

The Electrosurgery TEAM

Together Everyone Avoiding Mistakes

Recovery staff

- ✓ Check for skin damage
- ✓ Discard single-use items after use
- ✓ Report adverse events identified in the recovery area to the operating surgeon and theatre manager

Theatre manager

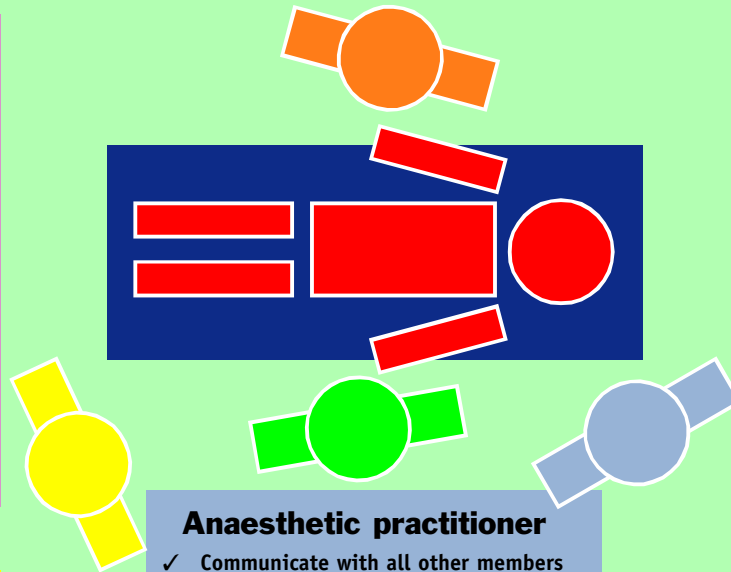
- ✓ Responsible for safe system of working as required by controls assurance/governance
- ✓ Ensure all staff have undergone general and product specific electrosurgery training
- ✓ Ensure systematic procurement of equipment, taking account of MDA guidance (DB9801) and evaluation reports (CEDAR)
- ✓ Liaise with medical engineering and sterile services departments to ensure appropriate systems of maintenance and reprocessing
- ✓ Report adverse events and near-misses to MDA and trust MDA liaison officer

Circulating staff

- ✓ Communicate with scrub nurse
- ✓ Understand generator and accessories
- ✓ Understand generator alarms and how to rectify problems
- ✓ Know where to find spare accessories

The Problem

Every year many patients and staff are injured needlessly by electrosurgical equipment (sometimes referred to as surgical diathermy). These injuries are often due to user error and poor systems of work, not the equipment design.



Anaesthetic practitioner

- ✓ Communicate with all other members of the electrosurgery team
- ✓ Understand generator and accessories
- ✓ Understand generator alarms and how to rectify problems
- ✓ Responsible for ensuring correct patient set-up including placement of the return electrode after clipping or shaving where appropriate

Scrubbed staff

- ✓ Co-ordinate theatre team and act as hub of communication
- ✓ Ensure that the patient and generator set-up are correct
- ✓ Ensure that the accessories such as forceps and leads are appropriate and functioning normally before and during procedure
- ✓ Ensure that electrosurgery equipment is used correctly at all times
- ✓ After surgery check reusable accessories for damage and prepare for central reprocessing
- ✓ Report adverse events to the theatre manager

Surgeon

- ✓ Responsible for clinical outcome
- ✓ Pre-operative assessment should consider relevant patient factors (see right)
- ✓ Select appropriate skin preparation (avoid using alcohol-based preparations as per MDA SN 2000(17))
- ✓ Select and check the appropriate mode, return electrode (if required), accessories and generator settings before use. Remember the pedicle effect
- ✓ Use the lowest power setting commensurate with the desired surgical effect
- ✓ If foot pedals are used check that they cannot be activated inadvertently by becoming trapped under the operating table
- ✓ Avoid activating generator if other staff are in direct physical contact with the patient
- ✓ Use quivers to store accessories when not in use
- ✓ Take particular care when 2 separate generators/systems are used by 2 surgical teams concurrently

Personal training

Do I understand?

- ✓ The patient's needs
- ✓ The different types of electrosurgery equipment needed to meet those needs
- ✓ The risks of electrosurgery and how to minimise them
- ✓ The principles of electrosurgery

Do I know how to?

- ✓ Set up the generator safely
- ✓ Prepare the patient properly
- ✓ Select and check accessories
- ✓ Avoid risks to theatre staff

Have I considered patient factors?

- ✓ Gender, weight and fat distribution
- ✓ Position return electrode taking account of patient position, the operating site, previous surgical scars and metal implants
- ✓ Active implants (pacemaker/internal defibrillator require extra pre-op/post-op checks by cardiology team)
- ✓ Consent for shaving
- ✓ Allergy to skin preps and return electrode

Have I considered equipment factors?

- ✓ Properly maintained and in good order
- ✓ Correct generator setting using lowest power practical to start procedure
- ✓ Correct accessories compatible with generator and required mode



Safeguarding Public Health

To find out more about the MDA and the electrosurgery equipment centre log onto www.medical-devices.gov.uk

CEDAR website at www.cedar.wales.nhs.uk

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Remember that you are professionally responsible for your own actions

Safe working needs TEAM working