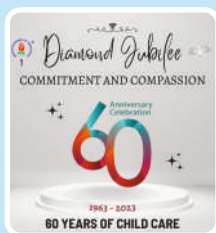


Indian Academy of Pediatrics (IAP)



nRICH

Newer Research and recommendations In Child Health

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UNDER THE AUSPICES OF THE IAP ACTION PLAN 2023

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Dear fellow IAPans,

nRICH

Newer Research and recommendations In Child Health-aims to bring you the abstracts of some of the breakthrough developments in pediatrics, carefully selected from reputed journals published worldwide.

Expert commentaries will evaluate the importance and relevance of the article and discuss its application in Indian settings. nRICH will cover all the different subspecialties of pediatrics from neonatology, gastroenterology, hematology, adolescent medicine, allergy and immunology, to urology, neurology, vaccinology etc. Each issue will begin with a concise abstract and will represent the main points and ideas found in the originals. It will then be followed by the thoughtful and erudite commentary of Indian experts from various subspecialties who will give an insight on way to read and analyze these articles.

I'm sure students, practitioners and all those interested in knowing about the latest research and recommendations in child health will be immensely benefitted by this endeavor which will be published online on every Monday.

Happy reading!

*Upendra Kinjawadekar
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Sumatriptan as a First-Line Treatment for Headache in the Pediatric Emergency Department

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BASED ON ARTICLE

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ABSTRACT

This is a retrospective study with 558 children aged 6-21 of which 66% were girls. The study analyses the effectiveness of Intranasal sumatriptan in ER in children presenting with acute attack of migraine. The pain score got reduced from 7 to 2. 48% received Intranasal sumatriptan; they have shown reduced ER/hospital stay compared to children who got IV line established for headache management. Study Conclusion: Intranasal sumatriptan is an effective alternative in children with acute attack of migraine that reduces the length of hospital stay and the cost of ER management.

COMMENTARY

Though there are many studies with intranasal sumatriptan, this study focuses on the management of migraine in the ER with intranasal therapy. This is a European study. But children coming to ER in our country do present with varied types of headaches, from tension to functional headaches that happen commonly around the time of board exams. Even children diagnosed to have migraine can have a functional headache. This needs to be differentiated before the intranasal administration of tryptans.

1. Labeling a headache as an acute attack of migraine may take some time in the ER within which IV line will have to be established considering the severity and dehydration at presentation if it is migraine.
2. For children with acute attack of migraine, analgesics – paracetamol, ibuprofen or naproxen is preferred with or without antiemetics.
3. If they do not respond, then the second line would be tryptans, of which, intranasal sumatriptan or zolmitriptans are preferred in view of the ease of administration.
4. They are contraindicated in children with migraine with brainstem aura or hemiplegic migraine.
5. All the studies talk about headache relief in 30min to 2 hours. Recently USFDA has approved calcitonin gene-related peptide (CGRP) receptor antagonist, Zavegepant, for the acute treatment of migraine in adults that can give faster relief within 15 minutes of administration. Trials need to be done in children.

RECOMMENDATION AND FURTHER APPLICATION:

The intranasal route of tryptans can be effectively used not only in the treatment of migraine in ER, but also as home therapy or even in schools in our setup. Proper guidelines need to be given and school teachers should be properly educated in this regard. A separate card can be given to children with migraine recommending the need for intra-nasal therapy which can reduce the time in the ER. Intranasal zolmitriptan is available more freely than intranasal sumatriptan in India.