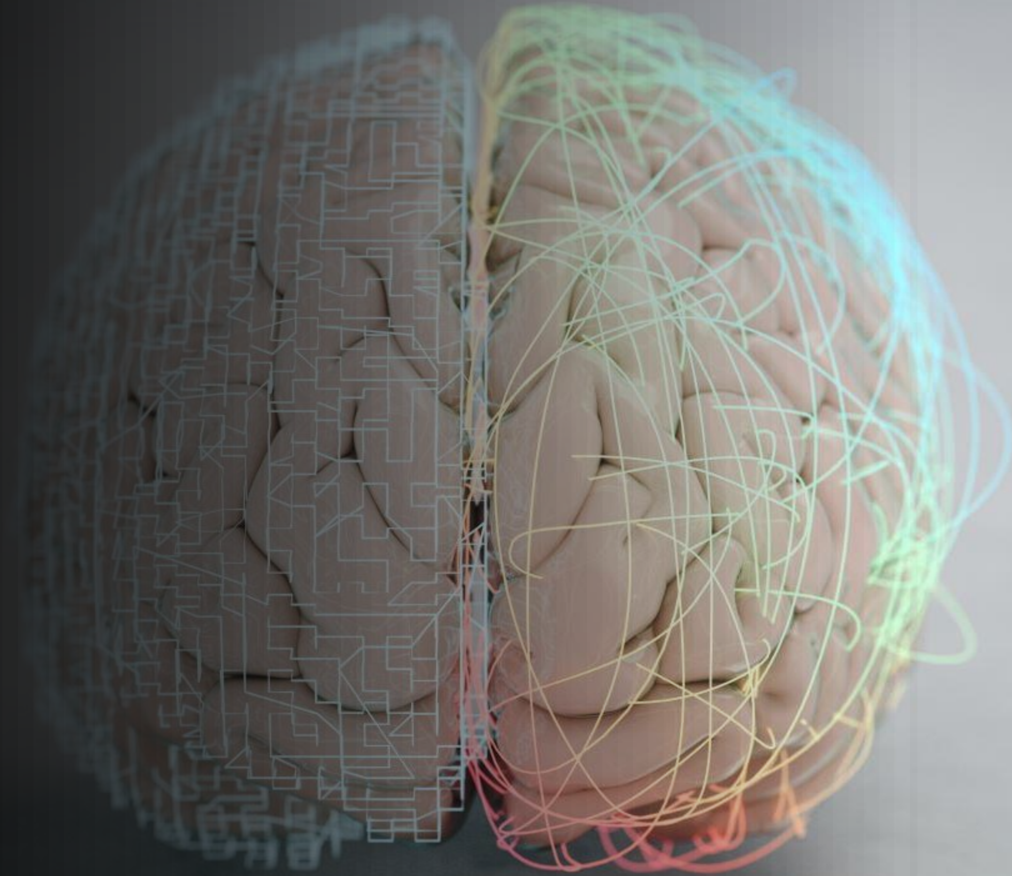
Febrile Convulsions



By Val Astle

Background

Occur between 6 months to 6 years

Occurs in 3% of children

In children the hypothalamus is susceptible to sudden changes in temperature

80% are simple, 20% complex

Cause is multifactorial. But the fever lowers the seizure threshold in those young children with a developing nervous system.

Simple
<15 mins
Generalised
1 seizure in 24 hours
Child developmentally normal
No neuro abnormality post seizure

Complex. **One or more of:**
>15 mins
Focal
More than 1 seizure in 24 hours

Investigation and Management

Investigate the cause of the fever
- E.g. urine sample

Routine bloods not required unless the child is unwell.

No role for EEG of neuroimaging in simple febrile convulsion.

If seizure for 5 minutes or more then treat
- as per seizure guideline
  - Starting with midazolam 0.15mg/kg IV or 0.3mg/kg buccal

Treat the underlying cause of the fever

Antipyretics do not prevent convulsions but may relieve discomfort and pain.

Prognosis

Risk of recurrence is 30%

- Greater risk if onset <18 months, lower temp close to 38°C, FH of febrile convulsions or shorter duration of fever before onset of seizure. If all 4 factors then risk 76%.
- And in those that recur, 90% recur within 2 years

Risk of epilepsy

- In those with prolonged seizures, focal seizures, neurodevelopmental abnormality or a FH of epilepsy then their rate increases up to 10%.
- If none of these factors then their risk is similar to the general population risk of 1.4%

Can be discharged home after 2 hours of observation if well and no concerning cause.

- Discharge with health fact sheets and first aid seizure management plan

If unwell then to treat and admit.