

Purging of Anesthesia Machines for use in MH Susceptible Patients

Revision September 2003 (for Aestiva/5 machines)

The following are the recommendations for purging an Anesthesia Machine to provide an essentially vapour-free machine for use with MH- susceptible patients. These recommendations are derived from the work of Beebe and Sessler, published in Anesthesiology in 1988.

1. The vaporizers should be removed from the back of the machine.
2. A new circuit, rebreathing bag, and gas sampling tube should be used. A selection of new masks should be available.
3. Place a new breathing bag at the end of the circuit to be used as a “lung”. Set ventilator rate at 600 ml. and 10 breaths per minute.
4. The machine should be purged with 100% oxygen at 10 litres per minute for 5 minutes.
5. For older machines, the fresh gas outlet hose should be replaced with the vapour-free fresh gas outlet hose.

The entire purging routine should take less than 10 minutes to perform.

Note: It is unnecessary to change the CO₂ absorber or the ventilator bellows as suggested by some centres.

References:

1. Beebe JJ, Sessler DI. Preparation of anesthesia machines for patients susceptible to malignant hyperthermia. Anesthesiology 1988; 69:395-400.

