## Malignant Hyperthermia Crisis Task Allocations

AAGBI Safety Guideline

The successful management of a malignant hyperthermia crisis requires multiple simultaneous treatment actions. This is made far easier through effective teamwork and specific task allocation.

### 1st anaesthetist - commence immediate management (on guideline sheet)

The anaesthetist diagnosing MH or the most senior anaesthetist responding should assume the role of clinical leader once immediate management actions have been undertaken and avoid becoming focused on a single task.

### 2nd anaesthetist - resuscitation

- Ensure dantrolene is given in correct dose (2.5mg/kg initially then 1mg/kg every 10-15min)
- Commence TIVA
- Management of hyperkalaemia
- Management of arrhythmias
- Management of acidosis
- Renal protection (forced alkaline diuresis)

### 1st anaesthetic nurse/ODP

- Collect MH kit
- Collect cold saline & insulin
- Set up lines (arterial/CVC)
- Runner for resuscitation drugs/equipment

### 2nd anaesthetic nurse/ODP (ideally two people)

- Draw up dantrolene as requested by anaesthetist in charge of resuscitation

### 3rd anaesthetist - lines/investigations

- Site arterial line
- Send bloods for
  - ABG – repeated (approx every 30 min initially)
  - U&Es
  - CK
  - FBC
  - Coagulation screen
  - Cross match
- Central venous access
- Urinary myoglobin
- Monitor core and peripheral temperatures

### Surgical team

- Catheterise
- Complete/abandon surgery as soon as feasible
- Undertake cooling manoeuvres

Adapted from the Malignant Hyperthermia Australia and New Zealand (MHANZ) MH Resource Kit with permission
Storing together the majority of items required to manage malignant hyperthermia will reduce time spent gathering equipment and hence expedite initiation of successful treatment.

**Compartment 1: dantrolene**
- 100 mls vial of sterile water for injection x 12
- 12 vials of dantrolene (20 mg per vial) (sufficient for an initial 2.5mg/kg dose plus 2 repeat 1mg doses in an average adult)
- 10 x 50ml syringes
- Guideline for management of crisis and task allocations
- Details of location of reserve dantrolene supplies

**Compartment 2: treatment**
- Calcium chloride 10%
- Sodium bicarbonate (50ml 8.4% syringe)
- Amiodarone 300mg
- β blocker
- Glucose (20%)
- 50ml propofol vials/prefilled syringes for TIVA

**Compartment 3: investigation/monitoring**
- Blood bottles
  - ABG
  - FBC
  - Coagulation
  - Biochem
  - Urine sample bottles
  - Group & save
- Arterial cannulae and transducer sets
- CVC and transducer sets

**Fridge pack**
- 2 litres of cold sodium chloride 0.9% for IV administration
- Short-acting insulin

Along with part-filled forms labelled ‘MH crisis’ and numbered; 1st, 2nd, 3rd
To include CK and urinary myoglobin assay

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