

南區頭痛讀書會

2011/07/24 方楨文

Case report

Identity information

- Mr. 張.
 - A 24-year-old male.
 - History of spontaneous pneumothorax in 2010/Dec.
 - No regular medications.
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- Dizziness and heavy sensation of head for 3 months.

History

- Intermittent. Dizziness without vertigo.
- Duration 50-60 minutes.
- Frequency 1/ every 2-3 days.
- Accompanied symptoms:
 - Nausea (+). Vomiting (-). Headache (-).
 - Tinnitus (-). Blurred vision (-).
- No specific precipitating factors.
- Aggravated with bright light. motion.

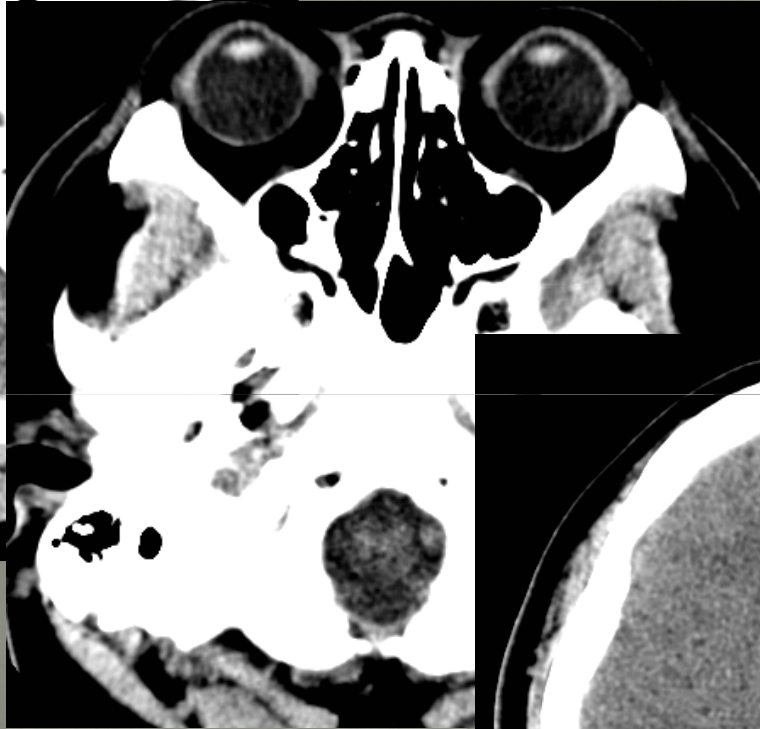
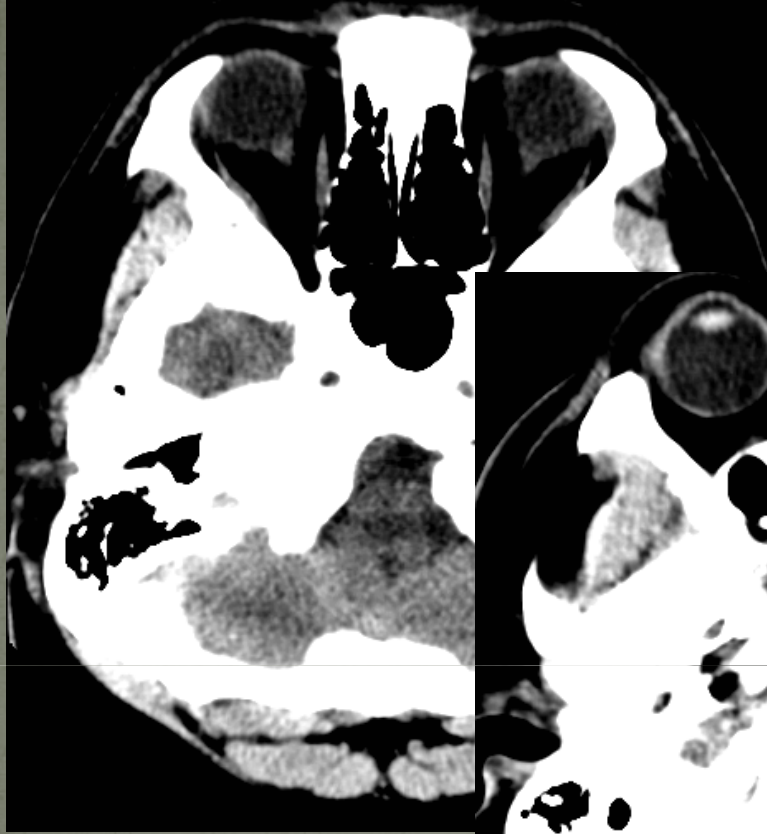
History

- But, precipitated with a light spot over left side.
 - Crescent shape. Shimmering and flashing.
 - Immobile. No change in size.



History

- Arranged ophthalmologist OPD
 - Negative of retinopathy
- Arranged EEG – Normal
- Arranged Brain CT (non-contrast)
 - No specific organic brain lesions.



Diagnosis

- Suspected typical migraine aura without headache
 - Give inderal 1# bid po. Diphenidol 1# bid po.

Treatment

- 2 weeks later
 - Less scotoma and dizziness.
 - Still got mild photophobia.
 - Keep medications for another 1 month
- 1 month later
 - No more scotoma and only rare dizziness.
 - Taper inderal and diphenidol to qd dosage.

Discussion

Migraine without headache

- Long been noticed since 1960'.
 - Sixty-one patients with acephalgic migraine.
 - Age 21-61 years old.
 - Mentioned various presentation of visual aura.
 - Scintillation. Hemianopia. Central scotoma. Diplopia. Altitudinal field loss. Tunnel vision. Temporal crescent.
- *Ophthalmology 1981;88:999-1003*

Various names in evolution

- Acephalgic migraine
- Silent migraine
- Sans-migraine
- Migraine equivalent
- Migraine variant
- Eye migraine
- Visual migraine
- Ocular migraine
- Painless migraine
- **ICHD II - Typical migraine aura without headache.**

1.2.3 Typical aura without headache

Description:

- Typical aura consisting of **visual and/or sensory symptoms** with or without speech symptoms. Gradual development, duration no longer than one hour, a mix of positive and negative features and complete reversibility characterise the aura **which is not associated with headache**.

Diagnostic criteria:

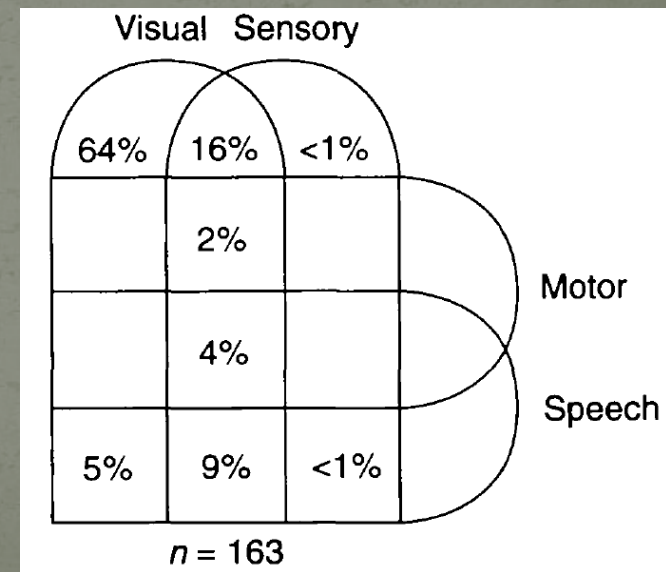
- A. At least 2 attacks fulfilling criteria B–D
- B. Aura consisting of at least one of the following, with or without speech disturbance but **no motor weakness**:
 1. fully reversible **visual** symptoms including **positive features** (eg, flickering lights, spots or lines) and/or negative features (ie, loss of vision)
 2. fully reversible **sensory** symptoms including positive features (ie, pins and needles) and/or negative features (ie, numbness)
- C. At least two of the following:
 1. **homonymous visual** symptoms¹ and/or unilateral sensory symptoms
 2. at least one aura symptom develops gradually **over ≥ 5 minutes** and/or different aura symptoms occur in succession over ≥ 5 minutes
 3. each symptom **lasts ≥ 5 and ≤ 60 minutes**
- D. Headache does not occur during aura nor follow aura within 60 minutes
- E. Not attributed to another disorder²

Prevalence

- Hard to estimate.
- The prevalence of migraine is hard to estimate in the first. Only half of migraineurs seek medical consultation.
 - Neurology. 2002 Mar 26;58(6):885-94
- People with migraine aura only usually went to an eye clinic, which lack the experience of migraine.

A nosographic analysis of the migraine aura in a general population

- 4000 people in 40 y/o in Copenhagen.
- Questionnaires and telephone interview.
- 163 people noticed migraine headache with aura.
 - Mostly visual and followed by sensory, speech and motor.



- In the 163 people
 - 62 people suffered from both migraine aura with and without headache
 - 7 people suffered from exclusive migraine aura without headache
- Approximately **0.175%** (7/4000) in a general population and **4.2%** (7/163) in migraine with aura.
- Almost **38%** (62/163) patient of migraine with aura suffered sometimes with migraine aura without headache.

Brain (1996), **119**, 355–361

Migrainous Visual Accompaniments Are Not Rare in Late Life

The Framingham Study

- 2110 people between 30-60 years old.
- Attended at least 6 bi-ennial exam during 1971-1989
- 26 people (1.23%.) had sudden visual defect compatible with migrainous aura.
- 15 people had spells never occurred with headache.
 - 58% (15/26) in people with migrainous aura
 - **0.71%** (15/2110) in general population.
 - M/F: 0.72%/0.70%

Prevalence of typical migraine aura without headache in Japanese ophthalmology clinics

- Conducted in several eye clinics and a university hospital
- Questionnaire
 - (ID migraine screener) + 6 questions.
- 1914 with 1063 valid reply.

ID Migraine™ (cont)

During the last 3 months, did you have the following with your headaches?

1. Felt nauseated or sick to your stomach?

Yes ____ No ____

2. Light bothered you (a lot more than when you don't have headaches)?

Yes ____ No ____

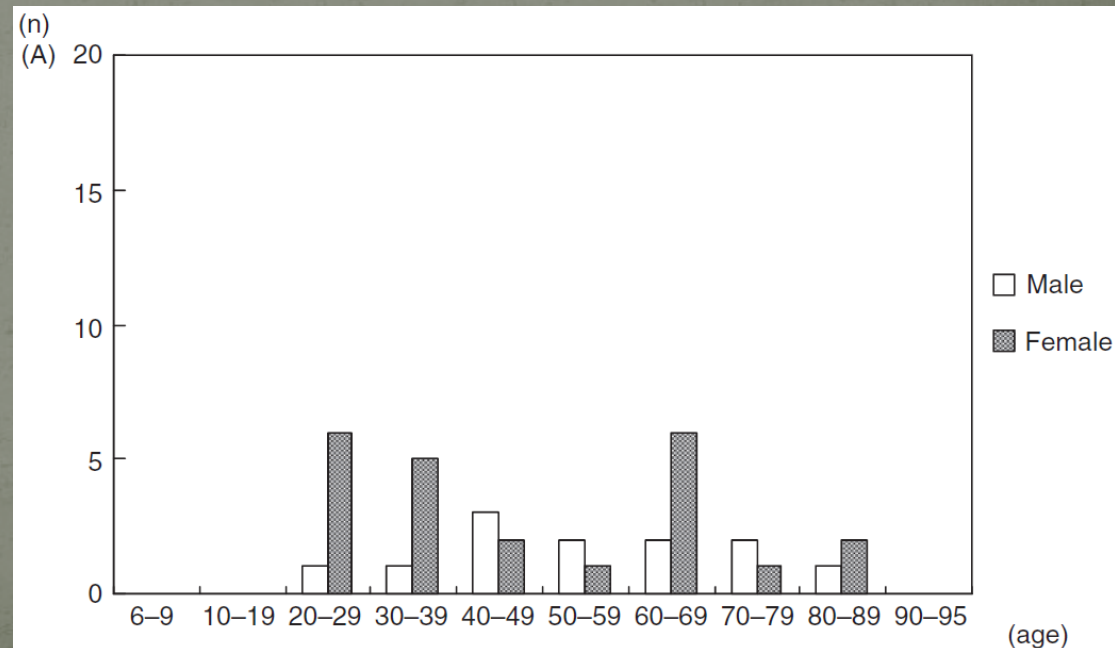
3. Your headaches limited your ability to work, study, or do what you needed to do?

Yes ____ No ____

- Q₁: Presence of visual aura?
- Q₂: Presence of sensory aura?
- Q₃: Frequency? (≥ 2)
- Q₄: Duration? (≥ 5 mins and ≤ 60 mins)
- Q₅: No headache after aura?
- Q₆: No past history of stroke.

Results

- 35 patients (M:F = 12: 23) in 1063 (3.29%) were diagnosed as typical migraine aura without headache.
- Median age 47 y/o (23-87 years old)
- Bi-phasic distribution.



- Less percentage of family history in migraine without headache. (24%)

- Ophthalmology. 1981;88:999-1003

- Almost half (44 %) of migraineurs with aura had attacks of aura without headache.

- Semin Neurol. 1995; 15:175-182

- 2 studies of 53 and 81 patients with migraine with aura followed for 10-20 years showed 7(13%) and 8 (11%) patients shifted to typical migraine aura without headache.

- Cephalalgia. 1998 Dec;18(10):690-6

- Cephalalgia. 2004 Jan;24 : 118-22

Differential diagnosis

- Due to the absence of headache, typical migraine aura without headache depends on history and laboratory results to rule out other etiologies.
- Visual aura compared with TIA or retinal disease
 - Typically moves and grows
 - Bright and shimmering
 - Duration around 15-30 minutes. (3-10 mins in TIA and >60 mins in retinal disease)

- Neurosensory symptoms compared with TIA and seizure
 - Paresthesia rather than hypesthesia
 - Marching slowly in minutes and may cross midline
 - The area of onset usually clears first

Treatment

- Elimination of particular triggers
 - Smoking cessation. Avoid hormonal replacement therapy and birth control pills.
- Acute treatment
 - Give NSAID or short acting beta blocker
 - Triptans and ergotamine is not suited due to vasoconstriction.
- Preventive treatment
 - Beta-blocker. TCAs. Calcium channel blocker.
 - No evidence of particularly effective medications.

Take home messages

- Typical migraine aura without headache is long been noticed but less emphasized due to rarity in the pure form.
 - 38-58 % of aura without headache in migraineurs with aura.
 - 0.175-0.71% in general population
- Laboratory study is needed to rule out other etiologies in atypical cases.
- Avoid ergot and triptan in treatment, if needed.

Thanks for your attention.
