What is Migraine?

Managing Your Migraine
Migraine Trust, 10th of March 2018

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MIGRAINE: definition

- Migraine is a complex condition with a wide variety of symptoms. For many people the main feature is a painful headache. Other symptoms include disturbed vision, sensitivity to light, sound and smells, feeling sick and vomiting. Migraines can be very frightening and may result in you having to lie still for several hours\(^1\).

- Neurobiologically based, common clinical syndrome characterized by recurrent episodic attacks of head pain which serve no protective purpose\(^2\)

- Abnormal reaction of the brain to normal stimuli: the brain reacts to normal stimuli like sunlight creating pain

1. [www.migrainetrust.org](http://www.migrainetrust.org)
2. [www.americanheadachesociety.org](http://www.americanheadachesociety.org)
The Burden of Migraine

- Most common DISABLING primary headache disorder

Epidemiology

- Prevalence: 8% of men,
  25% of women
  2% chronic migraine
- Onset often in teens
- Most sufferers aged 20 to 50

High impact

- Often under-diagnosed and under-treated
- Societal impact: family, job
- Socioeconomic: work days lost, reduced productivity
- WHO rank it in their top 20 most disabling conditions
Migraine in the UK

- Migraine affects 6 million people in the UK
- 90,000 people are absent from work or school per day as a result of migraine
- A third of migraineurs experience significant disability as a result of their attacks
- Migraine costs the UK economy over £1bn each year
What is a migraine?

‘Born with a migraine brain’
• Exposed to triggers

Temporary brain malfunction
• Premonitory phase
• Aura
• Headache
• Postdrome

Enduring sensitivity to sensory stimuli between attacks

NOT life threatening
NOT curable BUT treatable
CLINICAL PHASES OF A MIGRAINE ATTACK

- Attack Initiation
- Vulnerability
- Prodrome
- Aura
- Headache
- Postdrome

Time

Blau JN. Lancet. 1992
Migraine triggers

- Stress 75%
- Hormones 65%
- Not eating 55%
- Weather 50%
- Sleep disturbance 45%
- Perfume / odour 45%
- Neck pain 40%
- Lights 40%
- Alcohol 40%
- Smoke 35%
- Sleeping late 30%
- Heat 25%
- Food 25%
- Exercise 20%
- Sex 5%
- Dehydration
- Diet
- Environmental stimuli
- Changes in oestrogen level in women
Migraine, prodromes

• Several hours before, and sometimes even the day before.

• Up to 60% of patients

• Multiple symptoms:
  – Either unusually energetic and excitable or depressed
  – Irritable
  – Thirsty
  – Cravings for certain foods
  – Sleepy, with frequent yawning
  – Need to urinate more
Migraine, aura

Fully reversible, focal symptoms

Visual > Sensory > Language
- (Also motor, loss of consciousness, balance problems, vertigo, but not considered typical)
- Maybe multiple and prolonged

Gradual onset > 5 mins
Usually last < 60 mins

Usually precedes / accompanies headache
The visual aura

• Negative visual phenomenon (scotomas)

• Positive visual phenomenon (hallucinations)

• Perceptual disturbances
Scintillating scotoma

Silberstein

Lashley 1941
Fortification

Bourtange fort
Perceptual alterations

‘Alice in wonderland’
Lewis Carroll
The sensory aura

- Dynamic
- Tingling or "pins and needles" sensations in the body
- It may also cause numbness
- Often affect the face and hands but can spread out across the body
The dysphasic aura

- Language problems
- Difficulty expressing thoughts while speaking or writing
- Trouble understanding spoken or written words
- Confusion
- Trouble concentrating
Migraine, headache

- Disabling
- One side or both
- Usually throbbing
- Lasts hours to days
- Nausea ± vomiting
- Intolerant of noise, light, smells, touch, movement.
- Worsened by activity
- RETIRE TO DARK QUIET ROOM, LIE STILL, SLEEP
Migraine, postdromes

• Several hours after, and sometimes even the day after.

• Multiple symptoms:
  – Extreme tiredness
  – Sluggishness
  – Confusion
  – Headache with minimal triggers
  – Euphoria
Migraine vs Tension type headache

“Pure” migraine

Migraine > TTH

Migraine = TTH

TTH > Migraine

“Pure” tension type
Types of Migraine

1. Migraine
   1.1 Migraine without aura
   1.2 Migraine with aura
      1.2.1 Migraine with typical aura
         1.2.1.1 Typical aura with headache
         1.2.1.2 Typical aura without headache
      1.2.2 Migraine with brainstem aura
      1.2.3 Hemiplegic migraine
         1.2.3.1 Familial hemiplegic migraine (FHM)
         1.2.3.2 Sporadic hemiplegic migraine
      1.2.4 Retinal migraine
   1.3 Chronic migraine
   1.4 Complications of migraine
      1.4.1 Status migranosus
      1.4.2 Persistent aura without infarction
      1.4.3 Migrainous infarction
      1.4.4 Migraine aura-triggered seizure
   1.5 Probable migraine
      1.5.1 Probable migraine without aura
      1.5.2 Probable migraine with aura
Transformation of Migraine into Daily Chronic headache

Chronic migraine:
>15 days/month, > 3 months
>8 days are migranous

Risk factors:
- High frequency episodic migraine
- Medication overuse
- Obesity

Severity

Time
Migraine has influenced artists .....
Alice Cooper: "Aspirin Damage" from LP album "Flush the Fashion" (1980) – "I get these killer headaches / I get one everyday / I wake up with a migraine / Since you ran away..."

Migraine Eyes is a band from Finland that plays energetic and melodic alternative rock/metal
Questions?