

## **The child with a seizure**

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### ▪ **Tonic clonic status epilepticus:**

- **Generalized convulsions lasting over 30 minutes; OR**
- **Generalized convulsions occurring so frequently over 30 minutes, that the child does not recover consciousness between them**

### **General factoids:**

- **The longer the episode, the harder it is to terminate**
- **If its longer than 5 minutes, it wont stop by itself, so use anticonvulsants**

### **Consequences:**

- **Pulmonary oedema**
- **Arrhythmias**
- **DIC**
- **Rhabdomyolysis**
- **hyperthermia**

### **Long term consequences:**

- **the younger you are, the worse it will be**
- **persistent epilepsy, motor deficits, learning or behavioural problems: 6% of the over-3s, 29% of the under-3s**

## **So what if you are convulsing. Why is it such a problem?**

- **Cerebral metabolic activity rises 3-fold**
- **Blood pressure rises initially, and then falls**
- **When it falls, cerebral perfusion falls, because mid-seizure you lose you ability to autoregulate the cerebral blood flow**
- **Because of persisting muscle contraction, there is lactic acidosis**
- **Because of decreased cerebral perfusion, there is cerebral ischaemia, and thus cerebral oedema.**

## **Issues in assessment**

- **Grunting may be a sign of seizure, not of airway obstruction**
- **Hypertension is more likely the RESULT of the seizure, not the cause**
- **Decorticate and decerebrate posturing can be mistaken for the tonic phase**
  - **Everyone gets oxygen**
  - **Everyone gets a BSL**