

HEADACHE SCHOOL - HOW TO IMPROVE THE MIGRAINE DIAGNOSIS AND TREATMENT

HEADACHE IN NEUROLOGICAL PRACTICE

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Headache and facial pain are two of the most common symptoms encountered in everyday neurological practice. Most headaches do not signal medically serious disease, although they have serious impact on patients every day functioning and private life, as well as socio-economic consequences. Migraine and tension type headache are two most common types of headache in every day practice. Epidemiological studies have shown an annual prevalence of migraine in 6% of men and 15–17% in women. The 1-year prevalence of tension-type headache (TTH) ranges from 28 to 63% in men and from 34 to 86% in women.

Migraine causes discrete bouts of intense throbbing headache, lasting between three hours and three days. These are generally associated with nausea or vomiting and dislike of loud noises or bright lights. The headache is usually one-sided, at least at the onset. In classic migraine the same type of headache is preceded by a temporary visual disturbance lasting 15–30 minutes, manifesting as patches of lost vision, tunnel vision, brightly colored spots- photopsia, fortification spectra. Occasionally aura causes temporary speech loss, pins and needles, or limb weakness. Migraine tends to run in families. Attacks may be precipitated by menstrual periods, cheese, chocolate, or wine. Drugs to treat individual attacks include simple pain killers, ergotamine, and recently introduced 5-hydroxytryptamine-agonist drugs such as sumatriptan. Patients disabled by frequent severe attacks should eliminate any identified precipitating factors from their diet if possible. They may prevent regular and disabling attacks by taking daily prophylactic

medications (anticonvulsants, antidepressants, beta blockers, etc).

Tension headache consists of a tight band or pressure sensation encircling the head; brief bouts of this will be familiar to most people. When chronic, it is present in varying severity on most days, and tends to worsen as the day goes by. The cause of tension headache is not clear, but sustained contraction of scalp muscles is often blamed (very often in individuals under increased stress).

Mostly, headache does not signify serious disease, but sometimes it is only sign of the serious central nervous system disorder. In such cases headache can be first sign of stroke, brain tumor, inflammation of the head and neck structures (bones, meninges, brain, teeth, eyes, ears, etc), traumatic injury or consequence of the systematic disorder (metabolic disorders, inflammations etc). Headache of abrupt onset, often during physical exertion, occurs in subarachnoid hemorrhage. Gradually worsening daily headache, worse on awakening, occurs when raised pressure within the skull results from brain tumors, abscesses, hydrocephalus, or benign intracranial hypertension. Febrile states and with headache can be first sign of meningitis and/or encephalitis associated with stiffness of the neck and photophobia. Sometimes rare causes such as inflammation of blood vessels called giant cell arteritis can cause severe scalp tenderness; prompt treatment with steroids is essential to prevent blindness due to involvement of the eye's arteries.

In evaluation of headache, it is of great importance to take good anamnesis, to provide detail neurologic exam and to perform indicated work up.

Diagnostic algorithm for evaluation of patient with headache should include: neuroimaging methods (computed tomography, magnetic resonance, head and neck vessels ultrasound, in selected cases digital subtraction angiography), blood tests, electrophysiological methods (electroencephalography, electromyoneurography, visual and brain stem evoked potentials), X-ray of the spine and chest, in selected cases spinal tap (information about cerebrospinal fluid and blood-brain barrier functioning).

In primary headaches mostly all results are normal, in secondary headaches, we will confirm pathomorphological substrate. Treatment of primary headache was mentioned before. In patients with secondary headaches we treat pathomorphological substrate-brain tumor, stroke, inflammation, injury, etc, headache improves in correlation with regression of the underlying disease.