

Randall Children's Hospital

Co-Management and Referral Guidelines Initial Management of Febrile Convulsions Randall Children's Neurology

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Introduction

- Febrile convulsions are the most common childhood seizure type, seen in 2–5 percent of all children in the U.S. They most often occur in children 6 months to 5 years of age during a spike in fever, usually on the first day of fever.
 - Simple febrile convulsions are generalized seizures that last less than 10–15 minutes and do not recur within 24 hours.
 - Complex febrile convulsions are seizures that are focal rather than generalized and/or last more than 10–15 minutes, and/or recur within 24 hours.
- The risk for epilepsy in children with simple febrile convulsions is close to that seen in the general population (1–2 percent risk).
- There is a five-fold increased risk of epilepsy in patients with complex febrile convulsions.
- Some children with epilepsy have a lowered seizure threshold and are more likely to have seizure with fever.

Evaluation and Management

Evaluation

Simple febrile convulsions

- **No diagnostic studies are needed.** (No labs, no scans, no EEG)

Complex febrile convulsions

- There are no established guidelines. Consider EEG and possible MRI in patients who are developmentally abnormal, have a family history of epilepsy or who have prolonged and/or focal seizures.
- Consider an LP in a child with seizures and fever if clinically indicated (toxic-appearing child, meningeal signs, under-vaccinated, especially if the child has already received antibiotics and may have a partially treated bacterial infection).

Management

- **The mainstay of management is reassurance and education.** Counsel families that simple febrile seizures are benign events, unassociated with significant morbidity and mortality and recur in about 30 percent of cases.
- Antipyretics are ineffective in preventing seizures.
- There is no role for prophylactic anticonvulsants (either continuous or intermittent).
- There is some reduction in seizure frequency with the use of benzodiazepines intermittently during febrile illness, but the potential benefit must be weighed against potential side effects.
- Rectal diazepam gel may be useful to abort seizures in select patients with complex febrile convulsions.

When to refer

- All children with a first seizure with fever should be assessed by a physician (primary care provider or in the emergency department)
- Consider referral to neurology for:
 - Multiple febrile convulsions
 - Febrile convulsions in a developmentally abnormal child
 - New occurrence of afebrile seizures in a child with a history of febrile convulsions

(continued)



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Referral process

Randall Children's Neurology

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If urgent evaluation is required, contact the **Randall Children's Hospital Emergency Department: 503-276-9191.**

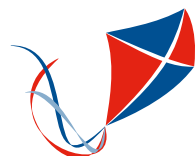
Additional Resources

American Academy of Pediatrics: Clinical Practice Guideline-Febrile Seizures - Guideline for Neurodiagnostic Evaluation of the Child with a Simple Febrile Seizure; *Pediatrics* Volume 125, Number 2, 389–394 (Feb 2011) <http://pediatrics.aappublications.org/content/127/2/389.full.pdf>

Prophylactic Drug Management for Febrile Seizures in Children; Evidence-Based Child Health — *A Cochrane Review Journal*: 8:4 1378–1485 (2013) <http://www.ncbi.nlm.nih.gov/pubmed/23877946>

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Find this and other co-management/referral guidelines online at: www.legacyhealth.org/randallguidelines



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