

# Paediatric Pearls

by Dr Julia Thomson, Paediatrician

Edited this month by Dr Melody Bacon, paediatric specialist registrar with an interest in epilepsy

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Monthly paediatric update newsletter for all health professionals working with children – put together by Dr Julia Thomson, Paediatric Consultant at Homerton University Hospital, London, UK. Housed at [www.paediatricpearls.co.uk](http://www.paediatricpearls.co.uk) where comments and requests are welcome!

## FEBRILE SEIZURE (febrile convulsion)

A seizure accompanied by a fever (>38°C by any method), without CNS infection, which occurs in infants and children aged 6 months to 5 years." AAP, 2011

### Simple Febrile Seizure

Last less than 15 minutes

Generalised seizures

No recurrence within 24hrs

No postictal pathology

- ~ 1 in 20 children experience a febrile seizure
- Most common triggers:
  - Viral URTI
  - Ear infection
  - Tonsillitis
  - UTI
- About 1 in 3 children who had a febrile seizure will have another

Subsequent risk of epilepsy is 1% IF there are no neurodevelopmental problems and no FH of epilepsy

**Medicines for children** is a partnership programme of RCPCH, NPPG and WellChild.

-Provides [useful information pages](#) on commonly prescribed medicines – answers to FAQ, how and when to give medicines, what to do if you forget to give the medicine, and any possible side effects.

### Current Sodium Valproate MRHA warning:

'Valproate must not be used in women and girls of childbearing potential unless the conditions of the [Pregnancy Prevention Programme](#) are met and only if other treatments are ineffective or not tolerated...'

Risk of teratogenicity and neurodevelopmental delay in foetus



Psychological effect on the patient of poorly controlled seizures in adolescence

## ILAE definition of EPILEPSY

Epilepsy is a disease of the brain defined by any of the following conditions:

- At least 2 unprovoked (or reflex) seizures occurring >24 h apart
- One unprovoked (or reflex) seizure & a probability of further seizures similar to the general recurrence risk (at least 60%) after 2 unprovoked seizures, occurring over the next 10 years
- Diagnosis of an epilepsy syndrome

## Safety net advice first afebrile seizure information leaflet

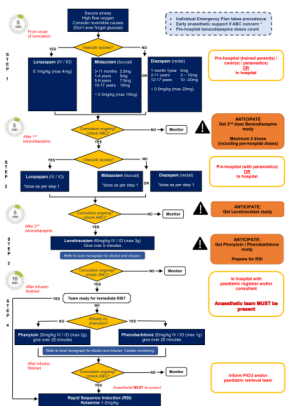
### Useful mnemonic for a structured approach:

D	Description	What are the episodes like and how adequate is the description?
E	Epilepsy	Are the episodes epileptic, non-epileptic or are you uncertain?
S	Seizures	If the episodes are epileptic, what are the seizure types?
S	Syndrome	Is there an identifiable electro-clinical syndrome?
C	Cause	Are there causes for this epileptic seizure or epilepsy? Genetic, Structural, Metabolic, Infectious, Immune, Unknown
R	Relevant	
I	Impairments	Are there any relevant co-morbidities and/or problems with learning?
B	Behavioural	
E	Educational	

## Status Epilepticus

<https://www.clinicalguidelines.scot.nhs.uk/media/3310/review-of-the-new-apls-guideline.pdf>

Image 1. NEW Advanced Paediatric Life Support (APLS) algorithm on management of the convulsing child



## Epilepsy is a multimorbidity disease



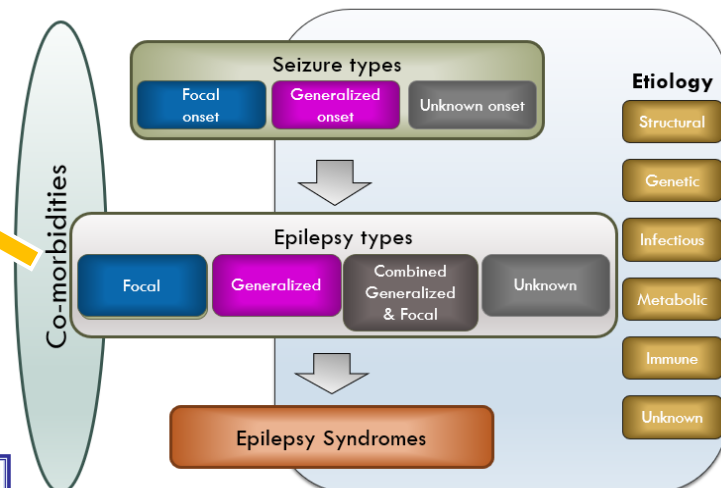
### Useful resource: [Young Epilepsy](#)

The children and young people's epilepsy charity supports young people, parents and health and education professionals.

### Star Fact!

Currently only 52% of the population of people with epilepsy are seizure free.

## \*NEW\* ILAE Classification of Epilepsies (2017)



If it is NOT

epilepsy...

what could it be?

### Syncope and anoxic seizures, including cardiac disorders

- Reflex anoxic seizures
- Breath holding attacks
- Simple faints (vasovagal syncope)
- Long QT disorders (which predispose to dangerous cardiac arrhythmias)
- Other cardiac syncope
- Suffocation

### Sleep disorders

- Nightmares
- Night-terrors
- Narcolepsy - cataplexy

### Behavioural events and psychological disorders

- Daydreams and childhood preoccupation / poor ability to concentrate
- Self-gratification / masturbation
- Ticks and stereotypies
- Non-epileptic attack disorder (psychogenic non-epileptic seizures)

### Paroxysmal movement disorders

- Non-epileptic myoclonus, including benign neonatal sleep myoclonus
- Dyskinesias
- Paroxysmal ataxias

**DON'T FORGET the risk of Sudden Unexpected Death in Epilepsy (SUDEP) 1 in 4,500 children will die of SUDEP each year**

"Sudden, unexpected, witnessed or unwitnessed, non-traumatic or non-drowning death of people with epilepsy, with or without evidence of a seizure, excluding documented status epilepticus and in whom post-mortem examination does not reveal a structural or toxicological cause for death."

Useful resource: <https://sudep.org/>