The International Headache Society (IHS) classification of cluster headache helped to standardize the diagnosis of this disorder among other headache disorders. Although the IHS criteria have proved invaluable as a research tool, the usefulness of the criteria in a clinical setting is under debate. Specifically, revisions are being proposed for several headache classifications and for the inclusion of newly defined headache subtypes (e.g., transformed migraine).

Cluster headache is sometimes referred to as “suicide headache” because of the intense pain associated with it. Although typical cluster headaches have a characteristic pattern of symptoms, the presentation is complex and heterogeneous. Cluster headache patients account for only 10% of patients seen at a typical migraine clinic (5% of the patients seen at the Parma Headache Center in Italy) and a much smaller percentage of patients seen by family physicians. As a result, it is often misdiagnosed, or inappropriately treated, before a correct diagnosis is made.

The aims of this study were to evaluate: 1) pain characteristics during a typical, spontaneous attack of cluster headache; 2) the presence of any prodromes, ie, signs and/or symptoms preceding the onset of an attack by a few minutes; 3) the presence of any premonitory signs and/or symptoms preceding the onset of the cluster period by a few days or a few weeks; and, 4) patients’ behavior during a typical, spontaneous attack of cluster headache. Forty-two consecutive patients (36 men and 6 women) at the Parma Headache Center in Italy were entered into the study from June to December 1999. The patients had episodic cluster headache as defined by the IHS classification and were not on preventive medication.

For a single attack, patients were asked to: 1) describe in detail the pain they were experiencing in their own words; 2) complete the Italian version of the McGill Pain Questionnaire; 3) record the number of minutes between the beginning of the attack and the time of maximum intensity; 4) indicate the maximum score for pain intensity on the Visual Analog Scale (VAS); 5) indicate prodromal and premonitory symptoms; and 6) provide a detailed description of how they responded to the pain and what measures they took to obtain relief during the attack. The questionnaires were only considered valid if the patient reported features that were consistent with the features of his or her typical attack.

TYPE OF PAIN

The results showed that the majority of patients (almost 60%) used terms that suggest puncture (e.g., drill, point, punch, spear, stab/knife wound, shooting) and more than 50% used terms that indicate the nature or type of headache pain such as “hammer,” “pulsating,” or “rhythmic.” Other terms used by almost 20% of patients were “gripping,” “electric discharge,” and “burning.” One simply noted the pain as “indescribable.” The vast majority of patients (95%) used complex, elaborate descriptions using more than one term. Almost 90% wrote in complete descriptive sentences.
The McGill Pain Questionnaire uses a series of adjectives to describe the characteristics and intensity of pain. The questionnaire uses 3 subscales—sensory, affective, and evaluative—and asks the patient to rate the pain intensity.

The results from each subscale of the questionnaire showed that there were wide variations in the degree of pain among cluster headache patients. For example, the mean sensory subscale rating was 0.522 (± 0.247 standard deviation [SD]). For affective ratings, the mean value was 0.513 (± 0.22 SD), and for the evaluative subscale the mean value was 0.94 (± 0.19 SD).

The VAS showed that more than 85% of patients indicated pain intensity ≥ 8 and almost 40% indicated that the time to maximum intensity was 0 to 3 minutes. Another 16% of the patient sample reported that the time to maximum pain intensity was from 4 to 6 minutes, 7 to 9 minutes, and 10 to 15 minutes, respectively, accounting for a total of approximately 48% of the patient sample.

For the local and painful prodromes (ie, signs or symptoms occurring a few minutes before the attack), half the patients reported mild pain or aches in the areas affected by the subsequent headache or in other cranial areas. The local and painless prodromes were classified as either “IHS” (ie, comparable to those listed in the IHS criteria of accompanying symptoms) or “non-IHS” (ie, not comparable to those listed in the IHS criteria of accompanying symptoms). For the “IHS” prodromes, one third of the patients indicated that they had nasal congestion. Lacrimation, rhinorrhea, conjunctival swelling, forehead and facial sweating, phonophobia, cough, drowsiness, yawning, hot sensation, polyuria, and bilateral blurred vision. A handful of patients used vivid metaphors such as “a stone passing through my temple,” “as if my blood were flowing faster in my brain,” and “a scarf choking my neck.”

The overwhelming majority of patients indicated that they were unable to stand still during the attack. More than 60% reported that they rubbed, pressed, or put something onto the aching part or put the aching part onto a flat surface in order to obtain relief from the pain.

For the local and painful prodromes, one fourth of patients indicated buzzing/itching/paresthesia/scalp hyperalgesia. Neck and eye muscle tenderness, dry or burning nostrils, pressure, general head sweating, and dilation of the superficial temporal artery were each indicated by 2% to 10% of the patients.

For general prodromal symptoms, one fourth indicated anxiety, irritability, abnormal mood, and unconscious rubbing of the eye, but other reported signs (in decreasing order of frequency) included nausea, phonophobia, cough, drowsiness, yawning, hot sensation, polynuria, and bilateral blurred vision. A handful of patients used vivid metaphors such as “a stone passing through my temple,” “as if my blood were flowing faster in my brain,” and “a scarf choking my neck.”

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The premonitory symptoms (ie, symptoms preceding onset of the cluster period by a few days or a few weeks) were sporadic, short lasting, and on the same side of the head as the subsequent attack in one third of patients.

Behavior

The overwhelming majority of patients indicated that they were unable to stand still during the attack. More than 60% reported that they rubbed, pressed, or put something onto the aching part or put the aching part onto a flat surface in order to obtain relief from the pain. Roughly 40% indicated that they rocked/walked back and forth, and/or moved in the same paths, turning round and round. Another 40% stated that they punched their knees/hit their head against a wall in response to the pain. Others reported lying down or sitting but were unable to stand still.

Both hot and cold substances were applied to ease the pain. In addition, breathing techniques, crying, and
screaming were employed to ease the pain. One fourth sought isolation and almost 40% sought darkness.

CONCLUSION

These results indicate that patients use a wide variety of adjectives to describe their pain and the 3-item scale (mild, moderate, severe) used in the IHS classification does not appear to be sufficient for a correct categorization of cluster headache pain intensity. The inability to keep a fixed position is typical of cluster headache patients and can be used as a characteristic feature in the differential diagnosis. The premonitory symptoms that precede the onset of the cluster period can alert physicians of the opportunity to start preventive therapy as soon as possible. However, the descriptions of pain do not help to elucidate the pathophysiology of cluster headache, ie, vascular or neuralgic pain.

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REFERENCES