Infection control recommendations for regional anaesthesia

Central neuraxial techniques

In a patient with known or suspected bacteraemia, prophylactic pre-procedural antibiotic therapy should be considered. Aseptic techniques must be applied during preparation of equipment. A caudal anaesthetic is considered to be a neuraxial technique as the caudal space is a continuation of the epidural space.

Maximal barrier precautions apply:

- Jewellery should be removed and hands washed.
- Caps, masks (covering both mouth and nose), sterile gloves and gowns.
- Sterile drapes.
- Face mask should also be worn by the anaesthetic assistant.
- An antiseptic, preferably a 0.5% solution of chlorhexidine with alcohol, should be used for skin preparation.
- Avoid pooling of the cleaning solution to avoid the risk of burns.
- Allow the solution to dry completely before touching or palpating the back.
- Meticulous care should be taken to avoid contact of chlorhexidine with the cerebrospinal fluid.
- Do not pour chlorhexidine into containers in close proximity to equipment that will be used for the neuraxial anaesthetic. Cover or protect equipment while cleaning with chlorhexidine.
- A sterile occlusive dressing must be applied over the puncture site.
- Bacterial filters may be considered during extended continuous epidural infusion.
- Disconnection and reconnection of the neuraxial delivery system should be limited.
- Consider removing a catheter that has become disconnected without it being noticed as soon as discovered.

Catheters must not remain in situ for longer than is clinically necessary.

Peripheral nerve blocks

- Maximal barrier precautions are generally not necessary.
- Maximum barrier precautions should be used if the patient is immunocompromised or a perineural catheter needs to be inserted.
- Jewellery should be removed and hands washed. Sterile gloves must be worn.
- Aseptic techniques should always be used during the preparation of equipment, e.g. ultrasound, the drawing up of drugs and the placement of needles and catheters.
- An antiseptic, preferably chlorhexidine with alcohol, should be used for skin preparation, and adequate time allowed for drying. Do not allow alcohol to come in contact with an ultrasound probe, needles and catheters.
- Prevent pooling of cleaning solution to avoid burns.

Use of ultrasound

- A sterile probe and handle covering should be used, e.g. a sterile transducer sheath.
- Do not use pre-lubricated condoms as sheaths as the lubricant can damage the probe. (Logiq e manual).
- An antiseptic, preferably chlorhexidine with alcohol, should be used for skin preparation, and adequate time allowed for drying. Do not put the probe on the patient until the alcohol has evaporated to prevent alcohol-induced damage to the probe.
- Do not allow sterilant such as Cidex® to come into contact with the patient as it may cause damage to skin or mucous membranes. If contact does occur, refer to the information leaflet of the specific sterilant.
- The probe should immediately be wiped with a soft towel to remove any gel/lubricant residue and any visible contamination.
- Product information should be consulted as to which cleaning agents are appropriate for the specific machine or probe.
- Use single-use, sterile gel, e.g. a K-Y® lubricating.