

### Guidelines for the use of



#### **Activated Charcoal Filters**

Activated Charcoal filters are recommended for use with anaesthetic workstations:

- 1. During a suspected Malignant Hyperthermia crisis;
- 2. For patients undergoing anaesthesia who have a known or suspected increased risk of developing Malignant Hyperthermia.

## Is this a suspected Malignant Hyperthermia Crisis?





- Remove vaporisers from anaesthetic workstation
- Flush circuit with 100 % Oxygen, 10 litres/min for 90 seconds
- Change anaesthetic breathing circuit for uncontaminated equipment
- Place Activated Charcoal Filters on both limbs of the anaesthetic workstation

# FOLLOW GUIDELINES FOR TREATING SUSPECTED MH CRISIS

- Turn off anaesthetic vaporisers and remove from the anaesthetic workstation
- Fresh gas flow 100 % Oxygen @ 10 litres/min
- Hyperventilate (2-3 x normal minute ventilation)
- Place Activated Charcoal Filters on both limbs of the anaesthetic workstation
- Change soda lime & breathing circuit if/when feasible



## After 90 minutes (optional)

#### **EITHER:**

 Keep filter in place and decrease gas flow to 3 litres/min

#### OR:

 Maintain gas flow of 10 litres/ min and remove Activated
Charcoal Filter from the circuit



<u>Change filters after 30 minutes and</u> maintain Gas flow at 10 litres/min

#### Guidelines based on evidence from:

- 1. Bilmen JG, Gillies RL. Anaesth Intensive Care 2014; 42: 51-58
- 2. Birgenheier N, Stoker R, Westonskow D, Orr J. Anesth Analg 2011; 112: 1363–70.
- 3. Cottron N, Larcher C, Sommet A, Fesseau R, Alacoque X, Minville V, Fourcade O, Kern D. *Anesth Analg* 2014; **119**:67–75