

Checking of Anaesthetic Equipment 2016 - 2017

Description

Anaesthetic practice involves the extensive daily use of equipment. Routine checking of this equipment is essential in the safe delivery of anaesthetic care. This session provides an overview of the principles of checking the anaesthetic equipment used in current common practice, in accordance with the recommendations of the Association of Anaesthetists in Great Britain and Ireland.

Session introduction

Learning objectives:

- Describe the tests performed in checking the anaesthetic equipment.
- Identify potential equipment malfunctions in anaesthetic practice.
- Recognize the design modifications of modern anaesthetic equipment to prevent such malfunction.

The anaesthetic machine

Monitoring equipment

None – invasive blood pressure

Medical gas supply
pipeline supply

Medical gas supply
reserve gas cylinders

Checking pressure gauges

Medical gas supplies
mechanical flowmeters

mechanical flowmeters
testing the anti - hypoxia device

Oxygen flash
oxygen bypass

Vaporizers
anti – spill design

Vaporizers
the risk of leaks

Vaporizers maintenance

Leak testing

Scavenging

Suction equipment

Ancillary equipment

laryngoscopes

Intubation aids

Airways equipment

Single use device

Back-Up Systems

Record Keeping

Session key points

- Routine checking of equipment is essential in the safe delivery of anaesthetic care
- Ensure that you have turned on anaesthetic machine after connecting it to the mains supply
- Check the gas supply; both piped gases and cylinders
- Make sure that the monitoring equipment is working adequately
- Ensure that various components of the anaesthetic machine are functioning correctly – flowmeters, vaporizers, oxygen emergency flash, scavenging system and suction system. Also check for leaks
- Check the breathing system and its components
- Ensure the availability of different airway management devices
- When possible, use single – use devices
- In cases of anaesthetic machine failure, have available means of ventilation and administration of oxygen

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