Migraine, lifestyle, childhood

Migraine is one of the most frequently reported somatic complaints in childhood, with a negative impact on health-related quality of life. Headaches in childhood are subtended by primary headache syndromes with a significant negative impact on the quality of life and a high risk of developing in chronic and persistent form in adulthood.

Headaches are not strictly related to adulthood but are very frequent during childhood, becoming more common during adolescence. The incidence of migraine in childhood has substantially increased over the past 30 years, probably due to both increased awareness of the disease and lifestyle changes in this age group. However the causes of the increase in migraine prevalence are not completely understood or known at this time and probably involve multiple factors.

Environmental and psychological factors (life events) may play an important role in migraine with onset in preschool age. According with the importance of “life events”, childhood maltreatment and a low socioeconomic status have been associated with an earlier age of migraine onset.

Age and gender influence the expression of some of the accompanying symptoms in the migraine. For example, headache exacerbation by physical activity and occurrence of aura phenomenon were more common in females with migraine where, vomiting and phonophobia are referred more frequently in males.

Migraine predisposition in children population may be related to genetic factors, the most important explaining factor for the migraine manifestations seems to be a positive family history.

Among lifestyle-related risk factors for migraine, a wide range of sleep disorders have been demonstrated in children. Obesity seems to occur at greater frequency in children with migraine. Migraine and obesity can probably have some common pathophysiologic pathways and share different mechanisms (e.g., inflammatory mediators). For some children, behavioural weight management may be mandatory to facilitate appropriate lifestyle changes (increasing exercise and improving adherence to dietary guidelines) for effective weight control and optimal migraine management. Paediatric obesity could be associated with several others comorbidities such as type 2 diabetes mellitus, dyslipidemia, metabolic syndrome, hyperandrogenemia andhyperinsulinism, high blood pressure, proteinuria, nonalcoholic fatty liver disease, gallstones, orthopedic pathologies, pseudotumorcerebri. Dietary triggers influence migraine attacks by means of the release of serotonin and norepinephrine, causing vasoconstriction or vasodilatation, or by direct stimulation of trigeminal ganglia, brainstem, and cortical neuronal pathways. The list of foods, beverages, and additives that trigger migraine includes cheese, chocolate, citrus fruits, hot dogs, monosodium glutamate, aspartame, fatty foods, ice cream, caffeine withdrawal, and alcoholic drinks, especially red wine and beer. Tyramine, phenylethylamine, histamine, nitrites, and sulfites are involved in the mechanism of food intolerance headache. A very important headache precipitant in children is the excessive gum-chewing.

In summary, these observations emphasize the impact of several lifestyle-related risk factors for migraine in children. Physician and patient’s awareness of lifestyle could have a significant impact on the quality of life of children with migraine. The management of children with migraine should consist primarily of lifestyle triggers identification and avoidance.

Publication

Migraine and lifestyle in childhood.
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