

Advanced Paediatric Life Support



the convulsing child

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The Convulsing Child Objectives

- To understand the structured approach to the convulsing child
- To understand the protocol for the treatment of the convulsing child
- To introduce the drugs used





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The Convulsing Child

Status epilepticus: definition

- Continuous and generalised convulsions for more than 30 minutes
- Repeated convulsions without full recovery between seizures



The Convulsing Child

Common causes

- Fever
- Cerebral hypoxia
- CNS infections
- Metabolic abnormalities
- Epilepsy & anticonvulsant withdrawal

- **D**isability - distinguish fit from posturing (from raised ICP)
dystonic reactions
pseudo-epilepsy
- **D**on't **E**ver **F**orget **G**lucose



The Convulsing Child Assessment

- **D**isability - distinguish fit from posturing (from raised ICP)
dystonic reactions
pseudo-epilepsy
- **D**on't **E**ver **F**orget **G**lucose

Check Blood Glucose Levels

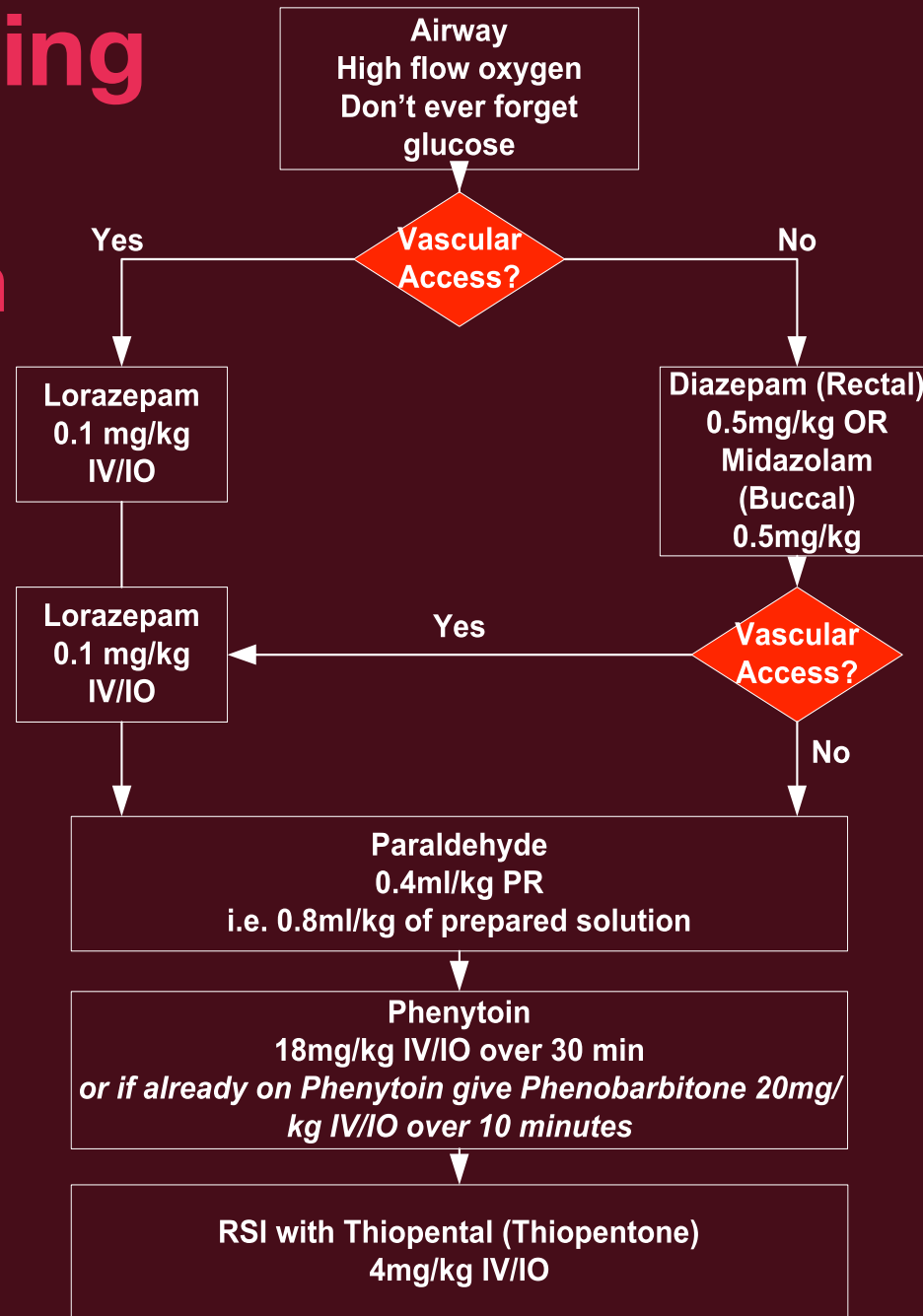
- **D**isability - distinguish fit from posturing (from raised ICP)
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The Convulsing Child Initial Resuscitation

- Open and maintain airway
- High flow oxygen
- Ventilatory support if necessary
- Give glucose if necessary
- Manage convulsion

Convulsing Child Algorithm



Allow 10 minutes for drug action



The Convulsing Child

Protocol Step 1

Immediate IV access

- Lorazepam
0.1mg/kg

No IV access

- Buccal
midazolam or
rectal
diazepam
0.5mg/kg over
30-60 secs

Allow 10 minutes for drug action

Allow 10 minutes for drug action



The Convulsing Child

Protocol Step 2

IV access

- 2nd dose of lorazepam
0.1mg/kg
over 30-60
secs

No IV access

- Paraldehyde
0.4ml/kg pr
with an equal
volume of
olive oil

Allow 10 minutes for drug action

The Convulsing Child After Step 2



- Reassess ABC
- Obtain senior advice
- Is this definitely an epileptic seizure?
- Check glucose
- Use intraosseous route if IV access still cannot be obtained

The Convulsing Child Protocol Step 3

Rectal paraldehyde 0.4ml/kg (if not
yet used)

while preparing to infuse

Phenytoin 18mg/kg (over 20 mins)



The Convulsing Child Protocol Step 4

- Induction of anaesthesia with thiopentone
- Consider treatment of raised ICP





Status Epilepticus

Medical complications

- Pulmonary oedema
- Hyperthermia
- Cardiac dysrhythmias
- Hypertension
- Cerebral oedema
- Myoglobinuria
- Disseminated intravascular coagulation

The Convulsing Child After the fit has stopped



- Monitor ABC
- Monitor further seizure activity
- Consider underlying cause



The Convulsing Child

Key Features

Convulsion with:

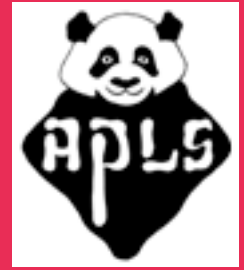
- irritability/fever/rash \Rightarrow meningitis
- rapid onset \Rightarrow poisoning/CVA
- vague history/suspicious bruising \Rightarrow NAI
- hypertension \Rightarrow hypertensive encephalopathy

**Review approach to child with decreased
conscious level**

Advanced Paediatric Life Support



The Convulsing Child



The Convulsing Child Summary

- Airway
- Breathing
- Circulation
- Check glucose
- Stop seizures
- Prevent or correct metabolic complications
- Identify and treat underlying causes

