brain demonstrated deep white matter changes in the left parietal and posterior parietal/occipital regions and adjacent grey matter and two small punctate haemorrhages in the left mid-parietal region.

Case 2: Four week old male infant presented with recurrent focal seizures. No pyrexia or preceding symptoms were documented. EEG recorded two seizures with origin near the right midline with spread to right motor cortex and right hemisphere. MRI brain showed right deep white matter changes and left subcortical lesion.

Case 3: Eleven week old female infant admitted with pyrexia and lethargy. She had 6 episodes of febrile generalised tonic seizures over 48 hours, each less than 5 minutes in duration. EEG demonstrated some asymmetry and excess slow activities over right temporal region in sleep, with no epileptiform features. MRI brain was normal.

Case 4: Thirteen month old female presented with febrile status epilepticus, on a background history of pyrexia and diarrhoea for 3 days. EEG showed three epileptic spasms with background continuous epileptiform discharges, which were multifocal; predominantly right posterior and some frontal discharges were seen in sleep. MRI brain showed subtle high signal white matter changes in the frontal lobes bilaterally and multiple high signal areas throughout corpus callosum.

Discussion This case series demonstrates that HSV encephalitis should be considered in children with atypical febrile seizures which are prolonged, focal or recurrent. Timely recognition of HSE is essential to minimise patient morbidity and mortality.

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TANACETUM PARTHENIUM, GRIFFONIA SIMPLICIFOLIA AND MAGNESIUM AS SYMPTOMATIC AND PROPHYLACTIC TREATMENT FOR HEADACHE IN PAEDIATRIC PATIENTS

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Objective The aim of this study is to evaluate the use and the self-perceived efficacy and tolerability of three nutraceutical components - Tanacetum parthenium, Griffonia simplicifolia and Magnesium - in children and adolescents with primary headaches without other comorbidities.

Design This is a longitudinal cohort study.

Setting The study was conducted as a prospective study. After the first examination and the prescription of exams, patients were subjected to one month baseline period without treatment to verify the number and the intensity of attacks.

Patients We enrolled a total of 42 children, 25 female (59,52%) and 17 male (40,48%). The average age of children at the time of recruitment is $10,59 \pm 3,18$ years. The inclusion criteria employed have been: (a) aged between 3–17 years; (b) diagnosis of primary headache and/or migraine (including migraine with or without aura; chronic headache; persistent headache); (c) headache/migraine present for at least three months; (d) at least three migraine attacks per month in the last three months. The exclusion criteria have been: (a) patients with chronic pain of different nature; (b) secondary headache.

Interventions We administered AURASTOP® at the dose of 1 teaspoon 2 times per day for 2–3 months and when an attack occurs, in children above 4 years of age, at a dose of 1 pouch.

Main outcome measures It has been used two validated questionnaire: Migraine Disability Assessment (MIDAS) and The six-item Headache Impact Test (HIT-6). MIDAS is a brief questionnaire and measures headache-related disability. HIT-6 was designed to provide a global measure of adverse headache impact. Treatment with AURASTOP® has been conducted for 3 months, with two sachets-day. Compliance of patients was monitored weekly by means of a weekly exchange of emails or phone calls to parents.

Results A reduction in MIDAS scores was observed comparing pre-treatment (46.48 ± 8.35) and post-treatment (9.78 ± 18.16) data. After the treatment 1/42 patients (2.38%) had worsened, 9/42 patients (21.43%) had not improved, 10/42 (23.91%) had gone up 1 class, 12/10 patients (28.57%) had gone up 2 classes, 10/42 (23.91%) had gone up 3 classes of MIDAS score. Therefore, the improvement of disability related to the headache is statically significant (Fisher's exact test). The reduction of HIT-6 score post-treatment (46.48 ± 8.35) compared with pre-treatment (62.55 ± 5.50) was statistically significant ($P < 0.05$).

Conclusions AURASTOP® can be used as a prophylactic treatment and as symptomatic treatment in paediatric patients with headache.

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PARAECHOVIRUS MENINGOENCEPHALITIS IN INFANCY; A CASE REPORT

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Aims This article aims to describe and highlight human paraechovirus (HPEV) as a cause of meningoencephalitis.

Methods A five week old (previously well) term male infant presented with a one day history of pyrexia and irritability. On examination, he was tachycardic, febrile and inconsolable. Baseline investigations showed serum white cell count (WCC) $4.5 \times 10^9/L$ (46% neutrophils, 37% lymphocytes), CRP 11 mg/L. Cerebrospinal fluid (CSF) analysis showed WCC 72/cm, 43/cm and 114/cm in three samples (with 18% polymorphs and 82% mononuclear cells), protein 0.78 g/L, and glucose 3.3 mmol/L. Treatment with triple antibiotics and acyclovir was commenced pending further results. EEG on day 2 of admission was abnormal with low amplitude throughout and slow rhythmic activities. Due to ongoing severe irritability and persistent tachycardia, further investigations including an MRI brain and echocardiogram (ECHO) were also undertaken and were reassuringly normal. CSF and blood cultures were negative at 48 hours. However CSF polymerase chain reaction (PCR) result detected paraechovirus RNA; the CT value (crossing target) was 31.6 suggesting a relatively small viral load. CSF sampling was repeated 48 hours later and the WCC had improved to 15/54/38 cell/cm. CSF PCR was again positive for paraechovirus and the CT value had increased to 39.2 suggesting a decrease in the viral load. This correlated with the slow clinical improvement. Of note the EEG on day 4 of admission was again very abnormal, as was the follow up EEG 6 weeks later which showed some excess slowing