Ashford and St. Peter's Hospitals
NHS Foundation Trust

Guideline for the management of Febrile convulsions 6 months – 6 years

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Guideline History		
Date	**Comments**	**Approved By**
Feb 2017	First Guideline	
Dec 2019	Update	Paediatric Guidelines Committee
Nov 2023	Update/changes to age group	Paediatric Guidelines Committee

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Guideline for the management of febrile convulsions in children

6 months – 6 years

Indication for use

- This guideline should be used for the management of febrile convulsions. This is defined as;
    - A seizure occurring between 6 months and 6 years of age.
    - Precipitated by fever of > 38°C.

Cautions

- Seizures lasting longer than 5 minutes should be treated as per the APLS Status Epilepticus Guideline.
- Children with signs of meningitis or sepsis should be discussed with the appropriate senior clinician.

Background

A febrile seizure is generally accepted to be a seizure accompanied by fever (temperature more than 38°C by any method), without central nervous system infection, occurring in infants and children aged 6 months to 6 years.

Simple febrile seizures

- Isolated
- GTCS
- < 15 mins
- Do not recur within 24 hours or within the same febrile illness
- Complete recovery within one hour

Complex febrile seizures

- Focal features
- > 15 mins
- Incomplete recovery after one hour
- Recurrence within 24 hours or within the same febrile illness

Clinical Management

1. The majority of seizures will have resolved when the child presents to A&E. If the seizure is ongoing manage with an ABCDE approach and follow the **APLS Status Epilepticus guideline.**

2. Once the child is stable, take a thorough **HISTORY** including;
    - The likely focus of the fever
    - Eye witness account of the seizure
    - Identification of any complex features
    - Past history of seizures
    - Birth history
    - Developmental and learning concerns
    - Family history of febrile seizures or epilepsy

3. Perform a detailed general and neurological **EXAMINATION** including;
    - Head circumference (plot on growth chart)
    - Conscious level
    - Signs of meningitis
    - Neurocutaneous markers
    - Focal neurological deficit

4. **RED FLAG** features include;
    - Age < 6 months
    - Signs of CNS infection
    - Complex seizures
    - Focal neurological signs

5. Routine **INVESTIGATIONS** are not always indicated, but may be required to determine the cause of the fever;
    - A blood glucose should be obtained on **ALL** patients.
    - Urine sample and CXR should be considered if there is no obvious cause of infection.
    - An ECG should be considered (tachycardia out of proportion to the fever, pallor, family history).
    - LP should be discussed with the senior clinician if there are signs of meningitis (if no contraindications).
    - Indications for urgent neuroimaging (CT), include - persistent focal neurological signs, < 6 months of age, focal seizure with signs of raised intracranial pressure – to be discussed with the senior clinician.

Indications for admission

- < 18 months
- All complex seizures
- Unclear focus or diagnostic uncertainty
- Focal neurological deficit
- Unwell
- Significant parental anxiety

Discharge

Children can be safely discharged home from A&E following a simple febrile convulsion with a clear focus of infection following a period of 4-6 hours observation and review by a senior doctor (ST4+).

A febrile convulsion can be very frightening for parents. They should be provided with the ***Febrile Convulsion Parent Information Leaflet*** and the following discussed;

a. Management of fever – no evidence that paracetamol and ibuprofen reduces risk of febrile convulsions, however can be used for pain and discomfort associated with febrile illness.

b. What to do if a further seizure occurs. Place on floor. Recovery position when possible. Do not place anything in the child's mouth. Time the seizure. Call an ambulance if the seizure lasts 5 minutes or longer.

c. Advice to seek medical attention for any seizure or symptoms including; lethargy, dehydration, fever longer than 5 days, non-blanching rash.
d. Routine immunisations should be completed as per schedule.

e. Safety advice for night when child in unwell with fever – parents may want to consider the use of a video monitor so that they would be alerted of a further seizure.

Parents of children who have experienced prolonged febrile convulsions should be taught to administer buccal Midazolam or rectal Diazepam and receive Basic Life Support training.

A decision to prescribe buccal midazolam should be discussed with the child's consultant.
Parents must be trained on the use of buccal midazolam prior to discharge if possible.

Referral to 1st Seizure Clinic

- All complex febrile convulsions.
- Frequent simple convulsions.
- Additional concerns about neurodevelopmental delay/neurocutaneous syndrome/metabolic disorder.

2. Supporting References

NICE Clinical Knowledge Summaries – Febrile Seizures

https://cks.nice.org.uk/topics/febrile-seizure/

3. Supporting relevant trust guidelines

APLS Status Epilepticus Guideline

Neonatal Seizures Guideline

2. Guideline Governance

a. Scope

This guideline is relevant to all staff caring for all children from 0-18 years old across the emergency department, inpatient ward and outpatient department.

b. Purpose

i. This guidelines aims to facilitate a common approach to the management of children. At times deviation from the guideline may be necessary, this should be documented and is the responsibility of the attending consultant.

ii. This guideline is subject to regular review to ensure ongoing evidence based practice.

c. Duties and Responsibilities

All healthcare professionals responsible for the care of all children 0-18years should be aware of practice according to this guideline.

d. Approval and Ratification

This guideline will be approved and ratified by the Paediatric Guidelines Group.

e. Dissemination and Implementation

i. This guideline will be uploaded to the trust intranet 'Paediatric Guidelines' page and thus available for common use.
ii. This guideline will be shared as part of ongoing education within the Paediatric Department for both medical and nursing staff.
iii. All members of staff are invited to attend and give comments on the guideline as part of the ratification process.

f. Review and Revision Arrangements

a. This policy will be reviewed on a 3 yearly basis by the appropriate persons.
b. If new information comes to light prior to the review date, an earlier review will be prompted.
c. Amendments to the document shall be clearly marked on the document control sheet and the updated version uploaded to the intranet. Minor amendments will be ratified through the Paediatric Guidelines Group. A minor amendment would consist of no major change in process, and includes but is not limited to, amendments to documents within the appendices.

g. Equality Impact Assessment

Background • Who was involved in the Equality Impact Assessment
Author
Methodology • A brief account of how the likely effects of the policy was assessed (to include race and ethnic origin, disability, gender, culture, religion or belief, sexual orientation, age) • The data sources and any other information used • The consultation that was carried out (who, why and how?)
All groups of staff and patients were taken into consideration and there is no bias towards or against any particular group.
Key Findings • Describe the results of the assessment • Identify if there is adverse or a potentially adverse impacts for any equalities groups
There is no evidence of discrimination.
Conclusion • Provide a summary of the overall conclusions
There is no evidence of discrimination.
Recommendations • State recommended changes to the proposed policy as a result of the impact assessment • Where it has not been possible to amend the policy, provide the detail of any actions that have been identified • Describe the plans for reviewing the assessment
This guideline is appropriate for use.

h. Document Checklist

To be completed (electronically) and attached to any document which guides practice when submitted to the appropriate committee for approval or ratification.

Title of the document: Guideline for the management of afebrile seizures in children
1 month- 17 years
Policy (document) Author: Dr Kate Irwin

Executive Director: N/A

		Yes/No/ Unsure/NA	Comments
1.	**Title**		
	Is the title clear and unambiguous?	**Y**	
	Is it clear whether the document is a guideline, policy, protocol or standard?	**Y**	
2.	**Scope/Purpose**		
	Is the target population clear and unambiguous?	**Y**	
	Is the purpose of the document clear?	**Y**	
	Are the intended outcomes described?	**Y**	
	Are the statements clear and unambiguous?	**Y**	
3.	**Development Process**		
	Is there evidence of engagement with stakeholders and users?	**N/A**	
	Who was engaged in a review of the document (list committees/ individuals)?		**Paediatric Guidelines Committee** **15/11/2023**
	Has the policy template been followed (i.e. is the format correct)?	**Y**	
4.	**Evidence Base**		

		Yes/No/ Unsure/NA	Comments
	Is the type of evidence to support the document identified explicitly?	**Y**	
	Are local/organisational supporting documents referenced?	**Y**	
5.	**Approval**		
	Does the document identify which committee/group will approve/ratify it?	**Y**	
	If appropriate, have the joint human resources/staff side committee (or equivalent) approved the document?	**N/A**	
6.	**Dissemination and Implementation**		
	Is there an outline/plan to identify how this will be done?	**Y**	
	Does the plan include the necessary training/support to ensure compliance?	**N/A**	
7.	**Process for Monitoring Compliance**		
	Are there measurable standards or KPIs to support monitoring compliance of the document?	**N/A**	
8.	**Review Date**		
	Is the review date identified and is this acceptable?	**Y**	
9.	**Overall Responsibility for the Document**		
	Is it clear who will be responsible for coordinating the dissemination, implementation and review of the documentation?	**Y**	
10.	**Equality Impact Assessment (EIA)**		

		Yes/No/ Unsure/NA	**Comments**
	Has a suitable EIA been completed?	Y	

Committee Approval (Paediatric Guidelines Group)			
If the committee is happy to approve this document, please complete the section below, date it and return it to the Policy (document) Owner			
Name of Chair	**Dr Claire Mitchell**	**Date**	**15/11/2023**
Ratification by Management Executive (if appropriate)			
If the Management Executive is happy to ratify this document, please complete the date of ratification below and advise the Policy (document) Owner			
Date: n/a			