

# FEBRILE SEIZURE, PEDIATRIC, ED AND INPATIENT

Updated: December 6, 2023

### **Clinical Algorithm:**



## **Clinical Pathway Summary**

#### CLINICAL PATHWAY NAME: Febrile Seizure, Pediatric, ED and Inpatient

**PATIENT POPULATION AND DIAGNOSIS:** Patients 6 months to 5 years old who present with seizures or seizure like activity in the setting of an elevated temperature >100.4 °F or >38.0 °C

#### APPLICABLE TO: Corewell Health West Emergency Departments and Hospitals

**BRIEF DESCRIPTION:** The goal of this pathway is to provide an evidence-based approach to the diagnosis and management of febrile seizure in children 6 months to 5 years of age. This pathway does **not** apply to patients who have a history of unprovoked seizure, underlying epilepsy diagnosis, or genetic condition associated with epilepsy or seizures. It provides standardization in the evaluation and management of febrile seizures. Febrile seizures are the most common neurological diagnosis in children 6 months to 5 years of age. They are caused most often by non-neurologic viral infections, and immunizations, but have been attributed to bacterial infections as well. They have been reported more frequently after infection with specific viruses (HHV-6 and influenza) and are more common in patients who have a family history of febrile seizures.

#### **OPTIMIZED EPIC ELEMENTS (if applicable):** N/A

#### **IMPLEMENTATION DATE:**

LAST REVISED: October 23, 2023

### **Clinical Pathways Clinical Approach**

#### TREATMENT AND MANAGEMENT:

Additional considerations:

If lumbar puncture is completed, or any history of vomiting, diarrhea, poor oral intake, or physical exam findings of dehydration or edema, consider additional laboratory work up including complete blood count, comprehensive metabolic panel, blood culture, and urinalysis.

Recommended dosing for antipyretics:

Medication	Route	Recommended dose	
Acetaminophen	Oral, intravenous, or per rectum	15 mg/kg q6 hours	
Ibuprofen (if >6 months of age)	Oral	10 mg/kg q6 hours	

#### Recommended dosing for abortive seizure medications:

Medication	Route	Recommended dose
Lorazepam	Intravenous or intraosseous	0.1 mg/kg, max 4 mg
Midazolam	Intranasal	0.2 mg/kg, max 10 mg
Midazolam	Intramuscular	0.2 mg/kg, max 10 mg

Rectal diazepam dosing recommendations for discharge medication:

<b>2 - 5</b> 0.5 m	<b>2 - 5 Years</b> 0.5 mg/kg <b>6 - 11 years</b> 0.3 mg/kg		<b>years</b> 19/kg	<b>12+ Years</b> 0.2 mg/kg	
Weight	Dose	Weight	Dose	Weight	Dose
(kg)	(mg)	(kg)	(mg)	(kg)	(mg)
6 to 10	5	10 to 16	5	14 to 25	5
11 to 15	7.5	17 to 25	7.5	26 to 37	7.5
16 to 20	10	26 to 33	10	38 to 50	10
21 to 25	12.5	34 to 41	12.5	51 to 62	12.5
26 to 30	15	42 to 50	15	63 to 75	15
31 to 35	17.5	51 to 58	17.5	76 to 87	17.5
36 to 44	20	59 to 74	20	88 to 111	20

Recommended counseling to provide to families:

- Return precautions:
  - Seizure lasting >5 minutes if rectal diazepam is not prescribed
  - Seizure that does not abort 2-3 minutes after administration of rectal diazepam
  - Greater than 3 separate seizures within a 24 hour period
  - Lack of return to baseline neurologic status
- Scheduled acetaminophen and ibuprofen (if >6 months of age) for 1-2 days after initial febrile seizure may prevent additional seizures during the same illness
- Scheduled acetaminophen and ibuprofen (if >6 months of age) starting at fever onset may not prevent febrile seizures in subsequent illnesses, but may be used for comfort

# **Pathway Information**

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EXPERT IMPROVEMENT TEAM (EIT): N/A

CLINICAL PRACTICE COUNCIL (CPC): Children's

CPC APPROVAL DATE: 10/31/2023

OTHER TEAM(S) IMPACTED: Pediatric Neurology

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