

MANAGEMENT OF PAEDIATRIC FEBRILE SEIZURES IN EMERGENCY WARD

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ABSTRACT

This review focuses on the most recent data and understanding of febrile seizures management in kids. Febrile seizures are events associated with fever in the absence of an intracranial infections, hypoglycaemia, or creating it necessary to deal with parental anxiety within the most sensitive manner. The aim of this review was to focus on the management of Febrile seizures in the diagnosis of Febrile seizures is clinical, and it is important to exclude intracranial infections, in particular after a complex febrile seizures. Management consists of symptom management and treating the reason behind the fever. This review will give an overview of the definition of febrile seizures, epidemiology, evaluation and treatment outcomes febrile seizures usually are self-limited, and intervention to stop the seizure often is unnecessary. When attainable, the cause of the fever should be treated. Febrile seizures must be treated based on a systemic approach all the histories must be considered, the drug of choice also very important to treat the pediatric febrile seizures, assess the patient condition is essential and monitor regularly. Rectal diazepam is a good and reliable way to control seizures outside of the hospital and even at home

INTRODUCTION

Febrile seizures [FS] are seizures or convulsions that occur in children between six months to six years and are triggered by fever [1]. FS square measures the foremost common variety of convulsions in kids. Their prevalence is just about three d - four-dimensional in white kids, 6%-9% in Japanese kids, and 5%-10% in Indian kids [2]. Febrile seizures may be very scary for folks, though they're usually harmless for a kid, creating it vital to handle parental anxiety within the most sensitive manner [3]

A unique pediatric entity of simple febrile seizures are characterized by

Simple febrile seizures characters

1. Temp \geq 100.4°F or 38°C
2. Ages 6 months – 5 years
3. Seizure activity < 15 min
4. Single seizure in 24 hrs

Incidence and prevalence; Febrile seizures occur more frequently in the Asian population, affecting 3.4%-9.3% of Japanese children [5] and 5%-10% of Indian children, but only 2%-5% of children in the United States [US] and Western Europe. The highest prevalence is 14% in Guam [7]. Unfortunately, there is no epidemiological study in Korean children. Febrile seizures occur in 2% to 5% of children 6 months to 5 years of age. The peak incidence occurs at

approximately 18 months of age and is low before 6 months or after 3 years of age. Generally, the incidence of Febrile seizures decreases markedly after 4 years of age [and the condition rarely occurs in children older than 7 years of age [5, 6] There are two seasonal peaks in Febrile seizures incidence: November-January, corresponding to the peak of viral upper respiratory infection, and, June –August when common viral gastrointestinal illnesses occur [8] variation in prevalence is related to differences in case definitions, ascertainment methods, geography, and cultural factors [9]. Males have consistently emerged as having a higher frequency of febrile seizures [male to female ratio, 1.1:1 to 2:1]. However, some large studies have shown no significant gender difference [8]. Febrile seizures are mostly generalized and convulsive in character, but approximately 5% of Febrile seizures cases have now convulsive features presenting with unconsciousness, staring, eye deviation, atonia, or cyanosis [5]. In a study of children with a first Febrile seizures, most seizures were simple, and at least one complex feature was noted in approximately 35% of cases, including features of focality [16.1%], multiple seizures [13.8%], prolonged duration (>15 minutes, 9.3%) and recurrent febrile seizure within 24 hours [16.2%]; 6.5% showed two complex features, and 0.7% showed three complex features Febrile status epilepticus, that is, seizures that last more than 30 minutes, represents only 5% of Febrile seizures and represents about 25% of all episodes of childhood status epilepticus with more than two thirds of cases

occurring at 2 years of age, Only 21% of children experience seizures either prior to or within 1 hour of the onset of fever; 57% have seizure after 1 to 24 hours of fever, and 22% experience febrile seizure more than 24 hours after the onset of fever

Simple vs Complex Febrile Seizures

Simple febrile seizures	Complex febrile seizures
Lasts less than 15minutes	Lasts 15minutes or longer
Happens once in a 24-hour period	Happens more than once in a 24-hour period
Generalized	Focal
No previous neurologic problems	Patient has known neurologic problems, such as cerebral palsy

Febrile epilepsy defined as a feverish convulsion lasting half-hour or a lot of or a series of feverish convulsions while not fully come to consciousness through out that amount

Provoking factors

Genetics

Febrile seizures will be seen in multiple relations and there's proof of genetic and environmental causes. There is a variable inheritance pattern, with no single accepted mechanism significantly higher concordance rates are seen for febrile seizures in monozygotic twins as compared to dizygotic twins in multiple twin registries [13]. A positive family history of febrile seizures can be found in 25–40% of cases when a child presents with a febrile seizure [10, 11]. The number of febrile seizures a child has affects the risk of a sibling experiencing febrile seizures [12]. The phenotype of Febrile seizures plus may account for children without a specific epilepsy syndrome who have Febrile seizures and then developed generalized epilepsy [14]. These patients or relations have a have a history of febrile seizures, often complex and frequently occur beyond 5 years of age. Epilepsy with variable seizure varieties develops later in childhood or adulthood. A variety of mutations including SCN1A, SCN1B and GABGR2 have been demonstrated in these families [15]. The proposed genetic syndrome that is called generalized epilepsy with febrile seizures plus [GEFS+] is a spectrum of clinical epilepsy phenotypes, with the most every phenol type of myoclonic-astatepilepsy[14].

Intrauterine Risk Factors

A population-based, prospective questionnaire study from early feta life onward evaluated the occurrence of Febrile seizures in 3,372 subjects at age 12 and 24 months [16]. In the trimester, children in the lowest percentile of all general growth characteristics [femur length, abdominal circumference, and estimated fetal weight] were at increased risk of developing Febrile seizures. In the third trimester children in the lowest percentile of biparietal diameter also were at increased risk of febrile seizures. Children within the lowest score of transversal neural structure diameter within the trimester were an enlarged risk of developing febrile seizures, compared with children in the highest percentile. Fetal growth retardation is associated with increased risk of febrile seizures were concluded in a study and that adverse environmental and genetic factors during pregnancy may be important in the development of febrile seizures.

Vaccinations

Vaccinations are important to pediatric health and are recommended by the American Academy of Paediatrics [AAP] for members of the youngest age group at risk for experiencing the disease for which efficacy and safety have been demonstrated [18]. In 2002 immunization safety publication released by the World Health Organisation. WHO recommends that children be vaccinated In general, febrile seizures that occur after vaccination have not been found to be different from febrile seizures from other causes [19]. The Febrile seizures are commonly the first manifestation of the sodium channel mutation known as Dravet syndrome, but any febrile illness could cause the first seizure in a genetically susceptible individual. Vaccinations can trigger the onset of seizures in one-third of patients with Darvet syndrome [19] Febrile seizures won't cause an associate in Nursing epileptic nervous disorder during a kid while not a mutation conferring genetic susceptibleness. Neither the AAP nor WHO recommends stopping or changing the immunization schedule after a febrile seizure, even in children with underlying genetic mutations. The public concern of vaccines inflicting febrile seizures has a crystal rectifier to varied studies. Children, less than 2 years of age have an increased risk of febrile seizures after the first dose of the measles-containing vaccine when it is administered with a varicella vaccine [20]. Rubella-containing vaccines haven't been found to be related to associate in nursing enlarged risk of febrile seizures in youngsters over four, regardless of whether.

Varicella is given at the same time [21]. The antecedently used whole-cell diphtheria/tetanus/pertussis and measles-containing vaccines have a long time association.

With febrile seizures, but the less reactogenic diphtheria, tetanus, and acellular pertussis [DTaP] vaccine has been developed and is currently used and does not increase the risk of febrile seizures [19].

Metabolic Abnormalities and Deficiencies

Whereas some have reportable an applied mathematics association between iron deficiency anemia and straightforward feverish seizures [22,23], other cross-sectional studies have not found a significant association[24]. A study of feverish seizures in Indian youngsters.

Found lower atomic number 30 levels in patients with Febrile seizures compared to age-matched feverish youngsters while not seizures [25]. Other studies have proposed that there is a link between Febrile seizures and a systemic respiratory alkalosis, irrespective of the severity of the underlying infection [26].

Mechanisms of Febrile Seizures Generation

Mechanisms	Animal models	Humans
↑Brain temperature	Activation of temperature-sensitive channels including transient receptor potential vanilloid [36,53]	Hyperthermia induced by hot bath and anticholinergic medication [43]
	Modulation of amplitude and kinetics of ionic currents [41]	

		↑ Frequency of allele promoting IL-1 β production in children with Febrile seizures [39]
Fever mediators: interleukin-1 β	↑ Seizure threshold temperature in IL1RI deficient mice [39] ↑ Hippocampal IL-1 β levels at Febrile seizures onset [46]	CSF: ↑ IL-1 β in children with Febrile seizures[54,55]
	Exogenous IL1-RA inhibits Febrile seizures [46]	However, no ↑ IL-1 β in CSF in children with Febrile seizures [56,57]
Hyperthermia-induced	Alkalosis may promote Febrile seizures [52,57]	Controversial [58]

Elevating brain temperature in itself alters many neuronal functions, including several temperature-sensitive ion channels [35, 36] this should influence neuronal firing and the probability of generating massive synchronized neuronal activity, i.e. Seizures. Remarkably, hyperthermia provoked by medication overdose or hot baths often provokes seizures in young children [43], indicating that an increase in brain temperature may suffice to generate seizures. Obviously, fever involves, in addition to increased brain temperature, also an inflammatory process including secretion of cytokines in the periphery as well as in the brain [38, 39]. Indeed, it was discovered that fever and hyperthermia's are common mechanisms to provoke seizures: The fever-promoting, pyrogen, interleukin1 β contributes to fever generation and, conversely, fever leads to the synthesis of this cytokine in the hippocampus [40-43]. In addition, interleukin-1 β has been shown to increase neuronal excitability, acting via both glutamate and GABA [44]. In vivo, these actions of interleukin-1 β enhance the actions of seizure-provoking agents In support of an important role for endogenous interleukin-1 β in the generation of febrile seizures has come from studies in mice lacking the receptor for this cytokine. Much higher temperatures were required to elicit hyperthermic seizures in these mice [27], and interleukin-1 β provoked seizures in immature rats and mice when given directly into the brain [27]. In addition, using lipopolysaccharide [LPS], a bacterial toxin, to induce release of endogenous interleukin-1 β 1 in rodents lowers the threshold to kainic acid, and combining LPS with low-dose kainic acid results in seizures[45,46]Several genes have been implicated in the susceptibility to febrile seizures, including those coding sodium channels, [28,29], GABAA receptors [30-33], and interleukins [33, 34].in addition, interactions among many genes may contribute to the prevalence of those seizures in an exceedingly additional advanced manner. It might be noted that fever of specific infectious etiologies and specifically HHV6 might influence the probability of generation of febrile seizures [47, 48]. Finally, hyperthermia-induced hyperventilation and alkalosis have been proposed as a pivotal element of febrile seizure generation [see elsewhere in this issue]. As discussed more fully elsewhere [49], alkalosis of the brain has been shown to provoke neuronal excitability [50, 51], and contributes to seizure path physiology in models where the latency between fever and seizure onset is long 30 min; [52].

Remarkably, human conditions associated with severe alkalosis, including prolonged crying and pyloric stenosis of infants, are not associated with the generation of seizures

Clinical Manifestations

Clinical Characteristics of Simple and Complex Febrile seizures [FS]

Simple	Complex
Generalized tonic-clonic seizures without focal features Seizures last less than ten minutes Seizures spontaneously resolve There is no recurrence within 24 h	There are focal features in which, for example, only one side of the body is involved Seizures last for more than ten minutes Two or more seizures occur within 24 h Full recovery is not observed after one hour There are post-ictal neurologic consequences There is a short period of paralysis, defined as Todd's paralysis, after the febrile Seizures develops Anticonvulsant drugs may be required to interrupt the seizure

In most cases, febrile seizures occur within the first day of the fever [65,66] Seizures occurring ≥ 3 days after the onset of a fever should be suspect. Typically, a simple febrile seizure is generalized and associated with tonic-clonic movements of the limbs and rolling back of the eyeballs. The seizure usually lasts for a few seconds to at most 15 minutes [usually less than 5 minutes], followed by a brief postictal period of drowsiness, and does not recur within 24 hours [59, 61,63]. The facial and respiratory muscles are often involved[4]. Atonic and tonic spells have also been described [4]. In contrast, a complex febrile seizure usually lasts longer than 15 minutes. The seizure is usually focal [movement limited to one side of the body or one limb]. It may recur within the same day. Loss of consciousness at the time of seizure is a constant feature. Foaming at the mouth, difficulty breathing, pallor, or cyanosis may also occur At the time of a seizure, the majority of children have a temperature of $\geq 39^{\circ}\text{C}$ [62] Febrile seizures can be classified as either simple or complex based on duration, physical characteristics, and recurrence patterns. [66] Simple febrile seizures account for about 80-85% of all febrile seizure.[59,60,62] the seizure may have a prolonged period of postictal drowsiness or be associated with postictal transient hemiparesis [Todd's palsy] [59,60,63,77] Generally, children with complex febrile seizures are younger and more likely to have delay in development than those with simple febrile seizures. [61] The majority of children with complex febrile seizures do so with their first seizure, but children with initial simple febrile seizures may have complex febrile seizures subsequently [61]. Febrile status epilepticus, the most severe type of complex febrile seizure, refers to continuous or intermittent febrile seizures without consciousness being regained at the interacted state for more than 30 minutes. [64,65,68] It should be noted that persistently open or deviated eyes are features of ongoing seizure activity [61] Children with febrile status epilepticus are more likely to have hippocampal abnormalities and are also at increased risk for subsequent febrile status epilepticus [64] Investigations. The two main objectives of investigating a child with febrile seizures are to rule out meningitis and ascertain the cause of a fever. Viruses are the most common cause of illnesses in children admitted to the hospital with a first febrile

seizure [71]. Infections are Usually upper respiratory, otitis media, and gastrointestinal. Occur throughout the first part of rising temperature, before the parents realize that the child is ill. It is unusual for febrile seizures to occur after the first day of a febrile illness and should make one consider other diagnostic possibilities. Seizures occurring after immunizations are likely to be febrile, occurring in response to temperature elevation, especially those occurring within 48 hours of DPT and 7-10 days after measles immunization. Lumbar puncture need not be routinely performed. The indications are shown in Table III. Ideally, this decision should be taken by an experienced pediatrician who may at times decide not to do a lumbar puncture even in an infant if the child is active and alert and if the reason behind fever may be determined. However, the decision should be reviewed within a few hours. Whenever in doubt, the investigation should be performed. The liquid body substance findings could also be traditional in early infectious disease

Table III Indications for Lumbar Puncture in Children with Febrile Seizures

1. Clinical signs of meningism
2. Undue or unexplained drowsiness or irritability
3. Signs and symptoms of systemic illness
4. Infants too young to faithfully show clinical signs of meningitis-especially below one year of age

An Electroencephalogram is not a guide to treatment or to prognosis, and as such, it is not helpful in children with first or recurrent febrile seizures [69]. The Electroencephalogram, if done soon after the seizure, usually shows marked generalized slowing which may persist up to a week or more and may be asymmetrical [70]. Abnormalities seen after the postictal period include spikes, 4-6/sec slow waves, or spike waves [72-76]. Specific abnormalities are more commonly seen in older children, in those with multiple previous febrile seizures, preexisting motor abnormality, and after focal seizures [74].

Differential diagnosis of febrile seizures

- Rigors: shaking without a loss of consciousness
- Febrile delirium: acute and transient confusion associated with a high fever
- Reflex anoxic seizures: children suddenly become limp because of painful events or shock
- Febrile syncope
- Evolving epilepsy syndrome: fever triggers seizure episodes
- Breath holding attacks: children voluntarily hold their breath and may transiently lose consciousness
- Evolving epilepsy syndrome: fever triggers seizure episodes
- Central nervous system infections; meningitis, encephalitis, and brain abscesses

Emergency stabilization using the ABCDE approach [airway, breathing, circulation, disability, and exposure/examination, plus blood glucose check][75,79] is needed if still child convulsing, and the seizure should be stopped with antiepileptic drugs as soon as possible. After stabilization, vital signs should be recorded: temperature, heart and respiratory rate, capillary refill time, and blood glucose [77,78]. In young children, the signs and symptoms of intracranial infections, such as meningitis or encephalitis, may be very subtle, and these infections must be ruled out as soon as possible [76, 79-81]. Brain abscesses are a rare entity in pediatric patients and occur in children younger than 15 years of age in 25% of cases, with a peak incidence at 4-7 years of age. Seizures, focal neurologic deficits, and an altered mental status are present in

25%–50% of patients, but symptoms may also not be evident. Brain magnetic resonance imaging [MRI] is the first diagnostic modality of choice, and a lumbar puncture is not recommended if the MRI visualizes the abscess. Treatment consists of antibiotic therapy and surgical drainage of the abscess. The most frequent organisms that cause brain abscesses are streptococci, staphylococci, and enteric bacteria, but of greater concern is the role of community-acquired methicillin-resistant *Staphylococcus aureus* [MRSA] over the last decade. Treatment; Febrile seizures square measure sometimes benign and self-limiting attacks [often lasting but ten minutes] and protecting measures square measure simply needed.

Airways open and appropriate posturing [lateral recumbent, with head extension], are the recommended maneuvers for the affected children. Rectal diazepam is a good and reliable way to control seizures outside of the hospital and even at home [89-91], but it should be used with great caution and in the hands of well-trained caregivers and/or parents. Parents of youngsters with a history of prolonged and/or multiple febrile seizures and those who are living far from medical care should be educated and trained to use rectal diazepam. For many parents, the availability of rectal diazepam will relieve their anxiety even though they may never use that [92-94]. When a toddler involves ER with seizure, associate degree IV route ought to be obtained and blood vessel benzodiazepine ought to be administered. When intravenous access is difficult, rectal diazepam would be an effective alternative choice [89, 91]. If the seizures continue after a sufficient dose of intravenous diazepam, a full status epilepticus treatment protocol should be initiated [95, 96].

Treatment of febrile seizures in the acute phase;
 Airways open and appropriate positioning
 Rectal and/or intravenous diazepam
 Status epilepticus treatment protocol is followed if seizures continued in the patient

Four step's model of approach to the kids with a history of feverish seizure

These steps are;

- Data gathering [i.e. formulating a database], risk assessment
- patient selection,
- Selection of treatment strategy.

Step1: Formulating a database; In this step, the physician gathers the clinical as well as the para clinical relevant information to formulate a robust database.

The Following Information is Mandatory

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- Age of the patient
 - History of febrile seizure in the 1st as well as 2nd-degree family Duration between the beginning of fever and the occurrence of the seizure
 - Complexity [i.e. focal, multiple, and prolonged Febrile seizures]
 - Duration of the postictal phase
 - Presence of any neurologic or developmental deficits
 - Presence of papilledema
 - History of any developmental delay History of nursery admission for more than 30 days
 - Day-care attendance
 - The duration between the beginning of fever and the occurrence of a seizure
 - Neck stiffness, Kerning and/or Brudzinsky signs
 - Petechiae and/or purpura
 - In infants less than 18 months old nonspecific and vague symptomology [e.g.: agitation, bulging fontanel, excessive cry]
-

Step 2: Risk Assessment

Risk assessment is according to the patient's database.

Risk factors in recurrences of febrile seizures: The chance of recurrence of febrile seizures is about one in three regardless of any risk factors [99-102]. The most common consistent risk factors are a family history of febrile seizures and the age of onset of fewer than 18 months [99-100]. Two other definite risk factors are peak temperature [100-102] and duration of the fever before the seizure [82, 104].

Risk factors in the first febrile seizure: In two independent studies [97,98], the risk factors associated with the 1st Febrile seizures are; history of Febrile seizures in the 1st or 2nd-degree family members, nursery stay of more than 30 days, developmental delay, attendance at day-care, high peak temperature. In the second study, there was an inverse association between gastroenteritis, as an underlying disorder, and the first attack of febrile seizure. There was a 28% chance of at least one febrile seizure for children with two or more of the above-mentioned risk factors [97]. The higher the height temperature, the higher the chance for recurrence. It is very important to mention that the peak temperature is not the temperature at the same time of seizure or arrival at the emergency department. The shorter the period, the higher is the risk of recurrence of further seizures. Children with multiple risk factors have the highest chance for recurrence [100,104] in children with no risk factor, there is a recurrence risk of less than 15% at two years. A recurrent febrile seizure also tends to be prolonged if the first attack was prolonged [86,101]. Presence of family history of a febrile seizure [epilepsy] is a doubtful risk factor for recurrence of further febrile seizures [100,101,105,106].

Drugs commonly used for children with febrile seizures [FS] who present to the emergency room

Name	Dosage	Administration Route	Frequency	Maximum Dosage	When Used
paracetamol	15 mg/kg	Oral, rectal or intravenous [IV] during resuscitation	Every four to six hours	Five within 24h	For pyrexia in children with FS
Ibuprofen	5-10 mg/kg	oral	Every six to eight hours	Four within 24h	For pyrexia in children with FS unless they are dehydrated
Diazepam	0.25 mg/kg 0.5 mg/kg	IV or intraosseous Rectal	A second dose may be given ten minutes after the first	Only two doses of benzodiazepines are to be used, regardless of the agent selected and if they are administered alone or in combination	For an actively convulsing child whose seizures have lasted more than five minutes
Lorazepam	0.1 mg/kg	IV	A second dose may be given ten minutes after the first	Only two doses are to be used	For an actively convulsing child whose seizures have lasted more than five minutes
Midazolam	0.15-0.2 mg/kg	IV	A second dose may be given 10 min after the first	Only two doses are to be used	For an actively convulsing child whose seizures have lasted more than five minutes
0.9% sodium chloride solution	20 mL/kg	IV	During resuscitation	More than two doses are rarely required	In children with shock, for example, in febrile illness due to gastroenteritis

Risk factors for subsequent epilepsy; the occurrence of a family history of no febrile seizures as well as the occurrence of complex febrile seizures will raise the risk of subsequent epilepsy [82,84,85,107,108]. In 2 studies, there was a rather redoubled risk in kids with multiple febrile seizures. One study found an inverse association between the duration of fever before the seizure and the occurrence of further epilepsy [108]. That means the shorter the duration between the onset of fever and seizure, the higher the chance of developing further

epilepsy. Two studies revealed that children with very prolonged febrile seizures [ie febrile status] are more prone to develop further epilepsy [82,108]. The only common risk factor for both the recurrence of febrile seizures and epilepsy is the duration of fever before the onset of the febrile seizure [105,106,108].

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- Definite risk factors;
 - Family history of Febrile seizures -
 Age < 18 months
 - Low peak temperature
 - Duration of fever
 Possible Risk Factors;
 - Family history of epilepsy
-

Step 3: Patient Selection;

When the patient has a pre-existing neurological deficit with prominent temporal semiology. When the patient has three or more risk factors for recurrence of FS [a 60% chance for further recurrence

Step 4; drug selection ; The best treatment policy is patient [parental] education about the benign nature of Febrile seizures and the risks and benefits of any medication Parent's education, regarding how to deal with the convulsing child as well as some simple and clear explanations about febrile seizures and their benign nature and outcome are all that is necessary [120]. Teaching parents how to use rectal diazepam in an emergency condition at home is quite beneficial [89]. So they can administer it whenever their child seizes. Maybe this is the most reliable and convenient type of treatment. There is some evidence that intranasal or intrabuccal administration of midazolam is also effective in the cessation of febrile seizures [121,122]. For long-term treatment, there are mainly two types; intermittent medication at the time of fever, and daily [continuous] medications.

Long-term antiepileptic drugs are not generally prescribed as prophylaxis for Febrile seizures, as it has been demonstrated that they do not reduce the risk of developing epilepsy, and their potential side effects outweigh their potential benefits [145 -149]. On some occasions, benzodiazepines, such as rectal diazepam or buccal midazolam, can be prescribed for use at home as a rescue therapy to stop seizures, Benzodiazepines can be used in children who present with frequent Febrile

seizures in a short period or for Febrile seizures that last more than 15 min, if antiepileptic drugs have previously been required to stop the seizures [144,145,148]. A recent study by Offringa *et al.* reviewed the effects of antiepileptic's, antipyretics, and zinc in children with febrile seizures. They concluded that neither continuous or intermittent treatment with zinc, antiepileptic's, or antipyretics is recommended for children with febrile seizures. Considering that Febrile seizures can be frightening to witness, parents and families should be supported with adequate contact details for medical services and information on Febrile seizures recurrence, first aid management and, most importantly, the benign nature of the phenomenon [150]. Several studies have recently addressed the management of febrile seizures in the Emergency room. They all concluded that there is a need for a standardized diagnostic workup to improve the cost/benefit ratio of febrile seizures management [151-153]

CONCLUSION

FS is the most frequent type of seizures in pediatric patients. Most children have an excellent prognosis, and few develop long-term health problems. The diagnosis of febrile seizures is clinical, and it is important to exclude intracranial infections, in particular after a complex febrile seizure. Management consists of symptom management and treating the reason for the fever. Parents and caregivers are often distressed and frightened after a Fockers and need to be appropriately informed on the usually favourable prognosis as well as guided by healthcare professionals on the management of their child's fever and acute phase of febrile seizures. Febrile seizures must be treated based on a systemic approach all the histories must be considered, the drug of choice also very important to treat the pediatric febrile seizures, assess the patient condition is essential and monitor regularly.

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