HEADACHE

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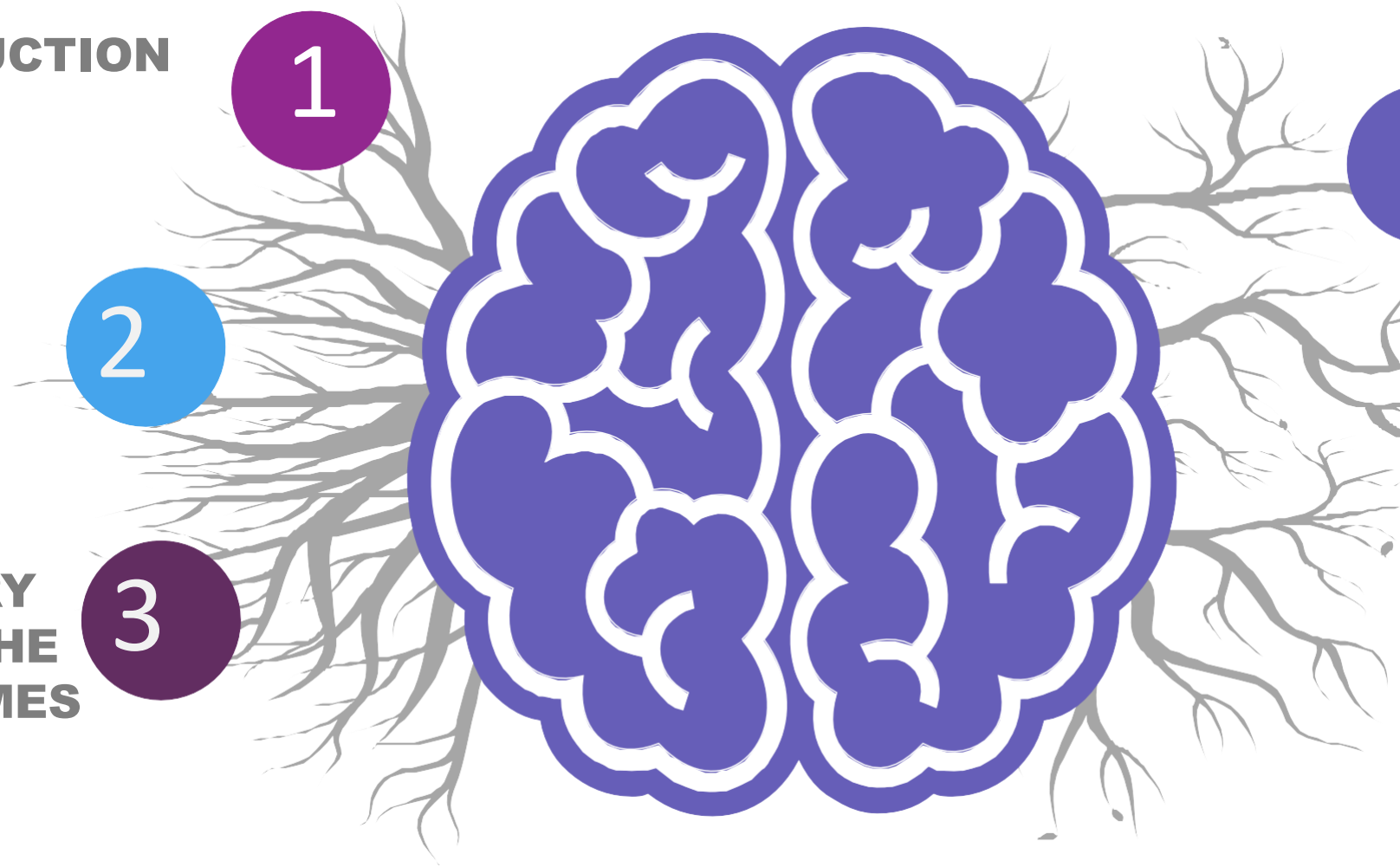


1 INTRODUCTION

Introduction

- Definition : A headache is a pain or discomfort in the head , scalp , or neck
- One of the most common of all human physical complaints.
- Headache is actually a symptom rather than a disease a stress response, vasodilation (migraine),skeletal muscle tension (tension headache), or a combination of factors.

Worldwide problem

- Up to 25% of adults have a severe headache each year
- Up to 4% have daily or near-daily headache

- Lifetime prevalence: 90%or more
- Significant suffering and economic loss

2 TYPES

Classification

I. PRIMARY HEADCHE

- A headache that is not caused by another **underlying disease, trauma or medical condition**.
- Accounts for about **ninety percent** of all headaches.

Cont.

- Intrinsic dysfunction of the nervous system
- Most patients presenting with headache have primary headache syndromes
- Episodic (عرضي)headache: more common
- Chronic headache: attacks occurring more frequently than **15 days/month for more than 6 months**

II. SECONDARY HEADCHE

- %2>of headaches in primary care offices
- Caused by exogenous disorders:
  - Head trauma
  - Vascular disease
  - Neoplasms(الأورام)
  - Substance abuse or withdrawal
  - Infection/Inflammation
  - Metabolic disorders
  - others

3 PRIMARY HEADACHE SYNDROMES

➢ PRIMARY HEADACHE SYNDROMES

- Tension type headache
- Migraine
- Trigeminal Neuralgiaالتهاب العصب الثالث
- Cluster headacheالصداع العنقودي
- Others

I- TENSION TYPE

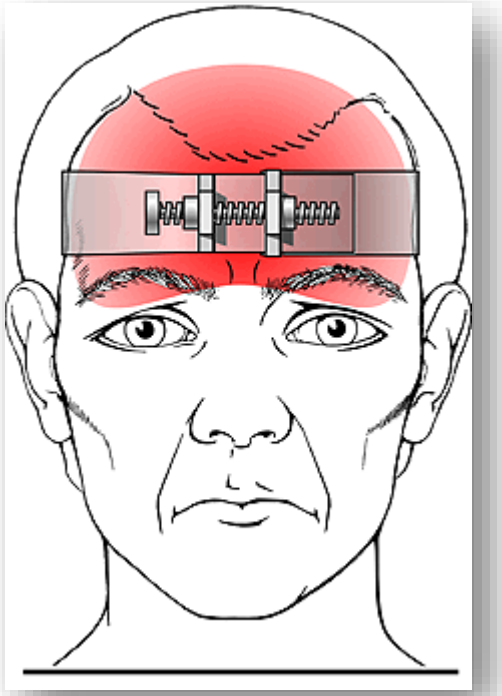
- Most common-69%
- Episodic or chronic
- Primary disorder of CNS pain modulation
- seen equally in both sexes

➢ Precipitating factors

- **Stress**: usually occurs in the afternoon after long stressful work hours or after an exam
- **Sleep deprivation**
- **Uncomfortable stressful position**
- Irregular meal time (hunger)
- Eyestrain
- Caffeine withdrawal
- Dehydration

Symptoms & Signs

- **Gradual onset** , radiate forward from back
- Two-sided, dull, tight, band like pain
- Less in morning, pain increase as day goes on
- **No** accompanying sensitivity to light, sound or movement

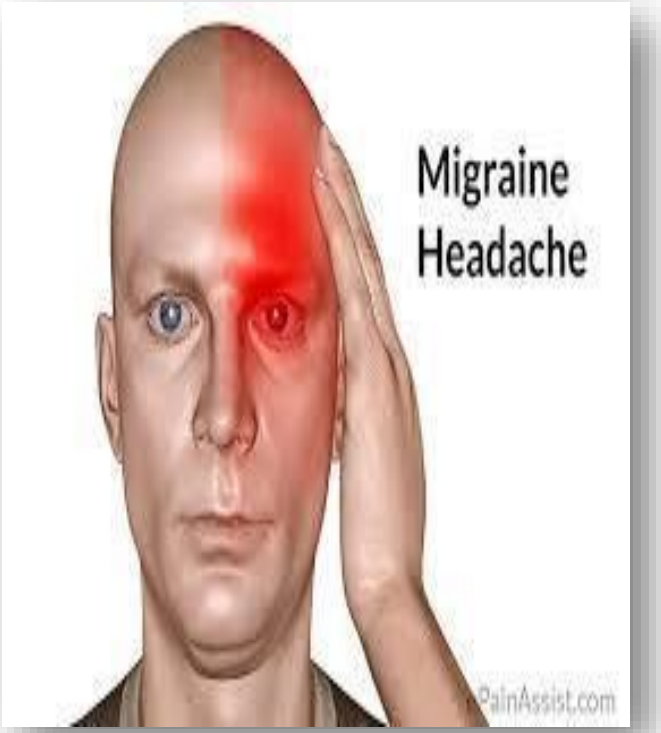


➢ Management

- Paracetamol,Aspirin,NSAIDs
- Behavioral approach-relaxation
- Chronic-amitriptyline

II- MIGRAINE

- 2nd most common-16%
- %15women and 6% men
- Severe, episodic ,one side, throbbing pain
- Nausea,Vomiting
- Sensitivity to light ,sound, movement
- Genetic predisposition



Pathophysiology

- Different theories suggest different causes

I. Vascular theory:

- **vasoconstriction** followed by **vasodilation** with resulting in changes in blood flow causes the throbbing pain.

II. Second theory:

- pain results from **muscular tension**

III. Biochemical changes:

- changes in **serotonin level**

Triggers

- Flashing lights , Loud sounds , Strong odors
- Stress
- Hunger
- Fatigue
- Smoking
- Pregnancy , Menopause , Oral Contraceptives
- Sleep changes
- Caffeine ,Chocolate ,Tyramine

Diagnosis

- ## Simplified Diagnostic Criteria for MIGRAINE

At least 2 of the following	*+At least 1 of the following:*
○ Unilateral pain ○ Throbbing pain ○ Increased by movement ○ Moderate or severe intensity	○ Nausea/vomitting ○ Photophobia and phonophobia

Management

- Non drug treatmenr
- Preventive therapy
- Abortive therapy

Management

➢ Non drug treatment

- Avoid headache triggers: foods, drugs, activities
- Avoid frequent abortive treatment
- Stop smoking
- Normalize sleeping and eating
- Exercise
- Relaxation and biofeedback
- Psychotherapy

Management

➢ Preventive Treatment

- Tricyclic antidepressants (first-line)
  - Amitriptyline
- Beta-blockers (first-line)
  - Atenolol, nadolol
- Ca++ channel blockers – less effective
  - Verapamil most commonly used

Management

➢ Preventive Treatment

- Anticonvulsants (second-line; valuable)
- Valproate and topiramate are quite effective
- Gabapentin
- Pregabalin

Management

➢ Abortive Treatment

- Simple and combined analgesics e.g NSAIDs.
- Mixed analgesics (barbiturate plus simple analgesics)
- Triptans
- Opioids

Management

❖ Triptans:

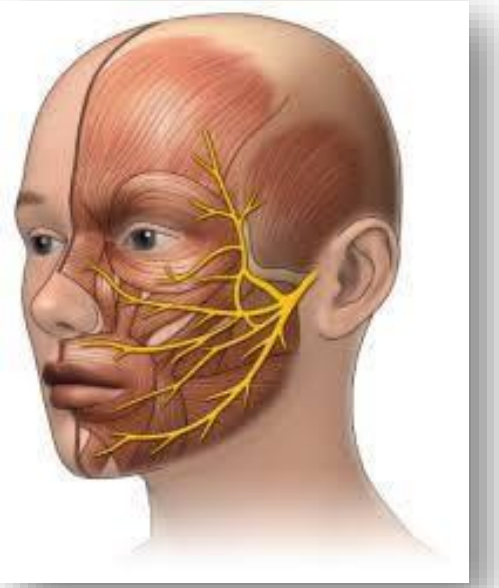
- Serotonin 5-HT1 agonists
- Reduce neurogenic inflammation
- Most effective if used at onset of headache, though may be helpful
- Used specifically for migraine

Management

➢ Other Agents

- Antiemetics/Neuroleptics:
  - often combined with abortive agents
  - Prochlorperazine, hydroxyzine, promethazine, metoclopramide

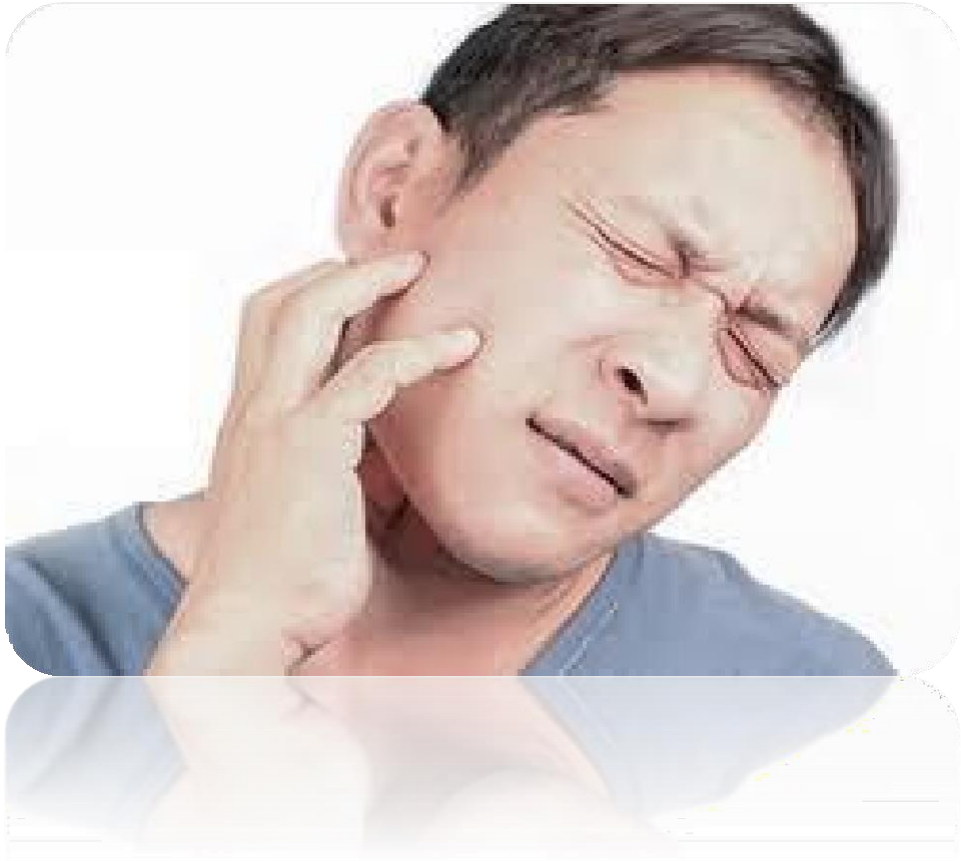
III- Trigeminal Neuralgia

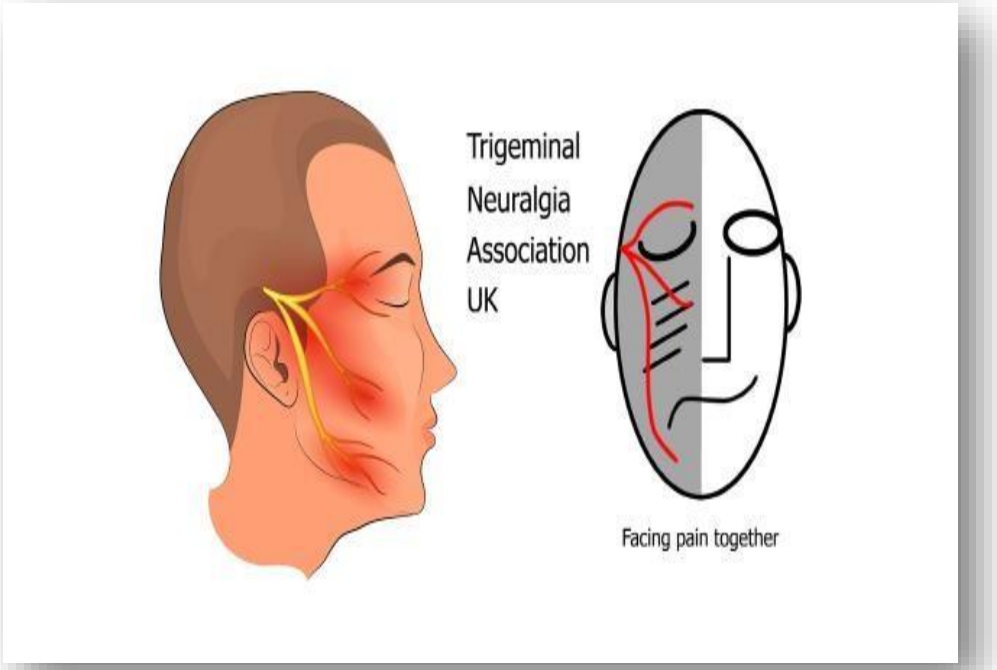


- Trigeminal neuralgia is a chronic pain condition that affects the trigeminal nerve, which carries sensation from your face to your brain.
- **occur in people who are older than 50.**

Trigeminal Neuralgia

Is sudden, severe facial pain. It's often described as a sharp shooting pain or like having an electric shock in the jaw, teeth or gums. It usually happens in short, unpredictable attacks that can last from a few seconds to about 2 minutes. The attacks stop as suddenly as they start.




Trigeminal
Neuralgia
Association
UK
Facing pain together

Management

- Carbamazepine
- Gabapentin/Pregabalin
- Injection of alcohol into peripheral branch of nerve

IV- CLUSTER HEADACHE

- Headaches occur during a short time period.
- A typical cluster of headaches may last 4-8weeks with 1-2 headaches/day during the cluster.
- Patient may be free 6months to 1year before another cluster of headache occurs.
- Male to Female ratio 5:1

Symptoms & Signs

- Sudden onset of headache originating in the eye and spreading over the temporal area.
- Pain extremely severe and last 20-60minutes
- The headache associated with

✓ Rhinorrhea

✓ Nasal congestion

✓ Redness of the Eye

✓ Swelling around the eye on the affected side


SWOLLEN OR DROOPY EYE
SMALL PUPILS
REDDENED CONJUNCTIVA
TEARING
NASAL DISCHARGE OR CONGESTION


CLUSTER HEADACHES
EXCRUCIATINGLY SEVERE, UNILATERAL HEADACHES WITH PAIN THAT USUALLY PEAKS IN 10 MINUTES AND LASTS UP TO 3 HOURS
THE ORBITAL, SUPRAORBITAL, AND TEMPORAL REGIONS ARE THE USUAL SITES OF PAIN
OCCUR SEVERAL TIMES PER DAY IN "CLUSTERS" FOLLOWED BY A PERIOD OF REMISSION
O2
FIRST-LINE PROPHYLAXIS IS WITH VERAPAMIL
IPSILATERAL AUTONOMIC SIGNS INCLUDING RHINORRHEA, LACRIMATION, MIOSIS, AND PTOSIS
ACUTE TREATMENT INCLUDES ADMINISTRATION OF 100% OXYGEN, SEROTONIN AGONISTS, AND ERGOTAMINES

Management

➢ Acute:

- Oxygen inhalation 100%
- Triptans/ergots
- Indomethacin

Management

➢ Chronic/Preventive:

- Verapamil, lithium
- Valproate, topiramate
- Prednisone burst
- Melatonin
- Ergots

Medication Overuse Headache

- Recurring headache in the setting of regular analgesic use
- Continues until medication is stopped
- Often responsible for “transformation” of episodic into chronic headache

Primary Headaches

Band-like Pressure

Tension-type headache

Half head Throbbing

Migraine

Periorbital Sharp

Cluster headache


Thanks
for Coming