

## Scenario: Child fitting needing respiratory support

### Set Up:

Mannequin /Confederate	Moulage	Equipment available	Drugs available
SimJunior	Peripheral IV	Airway trolley (incl oral airways)	Fluids: maintenance & Volume
Confederate - ward nurse	NGT in situ	Circulation trolley	Resuscitation drugs
Confederate - Parent (on phone)		MET trolley	Intubation Drugs
		Nasopharyngeal airway	Midazolam
		Suction system	Antiepileptics
		Paed stethoscope	

**Monitor:** Basic

**Paperwork Required:**

- Age appropriate observational Chart
- Drug Chart - with a range of epileptics
- Blood gas - capillary (respiratory acidosis)
- Blood gas - venous (respiratory acidosis)
- Blood glucose (2.5)
- CXR - intubated

### Learning Objectives:

#### (1) *Medical*

- Management of status
- Intubation & ventilation

#### (2) *CRM*

- Calling for help
- Leadership & role allocation within local team
- Handover (ISBAR) & reorganisation of resources
- Medication safety
- Open disclosure

### Synopsis of Scenario

8 yo boy with severe cerebral palsy and difficult to control seizures develops status. Has just had regular medication of Clonazepam. Midazolam is requested & given prior to MET team. Continued fitting. Given further dose of midazolam. Stops breathing. Bag & mask ventilation prevents cardiovascular arrest but failure to develop spontaneous ventilation - MET team intubate & arrange transfer to ICU.

### Patient Demographics

Patient Name:	Joshua Matthews	DOB/Age:	8 years		
Medical Record#:		Weight:	28kg		
Allergies:	nil	Male	<input checked="" type="checkbox"/>	Female	<input type="checkbox"/>
Dx/Procedure:	Admitted for dental extraction				
Other:	Developmental delay, Epilepsy, NG fed overnight				

### Information Card for ward staff involved in scenario

- 8yo boy with cerebral palsy & significant developmental delay
- Admitted for dental extraction
- Epilepsy
- NG fed overnight until 0300

**1<sup>st</sup> handover -Confederate nurse to 1<sup>st</sup> participant nurse covering her for tea break  
(confederate picks up bag but never leaves room as fitting starts)**

**I** Joshua Matthews  
**S** episodes of head twitching on & off whilst you were on break  
**B**  
**A** nothing else of concern, gave all meds due, done 3pm obs  
**R** I'm not sure what to make of the twitching

### Initial Observations:

	↑, N, ↓, absent	Description
Appearance	Pt initially responding 'no'. Start intermittent clonic seizure progress to continuous fitting shortly after handover of pt. Unresponsive (if vocals available give - obstructed airway noises)	
HR	↑	Slight tachycardia - 112mins
RR	↓	Rate: 15. Shallow respiration
Temp – peripheral - central	↓	36.7
Saturation	↓	88% (fluctuates between 72-92%)
Non- invasive BP – upper limb - lower limb	↑	102/75
ETCO2	↑	Not on initially (available post intubation - 64)
Pupils		One big & one small

**Ideal Management: Bedside nurse activates local team (medical & nursing)**

Examination:

Management:

DRSABC  
Notes seizure activity  
Checks drug chart - all antiepileptic meds given

Calls for help  
Oxygen  
Suction of oral / nasal secretions  
Consider oral or nasal airway  
Requests blood sugar  
Anti-seizure medication requested

HR slowly rises to 128; RR decreases to 12, continues fitting. Given 1<sup>st</sup> dose midazolam, still fitting. Respiratory rate decreases after midazolam, but continues fitting. Saturation fluctuating 72-92%, increases to 94+% when bagged effectively, BP stays good

**Progression Good: Local Team call MET**

CUES:

Ideal Management:

PROMPT:  
Still fitting: another dose of midazolam  
Team recognise stopped breathing

PROMPT: - pt not breathing

ISBAR handover  
Requests 2<sup>nd</sup> dose midazolam to be given  
Bag mask ventilation  
Ensure blood sugar & electrolytes on gas ok  
Volume  
Waits & assesses for spontaneous ventilation  
Intubation & ventilation  
Check ETCO<sub>2</sub> & air entry  
Discuss with ICU (ISBAR)

HR rises slightly to 85, End tidal CO<sub>2</sub> initially 64 - falls to 52, saturations rise to 95%, BP good

**Progression Poor:**

CUES:

Ideal Management:

Prompt: seizure  
- midazolam  
- call a MET  
- not breathing

As above

If responds to confederate HR rises slightly to 85, saturations rise to 94% with bagging, BP stable

**Scenario finishes after 10 minutes or after patient intubated & ventilated & discussion with ICU has occurred for bed**

**Resources:**

**Clinical Practice Guideline: RCH Status epilepticus (Afebrile seizure) guideline**