Febrile convulsion

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See also: ***Fever no focus in under 5s*** */* ***Paediatric sepsis 6***

To skip straight to **management flow chart**, click **here**

Background

Meningitis / encephalitis may cause seizures and fever and must be considered and excluded in any child presenting with a febrile convulsion.

- Febrile convulsion = seizure in an otherwise neurologically normal child aged 6 months – 6 years **associated with a fever** caused by infection or inflammation outside the CNS.
- May be confused with rigors, apnoea, syncope
- Common causes of fever in children presenting with febrile convulsions:
  - Viral infection such as URTI, roseola, chicken pox etc.
  - Otitis media, tonsillitis, gastroenteritis
  - UTI, LRTI
  - Post-immunisation

Simple febrile convulsions	**Complex** febrile convulsions
• Isolated, generalised tonic-clonic seizures	• Focal onset or focal features during fit
• Duration < 15 minutes	• Duration > 15 minutes
• Do not recur within 24 hours or in same febrile illness	• Recurrence within 24 hours or in same febrile illness
	• Incomplete recovery within 1 hour

Assessment

Actively fitting on assessment? ⟶ Assess A, B, C, D, E and don't ever forget **glucose.** Follow seizure / status epilepticus management guidelines.

Not actively fitting?

Explore in **history**:
- Pre-fit state: neurologically normal? Drowsy / meningitic? Illness symptoms?
- Parents' perception of fever
- Seizure details: onset, duration, any focal features, recovery time

Examine for signs of serious underlying cause for fever (see fever no focus in under 5s):

- Neck stiffness, photophobia, Kernig's sign, petechial rash, bulging fontanelle, focal neurological signs, decreased level of consciousness.
- Sepsis (see sepsis 6)
- pneumonia

Look for tonsillitis, otitis media, viral exantham, etc.

Urine dip (+ forced culture in under 1 year) *if no clear focus found on assessment.*

Bloods: FBC / CRP / Blood culture *consider if child is unwell or no focus found on assessment.*

CXR *if clinical suspicion of pneumonia*

Management

See **flow chart** on page 3

Discharge and follow up

When to consider follow up (discuss with CED consultant):

- After 4 separate episodes of fever with convulsion or any atypical features

Discharge advice (use leaflet):

- Febrile seizures are not the same as epilepsy. The risk of epilepsy developing later is low but slightly higher than the general population.
- Short-lasting seizures are not harmful to the child.
- About 1 in 3 children will have another febrile seizure.

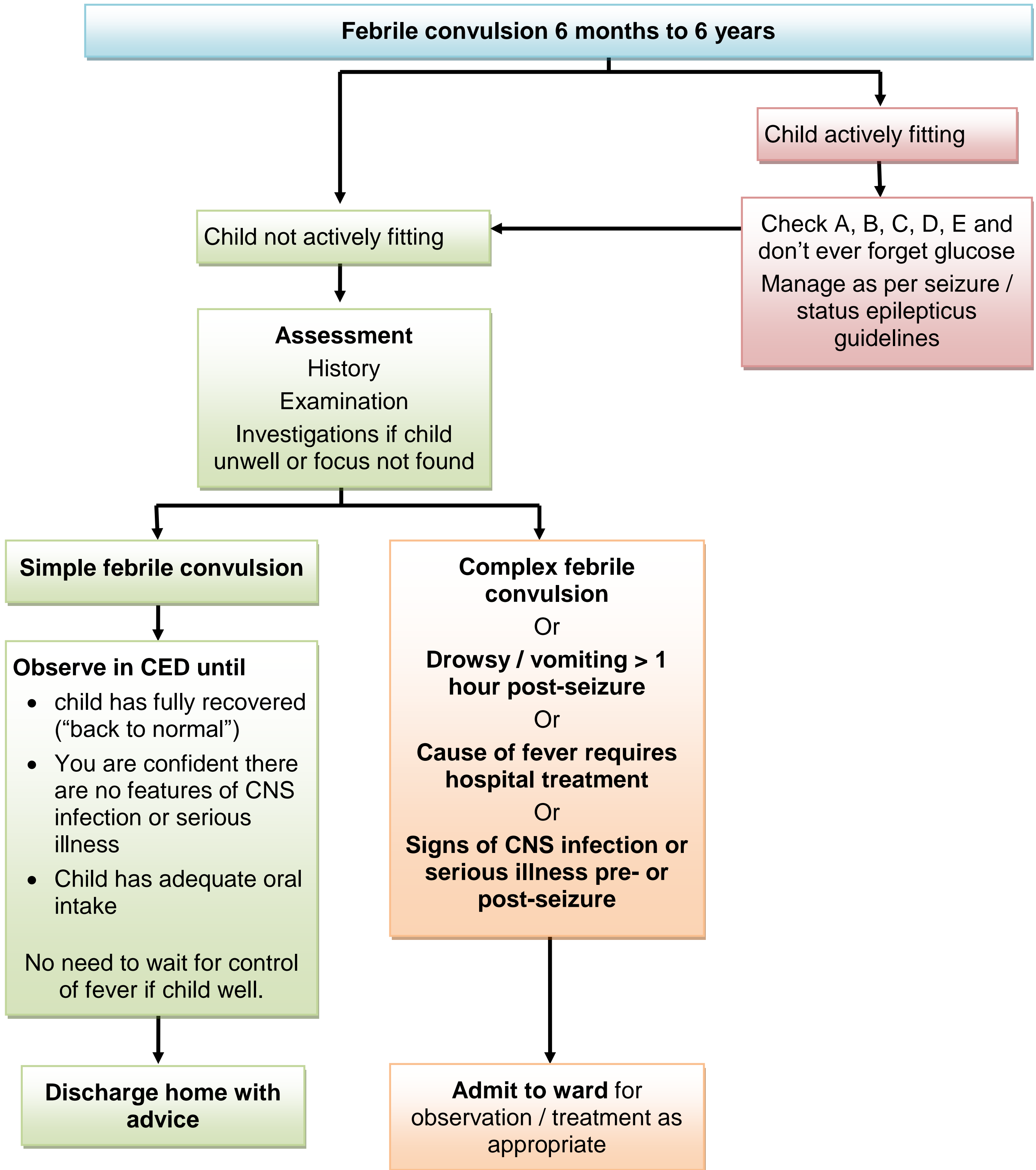
Inform parents what to do if a further seizure occurs. They should:

- Protect child from injury during the seizure and not restrain them or put anything in their mouth.
- Check their airway and place them in the recovery position when the seizure stops.
- Explain that the child may be sleepy for up to an hour after the seizure.
- Seek medical advice (GP / 111) if a seizure lasts for less than 5 minutes.
- If seizure continues for more than 5 minutes **call an ambulance**.

Advise parents about managing fever, but explain that reducing fever does not prevent recurrence.

Advise parents to continue immunizations even if the febrile seizure followed an immunization.

Management flow chart



Consider admission to the ward:

- Child < 18 months old
- More than usual parental anxiety, or the parents feel unable to cope
- Child is currently taking antibiotics or has recently been taking them
- No clear focus of infection