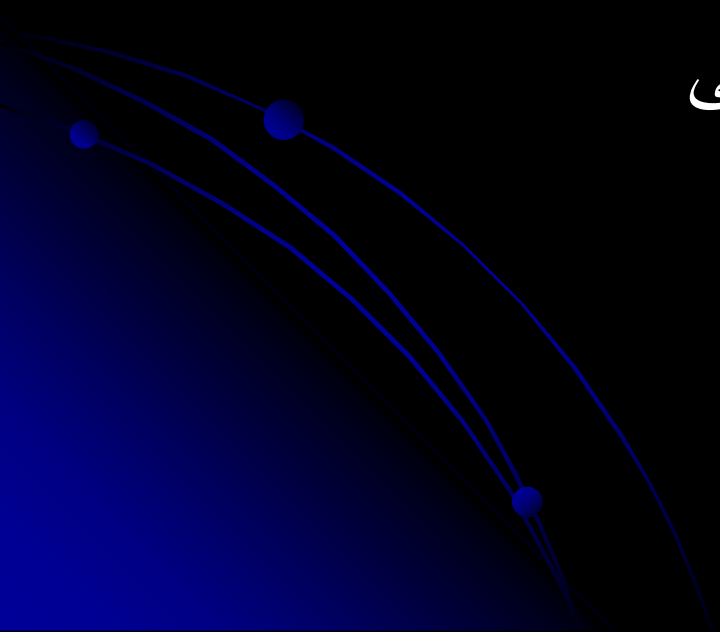


Tension headache:

دکتر فیروزه حسینی



Epidemiology

Preschool

1/3 will have had a headache

Migraine headache 0-7% of population

Schoolchildren

- 70% have ≥ 1 headache a year

Peak at 90% at age 12-13

Prevalence of recurrent headache 20-30%

Pathophysiology of Pain Sensation

- Extracranial structures: all sensitive to pain
- Intracranial structures: some sensitive, some not
 - Insensitive to pain: brain, ependymal lining, choroid plexus, dura mater, arachnoid, pia mater
 - Sensitive to pain: proximal portions of cerebral arteries, venous sinuses and the cerebral veins
- Attempting to locate the anatomic site of the pain source is difficult


Another Word About Epidemiology

- Causes of headache in the pediatric emergency department:

Viral Illness	39.2%
Sinusitis	16.0%
Migraine	15.6%
Post-traumatic Headache	6.6%
Strep Throat	4.9%
Tension Headache	<u>4.5%</u>
Total of benign causes	86.8%

- Burton LJ et al. "Headache etiology in a pediatric emergency department." *Pediatric Emergency Care* 1997. Feb; 13 (1): 1-4.

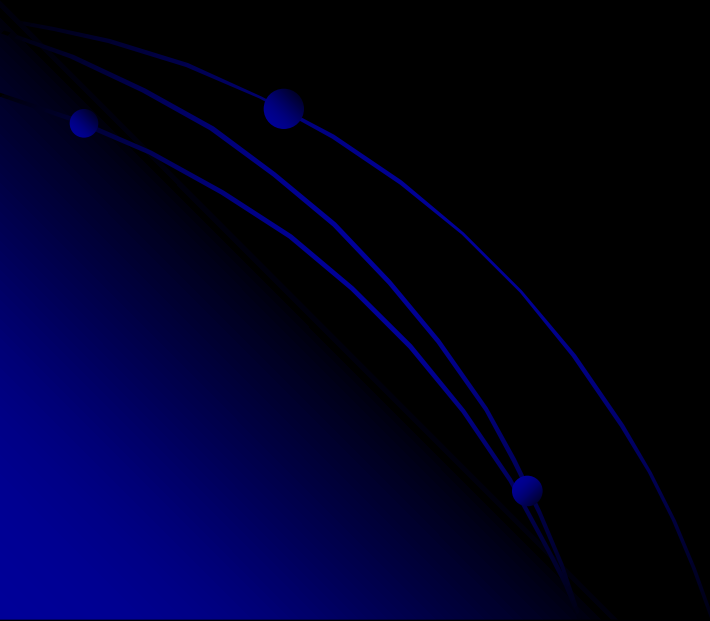
Primary vs Secondary Headache

- 10% of headaches seen in a specialist neurology / headache clinic are secondary in origin
 - Population prevalence of organic disease is likely to be lower
- 

Tension Headaches

- Characteristics of Tension Headaches:
 - Duration 30 minutes - 7 days
 - No aura
 - 2 out of 4 of following:
 - Pressing, tightening, band-like, dull
 - Nonpulsatile
 - Mild or moderate
 - Bilateral, often frontal
 - Not aggravated by physical activity
 - Both of following:
 - No nausea or vomiting
 - Photophobia or phonophobia (but not both)

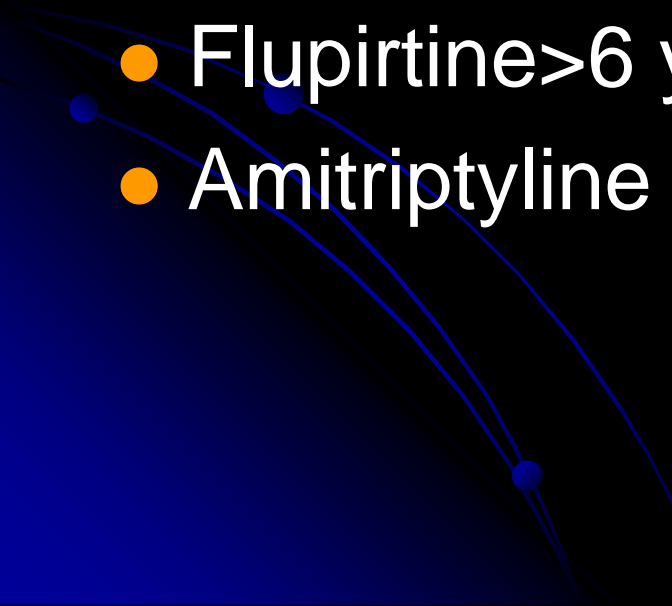
- حداقل ۱۰ حمله
- حداقل ۱۲ حمله در سال
- ۱ تا ۱۵ حمله در ماه مکرر
- بیش از ۱۵ حمله در ماه مزمن



CTTH

- No features suggestive of organic disease
 - Time of day
 - Postural manoeuvres
 - Associated symptoms
 - Time course
- Not classifiable as migraine
- Examination normal

Treatment:

- 1-life style
 - 2-drugs????
 - Drug for migraine headache
 - Analgesic.NAIDS.
 - Flupirtine>6 years
 - Amitriptyline
- 

Management

Explanation

Although not an organic disease, effects on life can be significant (school etc)

Treat attacks

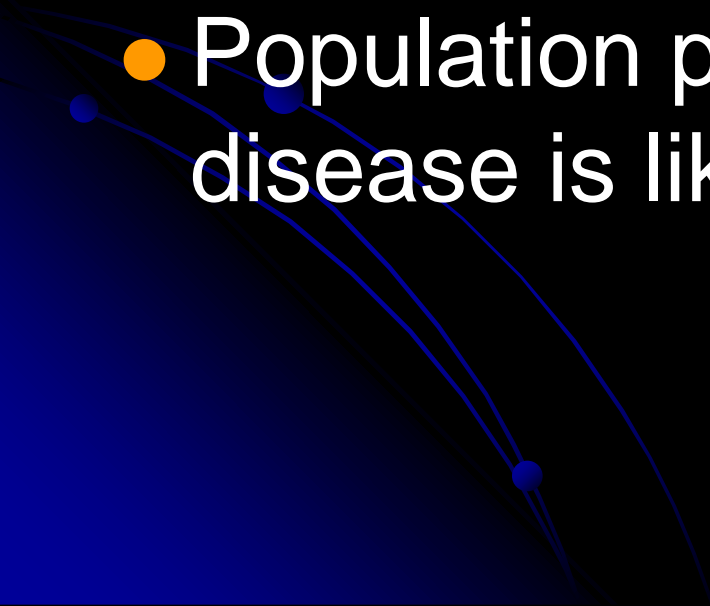
- Simple analgesia
- Avoid multiple drugs

Management

Prevention of attacks

- Sleep, diet(no caffeine), exercise hygiene
- Address anxiety (relaxation training, CBT, biofeedback)
- Maintain contact with school, try and attend but manage workload

Primary vs Secondary Headache

- 10% of headaches seen in a specialist neurology / headache clinic are secondary in origin
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- 

How to identify a secondary headache

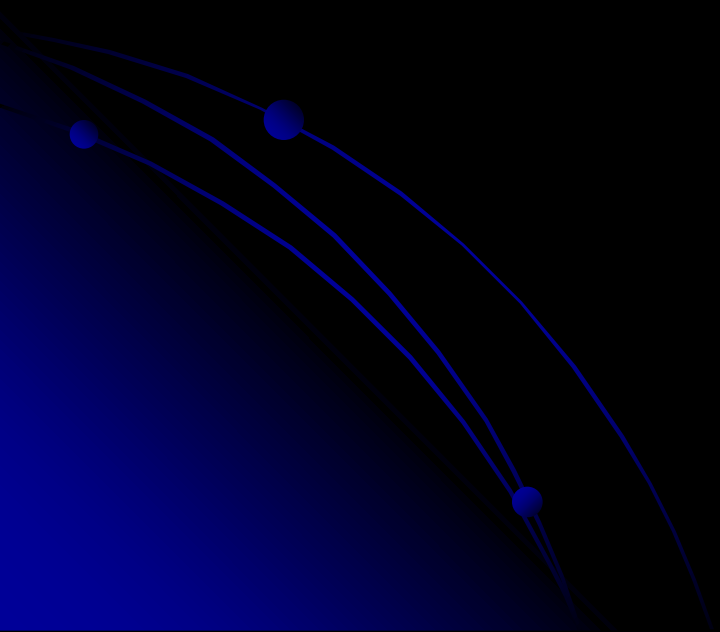
History

Examination

Brain Imaging

Indications

1. Timing of headache
2. Postural manoeuvres
3. Associated symptoms



Timing of Headache

Morning but from sleep,
before rising



Raised
Intracranial Pressure

Morning but
after getting up



Low Pressure
Headache

Postural Manoeuvres

Getting up relieves
headache

Coughing and straining
exacerbates it

Raised
Intracranial Pressure

Lying down
relieves headache

Low Pressure
Headache *or*
Sinusitis



Associated Symptoms

Frontal headache

Associations

Morning vomiting

Other neurology

Confusion

Raised
Intracranial Pressure

Frontal headache

Associations

Pain / paraesthesiae
across shoulders*

Blocked nose, facial pain^{sq}

Low Pressure
Headache* *or*
Sinusitis^{sq}

Management

2. Treatment of attacks

- Analgesia as soon as an attack starts
- Ibuprofen works best (one RCT)
- May be supplemented by anti-emetic
- Patients over 12 may respond to im, oral or nasal sanomigran (Imigran)

Management

3. Prevention – control of environment

- ‘Sleep hygiene’ – regular sleep
- ‘Diet hygiene’ – avoid long breaks ± snack before bed, avoid caffeine, low amine diet
- ‘Exercise hygiene’ – regular exercise, maintain hydration
- Avoid stress – relaxation training, CBT

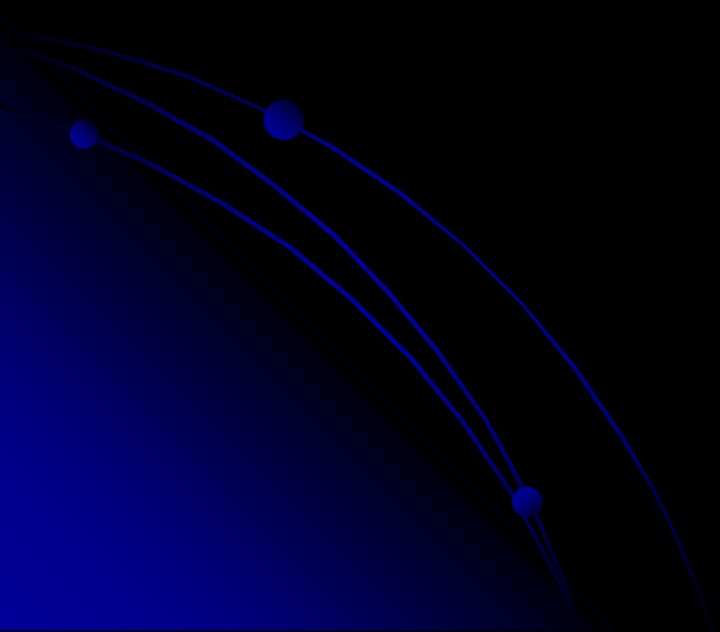
Management

4. Prevention – pharmacological

No magic bullet, trial basis only

- Pizotifen
- Propranolol
- Feverfew

Case 5



Case 5

10 year-old girl with 18 month history of

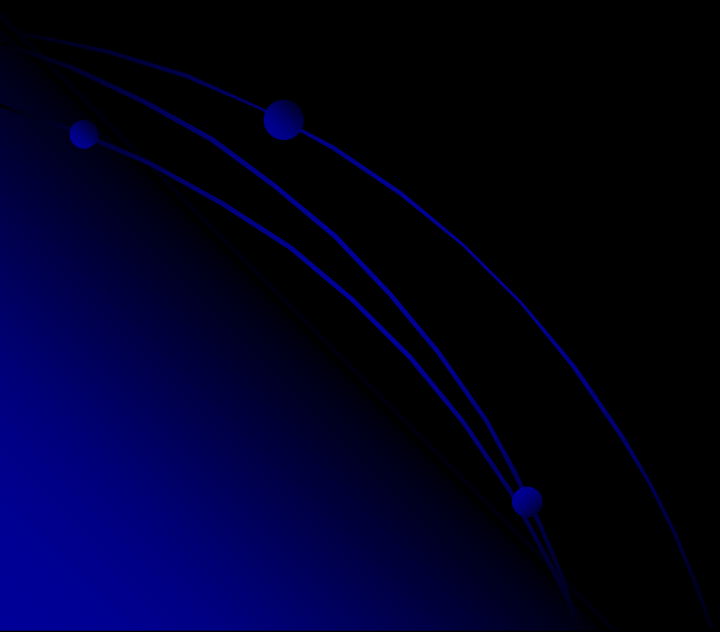
- Bilateral headache, mainly vertex
- Constant
- Comes on during day
- Not worsened by walking
- No aura or pallor / nausea
- 5/7 days a week, most weeks of the year

Case 5

- No family history
- Examination normal
- Local grammar school
- Predicted for A grades in 10 GSCEs
- No external sources of anxiety – stable home, not being bullied
- Trying to keep going to school

Case 5

- Alternating ibuprofen 400mg and co-codamol for headaches
- 'Nothing really works'



Chronic Tension-Type Headache

