

CLINICAL PROFILE OF HEADACHE AMONG CHILDREN ATTENDING EMERGENCY DEPARTMENT AT ALEXANDRIA UNIVERSITY CHILDREN'S HOSPITAL

Marwa Abd Elmaksoud, Wafaa Muhammad, Hanan Azuz

Paediatric Neurology, Faculty of Medicine, Alexandria University, Egypt.

BACKGROUND

- Headache is a pain located in the head above the orbitomeatal line and/or nuchal ridge; the posterior aspect of the upper neck including the region of insertion of neck muscles on the cranium.
- Headache is the most common somatic complaint in children and adolescents both in clinical and epidemiological databases, with increasing frequency in adolescence.

METHODS

- A Descriptive observational study conducted at the Emergency Department at Alexandria University Children's Hospital included all children presented to Emergency Department (ED) with headache as their primary complain over six months.

RESULTS

- During the study period, 22662 visits were made to the pediatric emergency department (PED); in 164 patients (0.72%) the chief complaint was a headache. However only 46 patients (1.17%) were admitted either to the ward, PICU or died at PED which means that 28.01% of admitted patients were complaining mainly of headaches.
- 90 patients (54.9%) were males, and 74 patients (45.1%) were females; their ages ranged from 2.6 to 17 years with a mean of 9.30 ± 3.02 years. For primary headache patients; 59 patients (59.0%) were males, and 41 patients (41.0%) were females; for secondary headache patients; 31 patients (48.4%) were males, and 33 patients (51.6%) were females; headache is most prevalent in school-aged children in 103 patients.

Table 2. Classification of primary headaches

Classification of primary headaches	Number	Prevalence among primary headache (%)	Prevalence among total headache (%)
Migraine	85	85.0	51.8
• Migraine without aura	69	69.0	42.1
• Migraine with aura:	16	16.0	9.7
Migraine with sensory aura	6	6.0	3.7
Migraine with visual aura	5	5.0	3.0
Migraine with brain stem aura	5	5.0	3.0
Tension type headache (TTH)	15	15.0	9.1
Total number of primary headaches		100	61.0

Table 3. Classification of secondary headaches

Classification of secondary headaches	Number	Prevalence among secondary headache (%)	Prevalence among total headache (%)
Unclassified	2	3.1	1.2
Non-life threatening causes:	22	34.4	13.4
Psychiatric disorder	14	21.9	8.5
Drug or toxin induced headache	3	4.7	1.8
Seizure related headache	3	4.7	1.8
Acute viral upper respiratory tract	2	3.1	1.2
Life threatening causes:	40	62.5	24.4
Intracranial vascular disorder	18	28.1	11.0
Hypertension	7	11.0	4.2
CNS infection	5	7.8	3.0
Idiopathic intracranial hypertension	3	4.7	1.8
Acute hydrocephalus	2	3.1	1.2
Brain tumor	2	3.1	1.2
Immune encephalitis	3	4.7	1.8
Total number of secondary headaches		64	39.0

- In primary headache disorder; headache is the illness itself, and headache is not attributed to any other disorder which are most common in the study (61.0%). Secondary serious headache are the second most common presentation in children (24.4%), while secondary benign headache are the least common (13.4%).

CONCLUSIONS

- Headache is not an uncommon cause of PED visits. It has a significant impact on the lives of children and adolescents, resulting in school absences, decreased extracurricular activities, and poor academic achievement.

REFERENCES

1. Headache Classification Committee of the International Headache Society (IHS). The International Classification of Headache Disorders, 3rd edition. Int Headache Soc 2018; 38(1):1-211.
2. Ozge A, Termine C, Antonaci F, Natriashvili S, Guidetti V, Wöber-Bingöl C. Overview of diagnosis and management of paediatric headache. Part I: diagnosis. J Headache Pain 2011; 12(1):13-23.

ACKNOWLEDGMENTS

1. The authors would like to thank the children who participated in this study and their parents as well.

CONTACT INFORMATION

*Marwa Abd Elmaksoud, Assistant Professor in pediatric Neurology, Alexandria University Children's Hospital, Egypt.
Email: marwa.abdelmaksoud@alexmed.edu.eg