SmartVent™

Cleaning Procedures

Version 2 – (Dec 2009)

Prior to handling SmartVent components, surgical gloves must be worn.

1. Single use circuit:

After each patient, disconnect and leave to decay in a suitable shielded waste container. There will be typically 100 MBq of unused Tc DTPA in the used circuit. Dispose of when decayed.

2. Generator Connector:

This is classified as a 'Single Session' component.

At the end of each session with SmartVent™, allow 36-72 hours for the contents of the canister to decay before removing the components from the canister. Disconnect the Generator Connector from the Generator and discard. The Generator can now be cleaned.

Decay table for 500 MBq of ^{99m}Tc

After 6 hours	250 MBq
After 12 hours	125 MBq
After 18 hours	63 MBq
After 24 hours	32 MBq
After 30 hours	16 MBq
After 36 hours	8 MBq
After 42 hours	4 MBq

E.g. if 500 MBq of ^{99m}Tc is left in the canister at 4pm on Monday, by Wednesday morning there will be 4 MBq left.

3. Aerosol Generator

Table 1: Classification of infection risk associated with the decontamination of medical devices

Risk	Application of item	Recommendation
High	• in close contact with a break in the skin or mucous membrane; • introduced into sterile body areas.	Sterilization.
Intermediate	• in contact with mucous membranes; • contaminated with particularly virulent or readily transmissible organisms; • prior to use on immunocompromised patients.	Sterilization or disinfection required. Cleaning may be acceptable in some agreed situations
Low	• in contact with healthy skin; • not in contact with patient.	Cleaning.

As the generator does not come into contact with the patient, it is classified as low risk of contamination (ref: MHRA MAC Guide. Full reference on request). Therefore, cleaning is all that is required. Diagnostic Imaging Limited has carried out a contamination risk assessment and can confirm that the generator and generator connector remain un-contaminated between patients. Full details on request.

Procedure

1. Remove generator filler cap
2. Rinse generator and filler cap under running tap water
3. Agitate the generator and filler cap in a warm solution of mild, soluble detergent (Washing up liquid is fine)
4. Rinse generator and filler cap under running water
5. Shake both components to remove excess water
6. Spray both components with 70% denatured ethanol. Ensure both the bowl and underside of the generator are thoroughly sprayed
7. Shake to remove excess alcohol
8. Using soft tissue, gently dry the bowl and underside of the generator taking care to avoid putting undue pressure on the aperture plate
9. Allow to thoroughly air dry. The generator is then ready to use.
10. **Do not expose the Generators to temperatures above 60^0C i.e. autoclaving or steam cleaning.**

4. Control module, cable and AC/DC adaptor

Wipe clean with a damp cloth.