

DIFFERENTIATING DIAGNOSTICS OF SYMPTOMS OF HEADACHES IN FAMILY DOCTOR'S PRACTICE

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Annotation

Headache – is the most widespread symptom at most nosology forms, it's the frequent reason that patients of different ages, sorts and activities tend to complain to their family doctors. It's the background of different diseases, complicating diagnostics and treatment of basic disease. Headaches could be one of the reasons that create the inability of usual functional activity which worsen the everyday work of the patient.

Keywords are: migraine, meningitis, intracranial hemorrhage, magnetically-resonant tomography.

ანოტაცია

თავის ტკივილი - უმრავლესი ნოზოლოგიური ფორმების (დაავადებების) ყველაზე მეტად გავრცელებული სიმპტომია, რაც სხვადასხვა სქესის, ასაკისა და საქმიანობის პაციენტების ოჯახის ექიმთან მიმართვის ყველაზე ხშირი მიზეზია და წარმოადგენს სხვადასხვა დაავადების ფონს, რომელიც ართულებს ძირითადი

დაავადების დიაგნოსტიკასა და მკურნალობას. თავის ტკივილი შეიძლება იყოს პაციენტის მიერ ჩვეული ფუნქციონალური აქტივობის შეუსრულებლობის მიზეზი, რაც აუარესებს მის ყოველდღიურ მუშაობას.

საკვანძო სიტყვებია: შაკიკი, მენინგიტი, შიდაქალის სისხლჩაქცევა, მაგნიტურ-რეზონანსური ტომოგრაფია (მრტ).

Аннотация

Головная боль – наиболее распространённый симптом при большинстве нозологических форм (заболеваний), является наиболее частой причиной обращения пациентов разного пола, возраста и рода деятельности к семейному врачу и является фоном различных заболеваний, осложняющих диагностику и лечение основного заболевания. Головная боль может быть причиной неспособности выполнения пациентом привычной функциональной активности, что ухудшает его повседневную работу.

Ключевые слова - мигрень, менингит, внутричерепное кровоизлияние, магнитно-резонансная томография (МРТ).

Entry

Headaches are among the most common reasons patients seek medical attention. Diagnosis and management is based on a careful clinical approach augmented by an understanding of the

anatomy, physiology, and pharmacology of the nervous system pathways that mediate the various headache syndromes.

Basic material

Common causes of headaches and classification system developed by the International Headache Society characterizes headache as primary or secondary (Table 1). *Primary headaches* are those in which the headache and its associated features are the disorders in itself, whereas *secondary headaches* are those caused by exogenous disorders. Primary headaches often result in considerable disability and a decrease in the patient's quality of life. [7] Mild secondary headaches, such as that seen in association with upper respiratory tract infections, are common but rarely worrisome.

Primary Headache:

MIGRAINE: It is usually an episodic headache associated with certain features such as sensitivity to light, sound, or movement; nausea and vomiting often accompany the headache. Diagnostic criteria for migraine headache are listed in (Table 2). A useful description of migraine is a benign and recurring syndrome of headache associated with other symptoms of neurologic dysfunction in varying admixtures. The best way to reveal migraine is PET (Positron Emission Tomography activation in migraine). The brain of the migraineur is particularly sensitive to environmental and sensory stimuli. Headaches can be initiated or amplified by various triggers, including glare, bright lights, sounds, or other afferent stimulation; hunger, excess stress; physical exertion; stormy weather or barometric pressure changes; hormonal fluctuations during menses; lack of or excess sleep; and alcohol or other chemical stimulation. **TENSION-TYPE HEADACHE:** The term 'tension-type headache' is commonly used to describe a chronic head-pain syndrome characterized by bilateral tight, bandlike discomfort. The pain typically builds slowly, fluctuates in severity, and may persist more or less continuously for many days. The headache may be episodic or chronic (present >15 days per month). **CLUSTER HEADACHE:** Cluster headaches are a rare form of primary headache with a population frequency of approximately 0.1%. [2] The pain is deep, usually retro-orbital,

often excruciating in intensity, non-fluctuating, and explosive in quality. A core feature of cluster headache is periodicity. At least one of the daily attacks of pain recurs at about the same hour each day for the duration of a cluster bout. The typical cluster headache patient has daily bouts of one to two attacks of relatively short-duration unilateral pain for 8 to 10 weeks a year; this is usually followed by a pain-free interval that averages a little less than 1 year. Cluster headache is characterized as chronic when there is no significant period of sustained remission. Patients are generally perfectly well between episodes. Patients with cluster headaches tend to move about during attacks, pacing, rocking, or rubbing their head for relief; some may even become aggressive during attacks. Cluster headaches are associated with ipsilateral symptoms of cranial parasympathetic autonomic activation: conjunctival injection or lacrimation, rhinorrhea or nasal congestion, or cranial sympathetic dysfunction such as ptosis.[1] *PAROXYSMAL HEMICRANIA*: is characterized by frequent unilateral, severe, short-lasting episodes of headache. Like cluster headaches, the pain tends to be retro-orbital but may be experienced all over the head and is associated with autonomic phenomena such as lacrimation and nasal congestion. Patients with remissions are said to have episodic PH, whereas those with the non-remitting form are said to have chronic PH. The essential features of PH are unilateral, very severe pain: short-lasting attacks (2-45 min); very frequent attacks (usually more than five a day); marked autonomic features ipsilateral to the pain: rapid course (<72 h); and excellent response to indomethacin. *SUNCT* (short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing) is a rare primary headache syndrome characterized by severe, unilateral orbital or temporal pain that is stabbing or throbbing in quality. Diagnosis requires at least 20 attacks, lasting for 5-240 s; ipsilateral conjunctival injection and lacrimation should be present. *LOW CSF VOLUME HEADACHE*: In these syndromes, head pain is positional: it begins when the patient sits or stands upright and resolves upon reclining. The pain, which is occipitofrontal, is usually a dull ache but may be throbbing. Patients with chronic low CSF volume headache typically have a history of headaches from one day to the next and are generally not present when waking up but worsen throughout the day. Recumbency usually improves the headache within minutes, but it takes only minutes to an hour for the pain to return when the patient resumes an upright position. The most common cause of headache due to persistent low CSF volume is CSF leak following lumbar puncture. Post-LP headaches usually begin within 48 hours but may be delayed for up to 12 days. Beverages with caffeine may provide temporary relief. *RAISED CSF PRESSURE HEADACHE*: These patients are typically present with a history of generalized headaches that are present when waking up and improve as the day goes on. It is generally worse with recumbency. Visual obscurations are frequent. Formal visual field testing

should be performed even in the absence of overt ophthalmic involvement. Headache on rising in the morning or nocturnal headache is also characteristic of obstructive sleep apnea or poorly controlled hypertension. *POST-TRAUMATIC HADACHE*: A traumatic event can trigger a headache process that lasts for many months or years after the event. The term trauma is used in a very broad sense: headaches can develop following an injury to the head, but it can also develop after an infectious episode, typically viral meningitis, a flulike illness, or a parasitic infection. Complaints of dizziness, vertigo, and impaired memory can accompany the headache. Symptoms may remit after several weeks or persist for months and even years after the injury. Typically the neurologic examination is normal and CT or MRI studies are unrevealing. Chronic subdural hematoma may on occasion mimic this disorder. In one series, one-third of patients with NDPH reported headaches beginning after a transient flulike illness characterized by fever, neck stiffness, photophobia, and marked malaise. Evaluation reveals no apparent cause for the headache. *PRIMARY COUGHT HEADACHE*: is a generalized headache that begins suddenly, lasts for several minutes, and is precipitated by coughing; it is preventable by avoiding coughing or other precipitating events, which can include sneezing, straining, laughing, or stooping. In all patients with this syndrome, serious etiologies must be excluded. *PRIMARY EXERTIONAL HEADACHE*: It may be precipitated by any form of exercise; it often has the pulsatile quality of a migraine. The pain, which can last from 5 minutes to 24 hours, is bilateral and throbbing at onset; migrainous features may develop in patients susceptible to migraine. Primary exertional headaches can be prevented by avoiding excessive exertion, particularly in hot weather or at high altitude.

Secondary Headache:

MENINGITIS: Acute, severe headache with stiff neck and fever suggests meningitis.[5] Lumbar puncture is mandatory. Often there is striking accentuation of pain with eye movement. Meningitis can be easily mistaken for migraine in that the cardinal symptoms of pounding headache, photophobia, nausea, and vomiting are frequently present, perhaps reflecting the underlying biology of some of the patients. A basic criterion is a presence of meningitis signs at examination. *INTRACRANIAL HEMORRHAGE*: An acute, severe headache with stiff neck but without fever suggests subarachnoid hemorrhage. A ruptured aneurysm, arteriovenous malformation, or intraparenchymal hemorrhage may also present with headache alone. Rarely, if the hemorrhage is small or below the foramen magnum, the head CT scan can be normal. Therefore, lumbar puncture may be required to diagnose definitively subarachnoid hemorrhage. *BRAIN TUMOR*: Approximately 30% of patients with brain tumors consider headache to be their chief complaint. The head pain is usually nondescript—an intermittent deep, dull aching of

moderate intensity, which may worsen with exertion or change in position and may be associated with nausea and vomiting. The headache of brain tumor disturbs sleep in about 10% of patients. [4] Vomiting that precedes the appearance of headache by weeks is highly characteristic of posterior fossa brain tumors. A history of amenorrhea or galactorrhea should lead one to question whether a prolactin-secreting pituitary adenoma is the source of the headache. Headaches arising de novo in a patient with known malignancy suggests either cerebral metastases or carcinomatous meningitis, or both. Head pain appearing abruptly after bending, lifting, or coughing can be due to a posterior fossa mass, a Chiari malformation, or low CSF volume.

TEMPORAL ARTERITIS: Typical presenting symptoms include headache, polymyalgia rheumatica, jaw claudicating, fever, bilateral blindness and weight loss. Headache is the dominant symptom and often appears in association with malaise and muscle aches. Head pain may be unilateral or bilateral and is located temporally in 50% of patients but may involve any and all aspects of the cranium. Pain usually appears gradually over a few hours before peak intensity is reached; occasionally, it is explosive in onset. The quality of pain is only seldom throbbing; it is almost invariably described as dull and boring, with superimposed episodic stabbing pains similar to the sharp pains that appear in migraine. Most patients can recognize that the origin of their head pain is superficial, external to the skull, rather than originating deep within the cranium (the pain site for migraineurs). Scalp tenderness is present, often to a marked degree; brushing the hair or resting the head on a pillow may be impossible because of pain. Headache is usually worse at night and often aggravated by exposure to cold. Additional findings may include reddened, tender nodules or red streaking of the skin overlying the temporal arteries, and tenderness of the temporal or, less commonly, the occipital arteries. The erythrocyte sedimentation rate (ESR) is often, though not always, elevated; a normal ESR does not exclude giant cell arteritis. A temporal artery biopsy followed by immediate treatment with prednisone 80 mg daily for the first 4-6 weeks should be initiated when clinical suspicion is high. The prevalence of migraine among the elderly is substantial, considerably higher than that of giant cell arteritis. Migraineurs often report amelioration of their headaches with prednisone. *GLAUCOMA:* may present a prostrating headache associated with nausea and vomiting. The headache often starts with severe eye pain. On physical examination, the eye is often red with a fixed, moderately dilated pupil.

Examination of the patient. Serious causes to be considered include meningitis, subarachnoid hemorrhage, epidural or subdural hematoma, glaucoma, tumor, and purulent sinusitis. In some circumstances, a lumbar puncture is also required. The psychological state of the patient should also be evaluated since a relationship exists between head pain and depression. Many patients in chronic dairy pain cycles become depressed, although depression itself is rarely a

cause of headache. Underlying recurrent headache disorders may be activated by pain that follows otologic or endodontic surgical procedures. Thus, pain about the head as the result of diseased tissue or trauma may reawaken an otherwise quiescent migrainous syndrome. A general evaluation of acute headache might include the investigation of cardiovascular and renal status by blood pressure monitoring and urine examination; eyes by funduscopy, intraocular pressure measurement, and refraction; cranial arteries by palpation; and cervical spine by the effect of passive movement of the head and by imaging. When worrisome symptoms and signs are present (Table 3), rapid diagnosis and management is critical. Complete neurologic examination is an essential first step in the evaluation. In most cases, patients with an abnormal examination or a history of recent-onset headache should be evaluated by a CT or MRI study.

Conclusion

1. Headaches are the background of different diseases, complicating diagnostics and treatment of basic diseases. Headaches worsen the everyday work and activities of the patient.
2. Headaches are the leading symptoms of many critical conditions. For family doctors, an exposure of the basic disease is a necessity for the timely providing of medical care for determining the further route of the patient.

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