck and shoulder areas.
- *Usually does not respond to analgesics*.

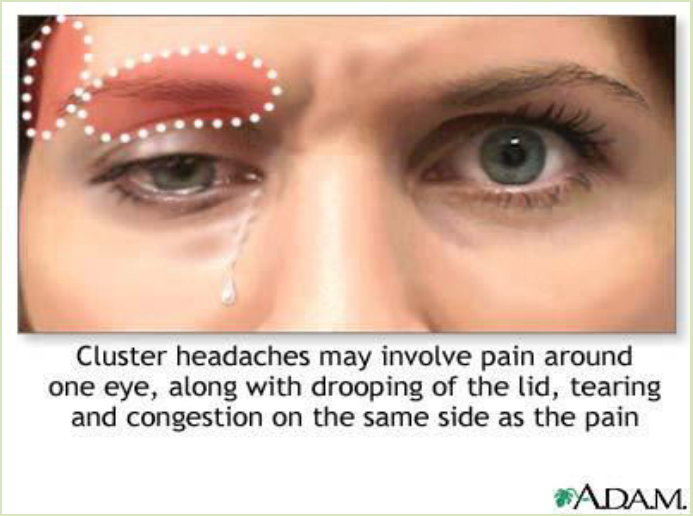
Treatment Of TTH

- Analgesics: Paracetamol, Aspirin, Ibuprofen.
- Sedatives.
- Both analgesics and sedatives are widely used.
- Anti depressant: Amitriptyline.

Cluster Headache

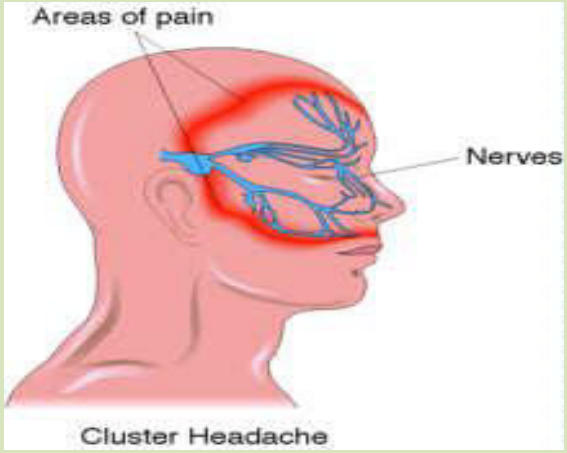
Cluster headache, nicknamed "**suicide headache**", is a neurological disease that involves an immense degree of pain.

Symptoms and Signs



- Excruciating unilateral headaches of extreme intensity.
- Duration 15 minutes to three hours or more.
- The onset of an attack is rapid, and most often without the preliminary signs that are characteristic of a migraine.
- Somebody have "*shadows*" (like aura in migraine)
- Somebody have "*side-shifting*"

Presentation of Cluster Headaches



- Periodic, severe pain.
- Unilateral lacrimation.
- Nasal congestion.
- Conjunctival congestion.
- The pain is characteristically brief (30-90 minutes).
- Typically, the patient develops these symptoms at a particular time of day (often in the early hours of the morning).

Treatment of Cluster Headache

- Ergotamine Tartrate by mouth ,inhalation or suppository 2 hours or more before an attack.
- Methylesergide, 1-2 mg tds.
- Analgesics.
- Oxygen inhalation.

Trigeminal neuralgia (tic douloureux)

A specific clinical syndrome in which there is recurring paroxysmal pain of brief duration (a matter of second), within the territory of the trigeminal nerve.

Trigeminal neuralgia

Aetiology:

- The cause is unknown.
- Females are more commonly affected than males.
- The ratio of about 3:2.
- Occurs mostly over the age of 50.

Clinical features of TGN

- Episodes of intense facial pain that last from a few seconds to several minutes or hours.
- There may be a trigger area on the face .
- Triggered by
  - eating, talking, shaving and brushing teeth.
  - Wind, high pitched sounds, loud noises
- Attacks are like stabbing, electric shocks, burning, or shooting pain.

Trigeminal neuralgia (cont.)

- Diagnosis:

  Certain strict criteria must be observed-

- Pain is unilateral.
- Pain is trigeminal.
- Pain is severe.
- Pain is paroxysmal.
- Pain is precipitated.
- There are no abnormal signs relevant to the trigeminal or any other cranial nerves.

Trigeminal neuralgia (cont.)

Treatment:

1. Carbamazepine (Tegretol) is effective, beginning with a small dose- 100 mg b.d. then t.d.s. then 200 mg b.d. then t.d.s.

2. Radical treatment in severe cases.

Destruction of sensory ganglion by thermo coagulation or electrolysis.

Headache in elderly

- **Tension type headache**
- **Migraine variant**
- **Giant cell arteritis ****
- **Cervical Spondylosis**
- **Postraumatic headache****
- **Secondary Headaches**


THANK YOU