Journal of Carcinogenesis
Covering Genesis to Therapeutics

Journal of Carcinogenesis, ISSN: 1477-3163
2026; Vol 25: Issue 1, https://carcinogenesis.com/

Frequency of Positive Cerebrospinal Fluid for the 1st Episode of Febrile Seizures in Children 6–24 Months of Age at Hayatabad Medical Complex, Peshawar, Khyber-Pakhtunkhwa.

Khadija Manzar[1], Muhammad Aqeel Khan[2], Zulfiqar Amjad[1], Sheharbanu Raza[1], Suman Shah[1], Habiba Noor[1]

[1]Postgraduate Resident, Department of Pediatrics Medicine, MTI-Hayatabad Medical Complex, Peshawar, Pakistan

[2]Professor, Department of Pediatrics Medicine, MTI-Hayatabad Medical Complex, Peshawar, Pakistan

Corresponding Author: Muhammad Aqeel Khan,
Professor, Department of Pediatrics Medicine, MTI-Hayatabad Medical Complex, Peshawar, Pakistan.
Email: khattakdr@yahoo.com

ABSTRACT

Background: Febrile seizures are one of the most common childhood seizure disorders. While the majority of first simple febrile seizures have a good prognosis, infection of the central nervous system is an important differential, especially in younger children. Examination of the cerebrospinal fluid (CSF) may help in detecting children with findings suggestive of meningitis..

Objective: To determine the frequency of positive cerebrospinal fluid findings among children aged 6–24 months presenting with a first episode of febrile seizure.

Methodology: This was a cross-sectional study which was conducted in Department of Pediatrics, Hayatabad Medical Complex, Peshawar. The total number of children aged 6–24 months who presented within 24 hours of their first febrile seizure were 132 children, collected by non-probability sequential sampling. Clinical characteristics, vaccination status, seizure onset temperature, seizure duration and CSF parameters were noted. Appearance, protein, glucose, and general cellular parameters of CSF were measured. The SPSS version 21.0 software was used for data analysis. The Chi-square test was used to assess the relationship between CSF positivity and demographic and clinical factors and $p<0.05$ was taken as statistically significant.

Results: The mean age of participants was 14.7 ± 5.4 months, and 76 (57.6%) were male. Positive CSF findings were observed in 43 (32.6%) children, while 89 (67.4%) had negative CSF findings. The mean CSF protein concentration was 44.9 ± 20.1 mg/dL, mean glucose was 55.6 ± 19.0 mg/dL, and mean CSF white blood cell count was 12.4 ± 17.1 cells/µL. Positive CSF findings were significantly associated with younger age (p=0.029), incomplete vaccination status (p=0.028), temperature above 102°F (p=0.001), and longer seizure duration (p=0.021). Gender was not significantly associated with CSF positivity (p=0.513).

Conclusion: Approximately one-third of children aged 6–24 months presenting with their first febrile seizure demonstrated positive CSF findings. Younger age, incomplete vaccination, higher temperature, and longer seizure duration were associated with an increased frequency of CSF positivity. Careful clinical assessment may help identify children in whom CSF examination is particularly important.

Keywords: Febrile seizure; cerebrospinal fluid; meningitis; lumbar puncture; children; fever

How to Cite: Khadija Manzar, Muhammad Aqeel Khan, Zulfiqar Amjad, Sheharbanu Raza, Suman Shah, Habiba Noor, (2026) Frequency of Positive Cerebrospinal Fluid for the 1st Episode of Febrile Seizures in Children 6–24 Months of Age at Hayatabad Medical Complex, Peshawar, Khyber-Pakhtunkhwa... Journal of Carcinogenesis, Vol.25, No.1, 581-587

1. INTRODUCTION

Febrile seizures are common neurological events in infants and young children, and usually accompany fever in the absence of any known CNS infection or other acute neurological cause. They are affected by the age-related excitability of the neurons, inflammatory responses, genetic susceptibility and the type of underlying febrile illness. Fever is most likely to be associated with a particularly heightened risk in the second year of life, when the developing brain is more likely to be driven to the limits of its seizure threshold (1). Current evidence indicates that immune mediators, cytokine responses, the genetic predisposition and infectious triggers may all play a role in the pathogenesis of febrile seizures.

Traditionally febrile seizures have been classified as simple or complex based on their clinical features. Febrile or February Seizure is a generalized seizure that lasts for less than 15 minutes, or does not happen again within 24 hours; complex febrile or febrile seizures are prolonged, focal or recurring. Recurrence within the first 24 hours will then affect the clinical classification and affect further evaluation. Biochemical markers, like serum lactate, could be useful to identify children at higher risk of recurrence in the same febrile episode (2). When assessing a child's initial seizure, it is important to differentiate between a benign convulsion associated with fever and seizures stemming from more serious neurological and/or infectious diseases (3).

The major clinical problem in the child with fever and seizures is the possibility of meningitis. While bacterial meningitis is now uncommon in many immunized communities, the diagnosis of central nervous system infection can have serious repercussions when it isn't suspected. Recent clinical evidence has suggested that the overall prevalence of meningitis in children with febrile seizures is relatively low in many settings, but is dependent on the age, immunization status, seizure characteristics and associated clinical findings. Soti Khiabani et al. highlighted the need to assess meningitis and co-infections in children admitted to the hospital with febrile seizures (4). Likewise, investigations of children with complex febrile seizures have shown low yield for serious bacterial infection and meningitis, and investigations should be tailored to the presentation of the child, rather than being carried out routinely (5).

When meningitis is suspected or any other infection of the central nervous system, lumbar puncture is the test of choice to obtain CSF. Typically CSF examination involves cell count, differential leukocyte count, protein, and glucose levels which all contribute to the differentiation of inflammatory/infectious abnormalities from normal CSF findings. It is a relatively safe procedure, if performed with careful technique and taking appropriate clinical precautions, however, technical difficulty and transient physiological disturbances are possible in younger infants (6). Thus the risk of clinically significant CSF changes needs to be weighed against the invasiveness of LP. Determination of CSF characteristics associated with positive tests could help guide clinical decisions.

Some factors have been linked to a child's susceptibility to their first febrile seizure. These include younger age, iron deficiency, family history of febrile seizures/epilepsy, prematurity and other environmental or developmental factors (7). Usually uncomplicated febrile seizures are brief, nonrecurrent, and have a benign prognosis and long term anticonvulsant treatment is not needed for the majority of them. However, there is now a strong focus on the correct clinical evaluation, identification of warning signs, education of parents/guardians, and in otherwise healthy children, avoiding unnecessary investigations and treatment (8,9).

The reported frequency of meningitis and positive CSF findings among children with a first febrile seizure differs across populations and clinical settings. In a Pakistani study involving children aged 6–18 months with a first episode of febrile seizure, meningitis was identified in 10.3% of participants, illustrating that clinically significant CSF abnormalities remain relevant in local pediatric practice (10). However, locally available evidence specifically addressing children aged 6–24 months presenting with their first febrile seizure remains limited. Therefore, the present study was conducted to determine the frequency of positive cerebrospinal fluid findings among children aged 6–24 months presenting with a first episode of febrile seizure at Hayatabad Medical Complex, Peshawar, and to assess their relationship with selected demographic and clinical characteristics.

2. METHODOLOGY

This cross-sectional study was conducted in the Department of Pediatrics, Hayatabad Medical Complex, Peshawar, Khyber Pakhtunkhwa, over a period of three months, from 8 March 2026 to 8 June 2026. The study was carried out after approval of the research protocol by the College of Physicians and Surgeons Pakistan under Ref. No. CPSP/REU/PED-2023-021-7585, dated 8 March 2026**.** Ethical approval had also been obtained from the Institutional Research and Ethical Board of Hayatabad Medical Complex under Approval No. 2007, dated 13 August 2024**.** The study setting specified in the protocol was the Pediatrics Department of Hayatabad Medical Complex, Peshawar. Written informed consent was obtained from the parents or legal guardians of all participating children before enrollment, and confidentiality of patient information was maintained throughout the study.

A total of 132 children were enrolled using a non-probability consecutive sampling technique. The sample size had been calculated using the WHO sample size calculator with a 95% confidence level, an 8% margin of error, and an anticipated

prevalence of 32.5%. Children aged 6–24 months, of either gender, who presented within 24 hours of their first episode of febrile seizure were eligible for inclusion. Children with a previous history of febrile seizures, a known seizure disorder, previous head trauma, receipt of antibiotics for more than 48 hours before presentation, or whose parents declined consent were excluded.

A detailed history was taken and each child was subjected to a thorough clinical assessment done by the paediatric team upon enrolment. Demographic and clinical data were age, gender, residence, body weight, vaccination status (based on Expanded Programme on Immunization), temperature at onset of seizure, duration of seizures, seizure type, and length of hospital stay. The data about antimicrobial and anticonvulsant therapy were also noted, as appropriate. A temperature of 100.4°F or higher in the axilla was used as a criterion for the presence of fever in the study protocol. A first simple febrile seizure was defined as a primary generalized seizure which occurred with fever and lasted for 15 minutes or less, with no seizures within 24 hours.

A lumbar puncture was performed after parental consent and in a sterile environment and CSF was withdrawn in a sterile container. The samples of CSF were analyzed for appearance, WCC, RCC, DLC, glucose, and protein levels by standard lab procedures. Abnormalities (increased white blood cell count, elevated protein concentration and reduced CSF glucose) indicative of meningeal inflammation were considered positive CSF and fulfilled the predefined study criteria. Laboratory data were recorded on a standard data collection sheet with clinical data for each subject.

IBM SPSS Statistics version 21.0 was used for data entry and analysis. Categorical variables, such as gender, vaccination status, seizure characteristics, CSF status were summarized in frequency and percentage; continuous variables, age, weight, temperature at seizure onset, seizure duration and hospital stay were summarized as mean ± standard deviation. First outcome was the percentage of children with first febrile seizure with positive CSF findings. The CSF positivity was adjusted based on the age, sex, weight, vaccination status, temperature, seizure duration and seizure type. The Chi square test was performed to determine the association between the categorical variables and positive CSF, and a p value less than 0.05 was used as a statistically significant value.

3. RESULTS

Overall, 132 children aged between 6 and 24 months who had first episodes of febrile seizure were studied. The mean age was 14.7 ± 5.4 months, and 76 (57.6%) participants were male. The vast majority of children (87.1%, 115) received vaccines in accordance with the Expanded Programme on Immunization schedule.

Table 1. Demographic and baseline characteristics of participants (n=132)

Variable	n (%) / Mean ± SD
Age, months	14.7 ± 5.4
Age group	
6–12 months	56 (42.4)
13–18 months	44 (33.3)
19–24 months	32 (24.2)
Gender	
Male	76 (57.6)
Female	56 (42.4)
Weight, kg	9.5 ± 1.8
Residence	
Urban	72 (54.5)
Rural	60 (45.5)
Vaccination according to EPI	
Complete	115 (87.1)
Incomplete/Not vaccinated	17 (12.9)

The age group 6–12 months had the highest number (42.4%), and 13–18 months was next (33.3%). The mean body weight was 9.5±1.8kg and over half of the study population lived in cities.

Table 2. Clinical characteristics of the first febrile seizure (n=132)

Clinical variable	n (%) / Mean ± SD
Temperature at seizure onset, °F	102.5 ± 1.1
Seizure duration, minutes	6.8 ± 3.5
Seizure duration	
<5 minutes	46 (34.8)

5–10 minutes	63 (47.7)
>10–15 minutes	23 (17.4)
Generalized seizure	118 (89.4)
Other/simple presentation recorded	14 (10.6)
Hospital stay, days	2.9 ± 1.4
Antimicrobial therapy administered	47 (35.6)
Anticonvulsant therapy administered	29 (22.0)

The average temperature at the time of seizure was 102.5 ± 1.1°F. The majority of seizures were in the 5-10 minute range (n=199, 14.3%), with 23 (17.4%) lasting longer than 10 minutes but under 15 minutes. The typical history was of generalized seizures. The average length of hospital stay was 2.9 ± 1.4 days.

Table 3. Cerebrospinal fluid findings among participants (n=132)

CSF parameter	Result
CSF appearance	
Clear	110 (83.3)
Turbid	18 (13.6)
Blood-stained	4 (3.0)
CSF protein, mg/dL	44.9 ± 20.1
CSF glucose, mg/dL	55.6 ± 19.0
CSF WBC count, cells/µL	12.4 ± 17.1
CSF RBC count, cells/µL	16.5 ± 32.4
Positive CSF	43 (32.6)
Negative CSF	89 (67.4)

The majority of cerebrospinal fluid specimens were clear in appearance. Mean CSF protein level was 44.9 ± 20.1 mg/dL and mean CSF glucose level was 55.6 ± 19.0 mg/dL. The average CSF WCC was 12.4 ± 17.1 cells/µL. Based on the operational definition in the study protocol, CSF is considered positive based on elevated protein, elevated white blood cell count, and decreased CSF glucose.

Table 4. Comparison of CSF laboratory parameters according to CSF status

Parameter	Positive CSF (n=43)	Negative CSF (n=89)
CSF protein, mg/dL	69.4 ± 15.8	33.0 ± 8.9
CSF glucose, mg/dL	31.8 ± 6.3	67.1 ± 11.8
CSF WBC count, cells/µL	31.7 ± 18.9	3.1 ± 1.7
Turbid appearance	17 (39.5)	1 (1.1)
Clear appearance	24 (55.8)	86 (96.6)

Children with positive CSF findings had significantly higher protein levels, CSF white blood cell counts, and lower CSF glucose levels than children with negative CSF findings. Turbid CSF also was much more common in children who had positive CSF.

Table 5. Frequency of positive cerebrospinal fluid (n=132)

CSF result	Frequency	Percentage
Positive	43	32.6
Negative	89	67.4
Total	**132**	**100.0**

Overall, 43 of 132 children (32.6%) were found to have positive CSF findings; 89 (67.4%) were found to have negative CSF findings. Hence, about one-third of children who came to hospital for a first episode of febrile seizure had CSF abnormalities in the pre-defined criteria.

Table 6. Association of demographic and clinical factors with positive CSF (n=132)

Variable	Positive CSF n (%)	Negative CSF n (%)	p-value
Age group			**0.029**
6–12 months	25 (44.6)	31 (55.4)	
13–18 months	12 (27.3)	32 (72.7)	
19–24 months	6 (18.8)	26 (81.3)	
Gender			0.513
Male	27 (35.5)	49 (64.5)	
Female	16 (28.6)	40 (71.4)	

Vaccination status			**0.028**
Complete	33 (28.7)	82 (71.3)	
Incomplete/Not vaccinated	10 (58.8)	7 (41.2)	
Temperature at seizure onset			**0.001**
100.4–102°F	9 (16.1)	47 (83.9)	
>102°F	34 (44.7)	42 (55.3)	
Seizure duration			**0.021**
<5 minutes	9 (19.6)	37 (80.4)	
5–10 minutes	22 (34.9)	41 (65.1)	
>10–15 minutes	12 (52.2)	11 (47.8)	

Positive CSF was significantly more frequent among younger children, particularly those aged 6–12 months (p=0.029). Incomplete or absent vaccination was also associated with a greater proportion of positive CSF findings (p=0.028). Children with a temperature above 102°F had a higher frequency of positive CSF compared with those with lower temperatures (p=0.001). Similarly, longer seizure duration showed a significant association with CSF positivity (p=0.021). No statistically significant association was found between gender and positive CSF (p=0.513).

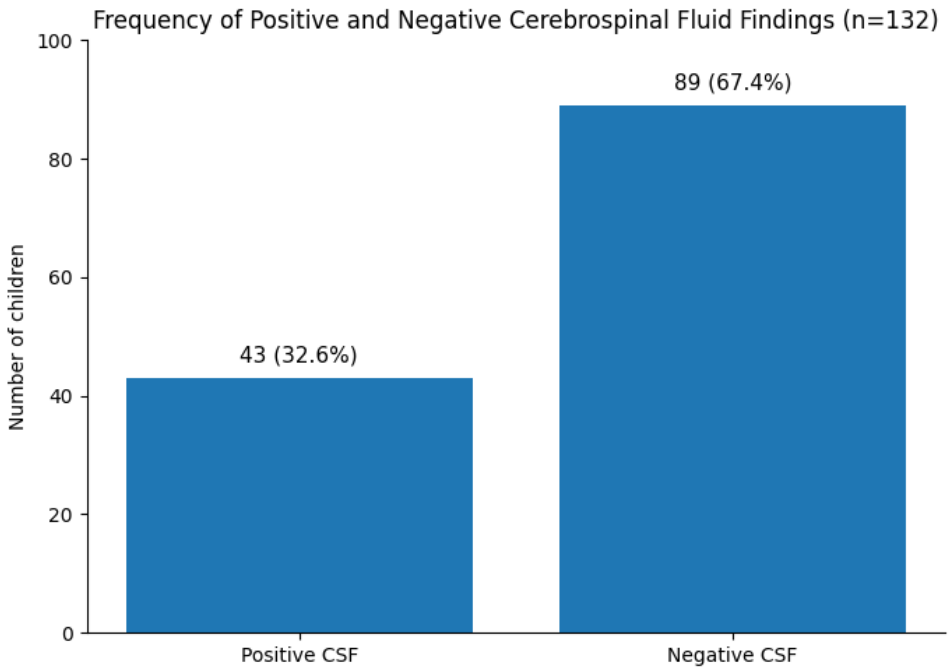

Figure 1. Frequency of positive and negative cerebrospinal fluid findings among children aged 6–24 months presenting with the first episode of febrile seizure (n=132).

4. DISCUSSION

The present study assessed cerebrospinal fluid findings among 132 children aged 6–24 months who presented with their first episode of febrile seizure. Positive CSF findings were observed in 32.6% of the children, while 67.4% had negative findings. The mean age was 14.7 ± 5.4 months, and the largest proportion of participants belonged to the 6–12-month age group. Febrile seizures are most frequently encountered in early childhood, particularly between 12 and 18 months, because of age-dependent neuronal excitability and a relatively low seizure threshold in the developing brain. Sawires et al. described febrile seizures as one of the commonest neurological presentations in childhood and emphasized that age, infection, genetic susceptibility, and inflammatory mechanisms contribute to their occurrence (11). Hossain and Saha likewise reported that the majority of febrile seizures occur during the first three years of life and are generally self-limiting, although careful clinical assessment is necessary to exclude central nervous system infection (12).

Males were slightly predominant in our study (57.6%). Seizures were recorded in most children and nearly one-half of children had 5 to 10 minute seizures. They are similar to the general clinical pattern of febrile seizures, where seizures are mainly short (less than 30 minutes) and generalized. Tiwari et al have reported that febrile seizures are common in children between 6 months and 5 years of age and that the commonest type of seizures are simple generalized seizures (13). Pavone

et al. also reported that simple febrile seizures are typically short, generalized and happen during a febrile illness, whereas prolonged and/or focal seizures expand the differential diagnosis and warrant more careful evaluation as a potential sign of a more complex neurologic condition (14). These observations help to document seizure duration, type, recurrence and post-ictal recovery, and aid assessment of children with fever-associated seizures.

The finding of positive CSF in almost one-third of those in the present study was a major one. Children with positive CSF had higher numbers of protein and WCC and lower glucose levels than children with negative CSF. CSF abnormalities can help diagnose meningeal inflammation but should not be routinely performed in all children with a typical simple febrile seizure. Kim explained that lumbar puncture is usually not warranted in uncomplicated simple febrile seizures, but is warranted when infection of the central nervous system is suspected (15). Likewise, a study of children with complex febrile seizures by Kannikeswaran et al, demonstrated that clinical selection is necessary in selecting children for invasive investigation, as there was a low yield for serious bacterial infection, and no cases of bacterial meningitis in their study (16). It is in this regard that the CSF positivity rate in the current study was relatively high, which might be due to the population selected at the hospitals, the younger age range and the pre-defined biochemical and cellular criteria used for the categorisation of CSF as positive.

In the present study, CSF markers associated with positivity were younger age, incomplete vaccination, seizure onset temperature and seizure duration. Infants and young children might require special evaluation, as signs and symptoms of meningitis may be vague and unreliable during this age group. Vaccines for Haemophilus influenzae type b and Streptococcus pneumoniae also have significantly changed the epidemiology of invasive bacterial infections in young children, so immunization status is an important component of a clinical history. In addition, the pediatric literature acknowledges that being partially immunized for Hib or pneumococcal vaccination is a factor that could raise the concern for bacterial meningitis in a child presenting with fever and seizure (17). The absolute magnitude of fever and its association with seizure susceptibility is complex, but fever itself has a significant role in seizure generation via inflammatory mechanisms and temperature-sensitive mechanisms of the brain. Antipyretic therapy does not appear to be effective for preventing seizures from recurring in the same febrile illness, and limited evidence suggests it may not be helpful during subsequent febrile illnesses (18). Therefore, the clinical assessment should not simply be aimed at a reduction in fever but also at the underlying cause, and features which are indicative of serious infection.

These findings highlight the importance of a selective and clinically guided approach to CSF examination in children presenting with febrile seizures. The prognosis is generally good for most simple febrile seizures and invasive testing should be avoided unless there is a suspicion of meningitis. However, modern reviews highlight the need for lumbar puncture in cases of clinical suspicion of meningitis or encephalitis in children under 2 years of age or those who are incompletely immunized, have altered consciousness, prolonged seizures, and other concerning clinical features (19). In addition, most children do not have neurological sequelae after uncomplicated febrile seizures, and it is important to counsel parents on this issue and the possibility of recurrence (20). However, the present study was restricted by several factors, such as being conducted in a single center, a limited time period, and the inclusion of subjects limited to 6–24 months of age. Furthermore, the primary outcome definition did not include the diagnosis of microbiological culture or molecular confirmation of meningitis. Further multicenter studies with CSF culture and molecular testing, inflammatory markers, and extended clinical follow-up would better differentiate transitory biochemical CSF abnormalities from definite central nervous system infection.

5. CONCLUSION

Positive cerebrospinal fluid findings were identified in 32.6% of children aged 6–24 months presenting with their first episode of febrile seizure. CSF positivity was associated with younger age, incomplete vaccination, higher temperature at seizure onset, and longer seizure duration, while gender showed no significant relationship. These findings support careful clinical assessment of young children with febrile seizures and a selective approach to lumbar puncture, particularly when features raise suspicion of central nervous system infection. Appropriate vaccination, prompt recognition of concerning clinical features, and timely CSF evaluation in selected children may contribute to early diagnosis and improved management

REFERENCES

[1] Han JY, Han SB. Pathogenetic and etiologic considerations of febrile seizures. Clin Exp Pediatr. 2023;66(2):46-53. doi:10.3345/cep.2021.01039.

[2] Lee D, Moon HJ, Lee HJ, Jeong D, Kim HJ, Noh HYJ, et al. Role of lactate measurement in predicting recurrence of seizure within 24 hours in simple febrile seizure patients. Signa Vitae. 2023;19(3):188-194. doi:10.22514/sv.2023.013.

[3] Fine A. Childhood neurologic conditions: evaluation of a first seizure. FP Essent. 2022;523:8-14.

[4] Soti Khiabani M, Mohammadi MS, Ashrafi MR, Haider SB, Haider SI, Mahmoudi S, et al. Evaluation of patients presenting with febrile seizures in an Iranian referral hospital: emphasis on the frequency of meningitis and

co-infections. BMC Pediatr. 2023;23:316. doi:10.1186/s12887-023-04120-z.

[5] Kannikeswaran N, Sivaswamy L, Farooqi A, Sethuraman U. Children with complex febrile seizures: is hospital admission necessary? Clin Pediatr (Phila). 2021;60(8):363-369. doi:10.1177/00099228211017702.

[6] Bedetti L, Lugli L, Marrozzini L, Baraldi A, Leone F, Baroni L, et al. Safety and success of lumbar puncture in young infants: a prospective observational study. Front Pediatr. 2021;9:692652. doi:10.3389/fped.2021.692652.

[7] Kumari PL, Rajamohanan K, Krishnan AA. Risk factors of first episode simple febrile seizures in children aged 6 months to 5 years: a case-control study. Indian Pediatr. 2022.

[8] Thadchanamoorthy V, Dayasiri K. Review on febrile seizures in children. Int Neuropsychiatr Dis J. 2020;14(2):25-35. doi:10.9734/INDJ/2020/v14i230126.

[9] Tiwari A, Meshram RJ, Singh RK. Febrile seizures in children: a review. Cureus. 2022;14(11):e31509. doi:10.7759/cureus.315

[10] Sajid M, Muhammad F, Muhammad Y, Jovaria S. Frequency of meningitis in children 6–18 months of age presenting with 1st episode of febrile seizure at Sahiwal Teaching Hospital Sahiwal, Punjab, Pakistan. Professional Med J. 2023;30(5):581-585. doi:10.29309/TPMJ/2023.30.05.7359

[11] Sawires R, Buttery J, Fahey M. A review of febrile seizures: recent advances in understanding of febrile seizure pathophysiology and commonly implicated viral triggers. Front Pediatr. 2022;9:801321. doi:10.3389/fped.2021.801321

[12] Hossain MM, Saha NC. Clinical review of febrile seizure and updates. Karnataka Paediatr J. 2021;36(1):3-12. doi:10.25259/KPJ_37_2020.

[13] Tiwari A, Meshram RJ, Singh RK. Febrile seizures in children: a review. Cureus. 2022;14(11):e31509. doi:10.7759/cureus.31509.

[14] Pavone P, Pappalardo XG, Parano E, Falsaperla R, Marino SD, Fink JK, et al. Fever-associated seizures or epilepsy: an overview of old and recent literature acquisitions. Front Pediatr. 2022;10:858945. doi:10.3389/fped.2022.858945.

[15] Kim SS. Lumbar puncture or not: when does febrile seizure require a neurodiagnostic evaluation? Clin Exp Pediatr. 2023;66(2):68-69. doi:10.3345/cep.2022.01081.

[16] Kannikeswaran N, Sivaswamy L, Farooqi A, Sethuraman U. Children with complex febrile seizures: is hospital admission necessary? Clin Pediatr (Phila). 2021;60(8):363-369. doi:10.1177/00099228211017702.

[17] Queensland Emergency Care Children Working Group. Febrile seizure—emergency management in children. Queensland Paediatric Clinical Guideline. 2023.

[18] Hashimoto R, Suto M, Tsuji M, Sasaki H, Takehara K, Ishiguro A, et al. Use of antipyretics for preventing febrile seizure recurrence in children: a systematic review and meta-analysis. Eur J Pediatr. 2021;180(4):987-997. doi:10.1007/s00431-020-03845-8.

[19] Kim SS. Lumbar puncture or not: when does febrile seizure require a neurodiagnostic evaluation? Clin Exp Pediatr. 2023;66(2):68-69. doi:10.3345/cep.2022.01081. (PubMed Central

[20] Queensland Emergency Care Children Working Group. Febrile seizure—emergency management in children. Queensland Paediatric Clinical Guideline. 2023