Convulsion febril pdf 2020

The 18-month-old baby, who was separated by her parents for counseling, presented a generalized seizure at home, with a two-minute shutdown and subsequent recovery of consciousness. He was feverish for 12 hours (underarm temperature of 38oC), cough and nasal congestion. Common upper respiratory tract infections stand out in your personal history. Pregnancy and childbirth were normal, weighing 3300 g, 50 cm long and The Apgar test 9/10, with normal development of psychomotor, without neurological changes. The father belongs to feverish seizures in childhood and has a family history of epilepsy in the brother of the parent. In physical examination, it has an otolaryngological orientation. Parents are very distressed and ask if their child had an epileptic seizure and what her treatment is. They are very restless because they do not know if it will be repeated every time you have a fever, and if you are in danger, even offer a referral, to perform blood tests and other tests (electroencephalogram,EEG), CT). Definition. FEBRILES CONVULSIONES The most commonly used definition is that adopted in 1980 by the Consensus Conference approved by the National Institutes of Health1 (INH), which was later joined by the International League Against Epilepsy2 (ILAE), which was published in the journal Epilepsy in 1993. Although both definitions are basically the same as the concept, a fundamental difference is established when considering the age of beginning: three months (INH) and above one month (ILAE), respectively. It was, however, the first most widely accepted in the scientific literature as a whole. In 1989, ILAE, in its proposal for an international classification of epileptic crisis3 (EU), included Febrile Crises (CF) in an unclassified EU group, and in 2001 the Special Working Group proposed a classification of epileptic syndromes that included them, this time in the EU Processes, which do not require the diagnosis of epilepsy4. According to the references, seizure or CF is EC-related fever (temperature of at least 38oC) that occurs in infants and children between the ages of three months and five years, but without evidence of an intracranial infection or other specific cause. EC with fever is excluded from the definition in children who have gone through to EU afebrile and processes in which fever and seizures can appear together, such as electrolyte imbalance and central nervous system (CNS) infections. Subsequently, the American Academy of Pediatrics (AAP) in its publications 6 to 60 months. In 1976, Nelson and Ellenberg, according to the National Joint Perinatal Project, divided it into simple and complex.5 Simple or typical SFs are defined as primary, brief, less than 15-minute generalized seizures that are not repeated within the first 24 hours of their creation in a child with fever who does not have an intracranial infection, metabolic disorders, or a history of afebril attacks. They carry a full recovery from the level of consciousness and do not leave neurological sequels (the level of evidence I). They are the most common (80%). which occur more than once in the first 24 hours or occur in the same feverish process. The mapping/concealment of EPIDEMIOLOGY is the most common seizure disorder in childhood. and in half of the cases appear between 12 and 30 months7. They usually occur on the first day of fever and are mostly widespread, tonic-clonic and short-lived (one or two minutes, sometimes only a few seconds), but 9% of children can last above 15 minutes8 and there is no evidence that they are more likely to coincide with maximum temperature increases9. Up to 5% can develop towards feverish status (the crisis lasts more than 30 minutes or a sequence of short crises, without regaining consciousness between them). Excluding CNS infection is crucial, especially in these children. The cause is unknown, but numerous reviews point to a multifactorial origin, with the interaction of genetic and environmental factors. Its incidence is higher in parents and siblings of children who represent CF than the general population. Up to 24% of those affected have a family history of febrile seizures, and 4% have a family history of epilepsy7. Various chromosomal loci have been identified in the complex inheritance of CF and, when analysing relatives, the genetic component is revealed to be followed by dominant autosomal inheritance, with a incomplete and less commonly polygenic penetration pattern.10 HISTORY AND INTELLIGENCE NECESSARY BEFORE A FEBRIL CONVULSION Diagnosis is fundamentally clinical and is based on anamines and physical examinations designed to study the characteristics of seizure, the presence of neurological or focal signs and the etiology of fever, mainly to exclude CNS infection or other related causes (metabolic, traumatic, etc.). Systematic questioning of Anamnesis is important for classifying the type of seizure and should include a detailed description of the episode. It is important to collect information from parents or, if they do not, family members or others present, to look for a personal history of feverish or feverish seizures, age of origin, number of episodes, previous and current diseases, including neurological or infectious diseases and injuries. Get information about the vaccination schedule and whether there is a family history of febrile seizures or epilepsy. Check out other attractive symptoms before you start a seizure. Ask about its characteristics, the beginning, whether the loss of consciousness, type of movements, duration, frequency, recovery time and relapse, to be able to print it in a simple or complex, and the treatment received, especially if it is known epileptic or if he had recent changes in them. Physical examination Physical examination will be aimed at being able to determine the possible infectious focus and exclude neurological changes before or caused by the crisis. It will begin with an initial assessment of cardiorespiratory state and level of consciousness, as well as the search for signs associated with neuromeninggeal, infectious or rash, such as the presence of skin rash, petehia, neurological signs, meningogens, neck stiffness or intracranial hypertension, metabolic disorders, hydroelectrotic changes, previous trauma (traumatic brain injury). It will be completed with a detailed general and neurological examination. IS MORE RESEARCH NEEDED? The IPA followed a review of evidence-based literature published in 2011, guidelines for assessing a child's neurological diagnosis through simple fibreed seizure.11 The standards that replace those published in 1996 are not intended for children with complex feverish seizures or previous neurological pathologies, CNS abnormalities or history of seizures not related to fever. Following the recommendations, lumbar puncture, blood test, EEG or neuroimaging tests (CT or magnetic resonance imaging) will not be shown, usually in a healthy child, within 12 hours of development simple feverish. Argument: Lambara puncture is not specified because the risk of bacterial meningitis, presenting as the first feverish seizure in a child from 6 to 18 months, is very low if he has no disease and is properly vaccinated. However, it should be taken into account if: Prospective demographic studies have shown that bacterial meningitis occurs in up to 18% of children with feverish epileptic status, so in this case it would be recommended to start early administration of parenteral antibiotics if there are any contraindications for lumbar puncture12. Electroencephalogram is not shown because there is no evidence that it has a pro-social involvement in predicting relapse or further development of epilepsy, even in a subgroup of complex feverish convulsions where the rate of finding changes in postictal EEG is low, but can be considered when a child with CF has a suspected brain pathology. Blood test Based on published scientific data, the IPA does not recommend the definition of glucose, serum electrolytes (ions, calcium, phosphorus, magnesium) or a full blood test on a regular basis, in a child with a simple febrile seizure, because there is no record of its benefits, but should be requested when there are specific signs aimed at identifying the cause of fever. Neuroimaging tests are not necessary in the initial assessment of a child with a simple first CF. Although brain lesions such as dysplasia or a rarer abscess or tumor may be added to more risks than benefits: CT is associated with radiation exposure, which may increase the risk of future cancer, such as leukemia or brain tumor13, and MRI with potential sowing risks, in addition to high cost. X-rays of the skull are also not needed when assessing a child with febrile convulsions. Extrapolation of data from the literature on the use of CT scans in neurologically healthy children who had a complex feverish seizure showed that they are also not usually needed because they are unlikely to be associated with intracranial pathology, such as trauma or the occupation mass of space, bleeding or hydrocephalus, abscess or brain swelling, which require urgent neurosurgical intervention.14 However, they should be considered in children with recurrent complex fever status or CF who have other neurological findings such as abnormal cephalic perimeter, significant developmental delays, or persistent neurological focal changes. WHAT DIFFERENTIAL DIAGNOSIS DO I NEED TO MAKE? Mostly with THERAPEUTIC ATTITUDE. PROTOCOL OF ACTION Given their benign and self-limiting nature, and since most CFs are brief, the last less than two minutes, and tend to give way spontaneously, some authors recommend not to try until then. When the seizure lasts more than five minutes, the recommendations advise to start treatment with benzodiazepines: rectal diazepam (DPA) or intranasal or oral midazolam (MDD)15.16. The critical phase of general acute treatment includes the use of common measures that are similar to any type of crisis: respiratory stabilization, breathing and circulation. Provide physical protection and place in the semi-stretched lateral decube position to avoid the possibility of aspiration if there is no history of injury. ABC, A: Keep your airways permeable (side-sucking head, sucking secretions, place oropharyngeal cannula); B: Maintaining adequate ventilation (oxygenation by mask or nasal tubes). Assess color, chest movements, breathing rate, pulmonary ocular, pulsoxymetry; C: provide peripheral infusions, monitor constants (pulses, heart rate, blood pressure) and evaluate peripheral venous channeling pathways. Drugs that can be used to treat feverish seizure of benzodiazepines are the first choice to treat the EU in an acute phase. The most widely used and most scientifically proven and most experienced application is DDS in rectal solution (microeneme) at 0.5 mg/kg/dose, maximum 10 mg/dose or endovenically at 0.3 mg/kg/dose, slow, maximum 10 mg/dose (proof level I). Its absorption occurs quickly and begins its action after 1-3 minutes (to achieve effective concentration in the brain takes ten seconds), its maximum effect is achieved in 5-10 minutes, with a duration of 10 to 20 minutes. However, rectal introduction to the suppositories is not helpful, due to its slow absorption. MDH is more effective than rectal DDS, with the use of oral mucosa (evidence level I), in doses of 0.5 mg/kg/dose or intranasal (evidence level III), in doses of 0.2 mg/kg/dose15.16. MDH and DMV are equally effective at administering intranasal and intravenous doses, respectively, to slow seizure (evidence level III)17. However, the safety of the use of MDH (oral or intranasal) in an out-of-hospital environment (evidence level IV) has not been demonstrated, and the use of rectal DDS (recommendation class A)18 should be preferred. Rectal DDD is effective in acute treatment of CF, seizures lasting more than five minutes and in the treatment of fever. Also, when you don't get and when you receive immediate care at home. The measurements are consistent: safe ABC and oxygenation and manage D'P for jugular capture. Lowering body temperature with antipyretic also should be part of the primary treatment. If the crisis continues (expect a response for ten minutes before considering it ineffective), the sequence should be continued with the EU critical phase emergency algorithm. If it is an epileptic seizure status, phenytoin is the initial anticonvulsant in emergency treatment. If the crisis does not give either a known cause or a clear infectious cause found, it should be transferred to the hospital after stabilization. As a rule, a child with feverish seizures does not need hospitalization. However, children between the ages of 12 and 18 months and children who received pre-antimicrobial treatment should be monitored within 24 hours thereafter. In children under 18 months of age, signs of meningitis can be very subtle and a lumbar puncture can be indicated. SPG is recommended in children under 12 months of age with fever and seizures. Table 2 summarizes the criteria for hospital referral. Table 2. Show/hide preventive treatment of relapses Effectiveness of continuous or intermittent antiepileptic treatment, for the prevention of relapse CF. Continuous treatment Three meta-analyses published in 1988, 1997 and 200319-21 found that continuous phenobarbital prophylaxis (PB) is effective in preventing the recurrence of simple CFs, when administered daily and in the therapeutic range (evidence level I) in doses of 3.5-5 mg/kg/day, in two doses. Primide also reduces the recurrence rate in doses of 15-20 mg/kg/day, and valproic acid (VPA) is at least as effective as PB (evidence level I) in doses of 30 mg/kg/day in two doses. However, the onset of side effects such as behavioral disorders, which in the case of PB can reach up to 20-40%, or hypersensitivity reactions, or association, although rarely, fulminant hepatitis in the case of VPA, especially in children under two years of age, severely limit their usefulness, as they may be of sufficient intensity to cause them to be removed22. Neither carbamazepine nor phenytoin are effective in preventing recurrence of simple CF23. Table 3 shows the main side effects. Table 3. The show/hide intermittent treatment of a randomized double-blind controlled clinical trial, in patients with a history of feverish seizures, showed that oral administration of DHL in doses of 0.33 mg/kg/8 hours for 48 hours decreases (reducing risk by 44% per person per year) in high-risk children24. Other open studies also document it.25 Intermittent prevention with THED to prevent relapses can be effective (evidence level III). Side effects include drowsiness and ataxia. Respiratory depression is extremely rare, even when administered rectally22. However, it should be remembered that sedia caused by any of the benzodiazepines administered orally, correctly, nasal or oral can mask THE infection of the central nervous system. Despite evidence that continuous antiepileptic treatment with PB, primay or VPA, or intermittent with oral CPD, is effective in reducing the risk of recurrence of simple SFs; however, given the benignness and excellent prognosis they present, and the potential side effects of anticonvulsants that outweigh the relatively lower risks associated with anticonvulsants, SPG does not recommend long-term, continuous or intermittent treatment of children with one or more simple febreal seizures, as this does not significantly increase the risk of future epilepsy. However, in situations where parent anxiety associated with feverish convulsions is severe, intermittent oral CPD at the beginning of feverish disease may be effective in preventing relapses.22 The recommended dose is 0.5 mg/kg/day (maximum 10 mg), orally or in 2-3 doses per day, during the first 48 hours of fever. With regard to the risk of subsequent epilepsy, there is no evidence that relapse prevention reduces this risk (evidence level I)18. The benefits and risks of antipyretic drugs in general, acetaminophen and ibuprofen are considered safe and effective in children and are very useful for alleviating the discomfort associated with fever, but no study has shown that their prophylactic administration reduces the risk of relapse. Important side effects include hepatotoxicity, respiratory failure, metabolic acidosis, renal and coma failure, in children after overdose or if there are risk factors22. PROGNOSIS AND RISK Febrile seizures have an excellent prognosis and usually do not leave a long-term sequelae. Are febrile seizures cause intellectual impairment? There is no evidence that they cause brain damage or CNS (evidence level I). It has not been shown to cause a decrease in intelligence, academic performance or learning, except for children with neurological disorders prior to the first CF, or that behavioral abnormalities are the result of recurrent GIs, even in children with CF What is the risk of further epilepsy? Most children do not develop epilepsy. The overall risk during your life after CF is 2%, compared to 1% of what exists in the general population, but if there are risk factors such as the history of epilepsy in first-degree relatives, a complex CF, or previous neurological deficit (cerebral palsy, later development, or other neurological abnormalities), the probability can increase significantly to 10% (the level of evidence I). In children not associated with risk factors, the increased risk is low (the level of evidence I). What is the risk of relapse? Unlike a small increase in the risk of epilepsy, children with simple SFs have high relapse rates that can reach up to 30 or 40% chance of developing epilepsy after their first crisis (the level of evidence I). Table 4 lists risk factors. Table 4. Show/hide Depending on this, the approximate probability calculation in two years will be: children without risk factors, less than 15%; Risk factor, 25%; with two, 30-50%, and with three or more, above 60%, especially if they are less than 18 months old and have a history of feverish seizures in first-degree relatives (I-18 proof level). Mortality Finally, the risk of death of a child during a simple bout of fever, as a result of documented trauma, aspiration or cardiac arrhythmia, is theoretically possible, but has not yet been recorded22. In short, with the exception of the high recurrence rate, no long-term side effects have been identified. FAMILY-ORIENTED TIPS AND ACTION MEASURES Most families perceive feverish crises as a worrying situation. Information management is key and should be an important part of treatment goals. Parents and caregivers should be informed of their benign nature, provide verbal or written support and information about cause and prognosis, and provide guidance and guidance, if a child develops a new crisis, are actions that will help alleviate the distress and anxiety of family members. Measures should include the following points: BIBLIOGRAPHY BIBLIOGRAPHY