Chapter 56

The Young Woman with Pain in the Head

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Case History

A 28-year-old woman began to experience pain 3 years ago, prior to presentation at the clinic. Her pain had the following features: it was felt strictly on the right side, sometimes dull, sometimes throbbing, very disturbing, and at times so severe that she had to go to bed. In the beginning, the pain used to last for 6 to 12 hours, on a weekly basis. After some months, the pain was present every day. In the last months, the pain was also felt on the left side of her head.

She underwent corrective procedures (dental appliances and surgery) with small, if any, benefit.

After 2 years of attending a dentistry clinic, she was referred to a neurosurgeon for assessment as a case of possible atypical tic douloureux. The neurosurgeon decided to send her to the Neurology Clinic, prior to performing an invasive treatment for her pain.

As well as headache, she had many accompanying symptoms such as photophobia, phonophobia, and infrequently, nausea. There was a worsening of her pain intensity with head movements, and there was an increase in her pain during her periods. Her physical examination was unremarkable, except for pain when pressure was applied to her temporomandibular joints (TMJs) bilaterally, being more intense on the right side.

Questions on the Case

Please read the questions, try to answer them, and reflect on your answers before reading the author's discussion.

- What are the possible diagnoses in this case?
- Is there something lacking in order to fulfill the International Headache Society (IHS) criteria for migraine?
- If so, what is missing?
- How would you manage this case?

Case Discussion

The patient's history is suggestive of migraine. The missing feature is the pain *location*. Migraine is said to be a *headache*, meaning a pain felt above an imaginary line linking the outer canthus of the eye to the tragus of the ear.

Even though migraine headaches are usually felt in anterior temporal, supraorbital, or orbital areas, other areas may be the main site of the pain.

In our patient, the pain was felt on the cheek and on the TMJ area. This characteristic led her to seek out a dental opinion.

Exploring the diagnostic reasoning in this case, we recall an old saying in the headache field that states that when something goes wrong in a given case, first of all, take a detailed history, and if it is necessary, repeat it. We have reported the history as it occurred in this case. As a result, special attention was paid to the migrainous features of her headache and not to the main site of pain.

When this was done, this patient would then fulfill criteria for migraine without aura; however, there was an important detail—it was not a *headache* by traditional anatomic location noted above.

In the IHS classification, there is only a short citation on lower-half headache (Table 56-1). A search of the American Headache Society/International Headache Society CD for lower-half headache yielded 75 entries, most of them papers published prior to 1988.

During the 1960s and 1970s, it could be noticed that there was grosso modo two concepts about lower-half headache:

1. It is something related to Sluder's neuralgia or cluster headache. As could be seen even in the now outdated *Classification of Headache* of the Ad Hoc Committee, the variety 1 concerns "vascular headache of migraine type." This category covers a large variety of separate entities such as "lower-half headache,"

believed to be due to a vascular mechanism. It includes atypical facial neuralgia and sphenopalatine ganglion neuralgia of Sluder.
2. Some authors, such as Lance in his monograph, consider lower-half headache as a synonym for facial migraine, and intend that this condition would be essentially a variety of migraine, with pain below the level of the eyes, whose management would be the same as that of migraine.

Also noteworthy is that neither in the Ad Hoc Committee classification, nor in Lance's monograph, could we find proper references with detailed papers about these issues.

As a matter of fact, after 1988, the term lower-half headache has barely been seen in the headache literature.

Even with this unusual background of lower-half headache, our case was managed as a migraine. Amitriptyline 25 mg per day along with propranolol 60 mg per day were introduced. Her pain was markedly reduced. Some months later, only some menstrual attacks remained. She has been doing well in the 3-year follow-up period.

It should be noted that atypical facial pain (IHS 1988, 12.8; see Table 56-1) would be a differential diagnosis. This is a challenging condition, usually refractory to all forms of treatments. Thus, due to the presence of the striking migrainous features and the response to migraine treatment, the diagnosis more probably would be a migrainous disorder under the old IHS criteria (1988) as well as the new (2004; Table 56-2).

Table 56-1. Classification of Migraine, after the International Headache Society Classification 1988

1.7 Migrainous Disorder Not Fulfilling above Criteria
Description: Headache attacks that are believed to be a form of migraine, but which do not quite meet the operational diagnostic criteria for any of the forms of migraine
Diagnostic criteria: A. Fulfils all criteria but one, for one or more forms of migraine (specify type(s)) B. Does not fulfill criteria for tension-type headache
Comment: Patients who do not have sufficient numbers of otherwise typical attacks to fulfill criteria should be coded here, as should patients with sufficient numbers of attacks that fulfill all criteria but one. Cyclic migraine, lower-half headache, facial migraine, hemicrania continua, and cervical migraine are not sufficiently validated.
12.8 Facial Pain Not Fulfilling Criteria in Groups 11 and 12
Previously used terms: Atypical facial pain, atypical odontalgia
Description: Persistent facial pain that does not have the characteristics of the cranial neuralgias classified above, and is not associated with physical signs or a demonstrable organic cause
Diagnostic criteria: A. Is present daily and persists for most or all of the day B. Is confined at onset to a limited area on one side of the face; may spread to the upper or lower jaws or a wider area of the face or neck; is deep and poorly localized C. Is not associated with sensory loss or other physical signs D. Laboratory investigations including x-ray of face and jaws do not demonstrate relevant abnormality
Comment: Pain may be initiated by operation or injury to face, teeth, or gums, but persists without any demonstrable local cause.

Table 56-2. International Headache Society Classification Criteria for Probable Migraine (2004)

1.6 Probable Migraine
Previously used terms: Migrainous disorder
Coded elsewhere: Migraine-like headache secondary to another disorder (symptomatic migraine) is coded according to that disorder.
Description: Attacks and/or headache missing one of the features needed to fulfil all criteria for a disorder coded above (the categories 1.6.3 probable childhood periodic syndromes that are commonly precursors of migraine and 1.6.4 probable retinal migraine, are not currently recognized).
1.6.1 Probable Migraine without Aura
Diagnostic criteria: A. Attacks fulfilling all but one of criteria A to D for 1.1 migraine without aura B. Not attributed to another disorder

Case Summary

- When dealing with headache patients, history taking is crucial.
- A detailed history may yield other details that can lead to a proper diagnosis.

Selected Readings

Classification of Headache of the Ad Hoc Committee. JAMA 1962;179:717.

Headache Classification Committee of the International Headache Society. Classification and diagnostic criteria for headache disorders, cranial neuralgias, and facial pain. Cephalalgia 1988;8 Suppl 7:46–7.

Headache Classification Subcommittee of the International Headache Society. The international classification of headache disorders. 2nd ed. Cephalalgia 2004;24 Suppl 1:1–160.

Lance JW, editor. In: Mechanism and management of headache. 4th ed. London: Butterworth Scientific; 1982. p. 127–8.

Editorial Comments

Clinical neurology is very much based on pattern recognition to make a diagnosis, and this is particularly important in the field of headache. When a patient presents with a "pain" anywhere in the head, it is important to look for other symptoms and signs. This case by Dr. Bordini captures the essence of that type of diagnostic thinking—the patient did not have a headache per se, based on anatomic grounds, but on closer scrutiny, did satisfy most of the known criteria for migraine without aura and responded clinically to migraine therapy. This is not an uncommon scenario in clinical practice. Strict criteria are extremely useful in making the diagnosis in most cases, but there are always atypical cases and this is when good clinical acumen comes into play. Lower-half headache is still "migraine" to most senior clinicians. Study this case closely, as it is most informative.

Final diagnosis:

Lower-half headache; probably migraine without aura