Cefalea in età pediatrica

Le dimensioni del problema:

- ☞una cefalea ricorrente è causa di sofferenza e disabilità per circa il 40% dei bambini e degli adolescenti
- ☞Rapporto maschi-femmine: 1.5:1 prima dei 10 anni, poi il rapporto si inverte
- ☞Le cefalee con causa “organica” rappresentano quasi il 47% del totale (Sillanpää and Anttila, 1996)

CEFALEE PRIMARIE

- ☞Emicrania con e senza aura (equivalenti emicranici)
- ☞Cefalea tensiva
- ☞Cefalea a grappolo
- ☞Altre forme di cefalea primaria

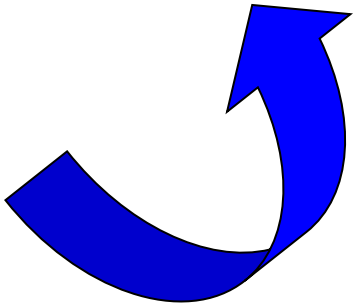
CEFALEE SECONDARIE

- ☞Processi infiammatori a carico di strutture non nervose (sinusiti, otiti, “febbre”)
- ☞Meningite
- ☞Anemie
- ☞Anomalie vascolari cerebrali (angiomi, MAV)
- ☞Tumori cerebrali e idrocefalo
- ☞Emorragia subaracnoidea
- ☞Trombosi dei seni venosi cerebrali
- ☞Pseudotumor cerebri
- ☞**Malocclusione dentaria**
- ☞Traumi cranici
- ☞Ipertensione arteriosa
- ☞Malattie metaboliche (MELAS)

CEFALEE PRIMARIE

- Emicrania con e senza aura (equivalenti emicranici)
- Cefalea tensiva
- Cefalea a grappolo
- Altre forme di cefalea primaria

L'emicrania è di gran lunga più frequente della cefalea tensiva fino a 9-10 anni (rapporto di 4:1 circa), mentre successivamente la prevalenza della cefalea tensiva aumenta fino a diventare superiore a quella dell'emicrania in età adulta



Migraine without aura

Diagnostic criteria:

A. At least five attacks[1] fulfilling criteria B–D
B. Headache attacks lasting 4-72 hours (untreated or unsuccessfully treated)[2,3]
C. Headache has at least two of the following four characteristics:
   1. unilateral location
   2. pulsating quality
   3. moderate or severe pain intensity
   4. aggravation by or causing avoidance of routine physical activity (e.g. walking or climbing stairs)
D. During headache at least one of the following:
   1. nausea and/or vomiting
   2. photophobia and phonophobia
E. Not better accounted for by another ICHD-3 diagnosis

Notes:

1. One or a few migraine attacks may be difficult to distinguish from symptomatic migraine-like attacks. Furthermore, the nature of a single or a few attacks may be difficult to understand. Therefore, at least five attacks are required. Individuals who otherwise meet criteria for 1.1 *Migraine without aura* but have had fewer than five attacks, should be coded 1.5.1 *Probable migraine without aura*.
2. When the patient falls asleep during a migraine attack and wakes up without it, duration of the attack is reckoned until the time of awakening.
3. In children and adolescents (aged under 18 years), attacks may last 2-72 hours (the evidence for untreated durations of less than 2 hours in children has not been substantiated).

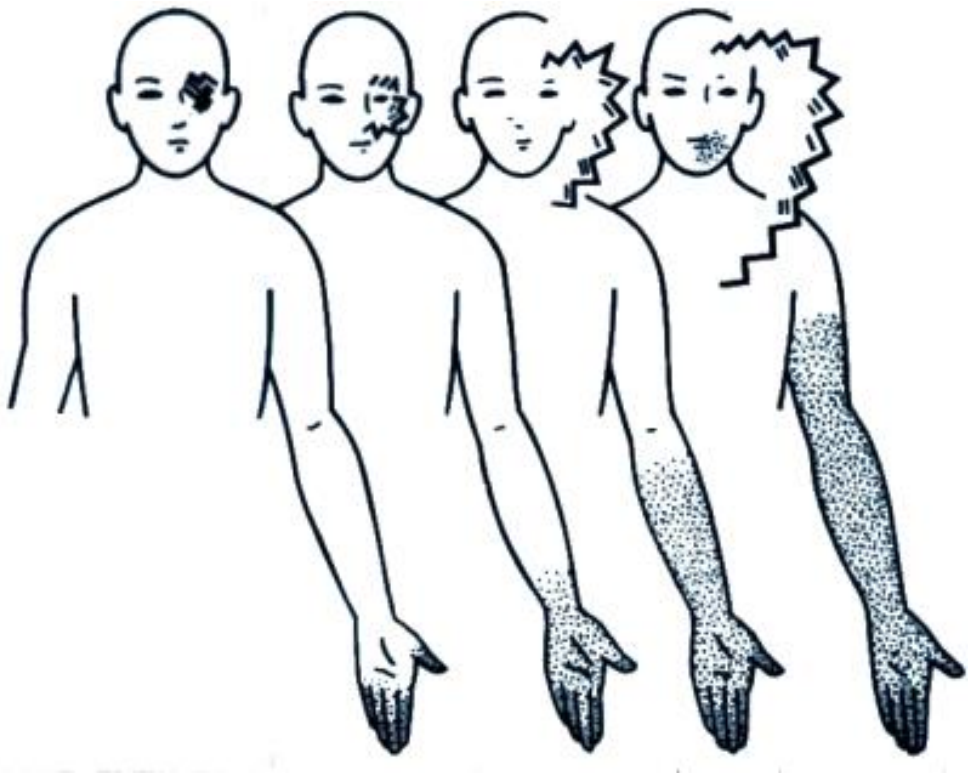
ICHD-III beta version

Cephalalgia 33: 629-808

Migraine with aura

Diagnostic criteria:

A. At least two attacks fulfilling criteria B and C
B. One or more of the following fully reversible aura symptoms:
   1. visual
   2. sensory
   3. speech and/or language
   4. motor
   5. brainstem
   6. retinal
C. At least two of the following four characteristics:
   1. at least one aura symptom spreads gradually over ≥5 minutes, and/or two or more symptoms occur in succession
   2. each individual aura symptom lasts 5-60 minutes[1]
   3. at least one aura symptom is unilateral[2]
   4. the aura is accompanied, or followed within 60 minutes, by headache
D. Not better accounted for by another ICHD-3 diagnosis, and transient ischaemic attack has been exclude



ICHD-III beta version

Cephalalgia 33: 629-808

Emicrania senza e con aura nei bambini

☞ Il dolore è spesso bilaterale (può essere unilaterale anche nella cefalea tensiva)

☞ Il dolore è spesso di tipo costrittivo/gravativo

☞ La durata è variabile (anche < 2 ore)

☞ **In genere il dolore è intenso e interferisce con le attività quotidiane del bambino**

1.6 Episodic syndromes that may be associated with migraine

1.6.1 Recurrent gastrointestinal disturbance

1.6.1.1 Cyclic vomiting syndrome

1.6.1.2 Abdominal migraine

1.6.2 Benign paroxysmal vertigo

1.6.3 Benign paroxysmal torticollis

ICHD-III

Contents lists available at ScienceDirect

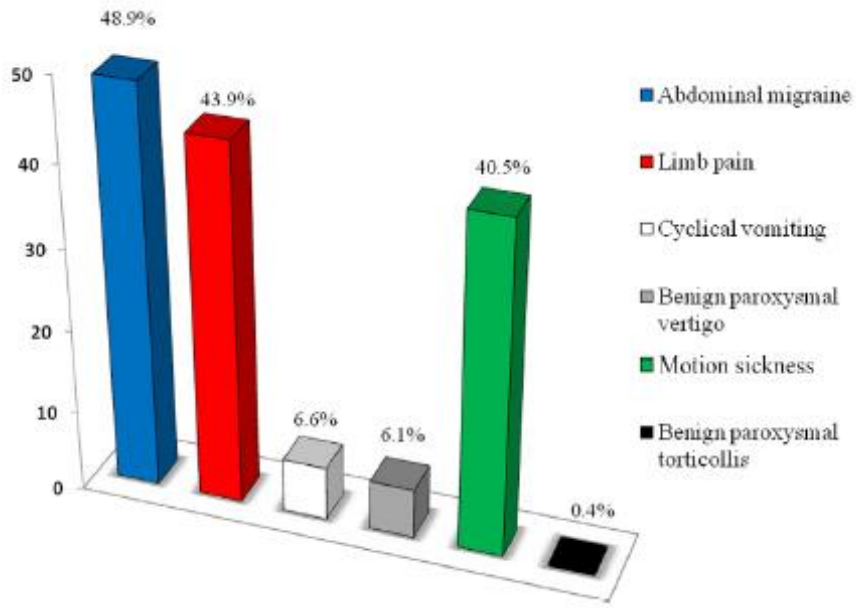
Pediatric Neurology

journal homepage: www.elsevier.com/locate/pnu

Original Article

Migraine Equivalents as Part of Migraine Syndrome in Childhood

Samuela Tarantino PsyD [a,*], Alessandro Capuano MD, PhD [a], Roberto Torriero MD [a], Monica Citti PsyD [b], Catello Vollono MD, PhD [c], Simonetta Gentile PsyD [b], Federico Vigevano MD [a], Massimiliano Valeriani MD, PhD [a,d]



1134 patients referred to our headache center

No different distribution between migraine and TTH

Distribution of Migraine Equivalents (%) versus Headache Diagnosis According to International Classification of Headache Disorders, Third Edition, Beta Version[1]

Migraine Equivalents	Migraine Without Aura	Migraine With Aura	Chronic Migraine	Infrequent Tension-type Headache	Frequent Tension-type Headache	Chronic Tension-type Headache
Abdominal migraine	22.4	2.3	3.6	1.8	6.1	1.7
Limb pain	21.1	2.0	2.9	1.4	5.7	1.0
Motion sickness	20.7	2.0	2.1	1.4	4.0	1.4
Cyclical vomiting	4.0	0.3	0.1	0.1	0.4	0.3
Benign paroxysmal vertigo	2.6	0.0	0.3	0.6	1.1	0.2
Benign paroxysmal torticollis	0.2	0.1	0.0	0.0	0.0	0.0

Children with migraine equivalents had higher frequency of migraine attacks

Logistic Regression Results

Parameter	*P* value
Dependent variable: frequency (reference high frequency)	
No equivalents	0.038*
Number of equivalents	0.686
Dependent variable: presence of equivalents (reference Yes)	
No photophobia	0.386
No phonophobia	0.040*
No nausea	0.691
No vomiting	0.786
Dependent variable: motion sickness (reference Yes)	
No photophobia	0.492
No phonophobia	0.000*
No nausea	0.061
No vomiting	0.010*
Dependent variable: cyclical vomiting (reference Yes)	
No photophobia	0.385
No phonophobia	0.424
No nausea	0.787
No vomiting	0.005*

* $P \leq 0.05$.

Cluster headache

Diagnostic criteria:

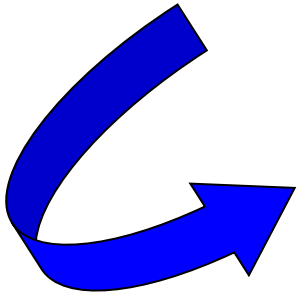
A. At least five attacks fulfilling criteria B–D
B. Severe or very severe unilateral orbital, supraorbital and/or temporal pain lasting 15–180 minutes (when untreated)[1]
C. Either or both of the following:
   1. at least one of the following symptoms or signs, ipsilateral to the headache:
      a) conjunctival injection and/or lacrimation
      b) nasal congestion and/or rhinorrhoea
      c) eyelid oedema
      d) forehead and facial sweating
      e) forehead and facial flushing
      f) sensation of fullness in the ear
      g) miosis and/or ptosis
   2. a sense of restlessness or agitation
D. Attacks have a frequency between one every other day and eight per day for more than half of the time when the disorder is active

ICHD-III beta version

Cephalalgia 33: 629-808

Gestione del paziente cefalalgico

- ☞ Screening di base (anamnesi, esame obiettivo internistico e neurologico)
- ☞ Eventuali esami strumentali
- ☞ Consegna del diario

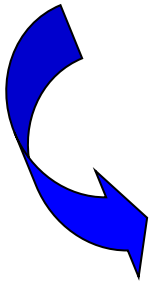


- ☞ Controllo dopo 2 mesi
- ☞ Diagnosi definitiva
- ☞ Eventuale terapia

Ospedale Pediatrico Bambino Gesù
ISTITUTO DI RICOVERO E CURA
A CARATTERE SCIENTIFICO
Divisione di Neurologia
Primario: dott. Federico Vigevano

Centro per lo studio e la cura
delle cefalee in età evolutiva
Dott. Massimiliano Valeriani - Responsabile
Dott. Alessandro Capuano
Dott. Roberto Frusciante
Dott.ssa Laura Papetti

Diario



Numero	Data	Orario		Localizzazione del dolore	*Intensità del dolore	**Qualità del dolore	Farmaci	Efficacia dei farmaci
		Inizio	*Fine*					

* L=lieve; M=medio; F=forte

**P=pulsante, come un martello; C=costrittivo, come una morsa

Terapia dell'attacco acuto
(va iniziata il prima possibile)

- ☞ Ibuprofene ➡ <u>prima scelta</u>
- ☞ Paracetamolo, aspirina e altri FANS
- ☞ Indometacina
- ☞ Triptani ➡ solo il sumatriptan 10 spray è autorizzato al di sotto dei 18 anni

THEMED ARTICLE | Migraine & headache Review

For reprint orders, please contact reprints@expert-reviews.com

EXPERT REVIEWS

Triptans other than sumatriptan in child and adolescent migraine: literature review

Expert Rev. Neurother. 11(3), 395–401 (2011)

Catello Vollono[1], Federico Vigevano[1], Samuela Tarantino[1] and Massimiliano Valeriani[†1,2]

[1]Headache Center, Neurology Division, Ospedale Pediatrico Bambino GESÙ, IRCCS, Piazza Sant'Onofrio, 4, Rome, Italy
[2]Center for Sensory-Motor Interaction, Aalborg University, Aalborg, Denmark
[†]Author for correspondence:
Tel.: +39 066 859 2289
Fax: +39 066 859 2463
m.valeriani@tiscali.it

Abortive drugs used for migraine in children and adolescents are usually the same as those used in adults. Only a few studies have assessed the efficacy of triptans other than sumatriptan in pediatric migraine. This systematic review describes the evidence concerning the efficacy and tolerability of these triptans. The PubMed research produced 481 results and only seven studies were randomized controlled trials. A total of 11 articles were reviewed. Zolmitriptan and rizatriptan were superior to placebo in most studies. Almotriptan demonstrated a high profile of tolerability. A single study of eletriptan demonstrated no statistical difference between this drug and placebo in terms of both efficacy and tolerability. All studies have reported a good triptan safety profile. The conflicting data regarding triptan efficacy are probably due to differences in populations, methodologies and efficacy measures among the different studies. Triptans are an important option in the symptomatic treatment of childhood and adolescent migraine.

KEYWORDS: adolescent migraine • almotriptan • childhood migraine • eletriptan • frovatriptan • pediatric migraine • rizatriptan • symptomatic treatment • triptans • zolmitriptan

Terapia di profilassi dell'emicrania:

1) quando?

- ☞ Numero di attacchi ≥ 4/mese
- ☞ Crisi di durata > 4 ore
- ☞ Crisi di intensità medio-grave
- ☞ La terapia sintomatica non dà risultati soddisfacenti
- ☞ La terapia sintomatica dà effetti collaterali importanti
- ☞ Dopo almeno 2 mesi di osservazione

La cefalea interferisce con le normali attività quotidiane del bambino

Terapia di profilassi dell'emicrania:

2) come?

- ☞ Calcio-antagonisti (flunarizina)
- ☞ Beta-bloccanti (propanololo)
- ☞ Antidepressivi (amitriptilina, SSRI)
- ☞ Antiepilettici (valproato, gabapentin, topiramato)
- ☞ 5-Idrossitriptofano
- ☞ Diidroergotamina
- ☞ Magnesio
- ☞ Naprossene ➡ emicrania legata al ciclo mestruale