

State of Kuwait  
Ministry of Health  
Infection Control Directorate

# **Infection Control Guidelines for Spinal procedures**

Updated - 2014

# **Infection Control Guidelines for** **Spinal procedures**

## **I. Introduction**

Bacterial meningitis following myelogram and other spinal procedures (e.g., lumbar puncture, spinal and epidural anesthesia, intrathecal chemotherapy) has been reported<sup>1,2</sup>. Face masks are effective in limiting the dispersal of oropharyngeal droplets<sup>3</sup> and are recommended for the placement of central venous catheters<sup>4</sup>. The Healthcare Infection Control Practices Advisory Committee (HICPAC) reviewed the evidence and concluded that there is sufficient experience to warrant the additional protection of a face mask for the individual placing a catheter or injecting material into the spinal or epidural space.

The HICPAC recommended the **surgical masks** to be worn by spinal procedures operators to prevent infections associated with these procedures<sup>5</sup>.

Standard Precautions are intended to be applied for the care of all patients in all healthcare settings, regardless of the suspected or confirmed presence of an infectious agent. **Implementation of *Standard Precautions* constitutes the primary strategy for the prevention of healthcare-associated transmission of infectious agents among patients and healthcare personnel.**

## **II. Rationale**

Within a healthcare setting both patients and healthcare staff are at risk of acquiring an infection

## **II. Components**

**Spinal procedures operators are highly recommended to perform these steps**

### 1. Hand hygiene:

The operator should wash their hands and fore-arms up to the elbows immediately before donning sterile gowns and gloves using hand antisepsis.

### 2. Personal protective equipment (PPE)

- Sterile gloves
- Surgical mask
- Protective gown
- Eye protection (goggles), face shield\*

### 3- Skin preparations

Authors of the British Royal College of Anaesthetists 3<sup>rd</sup> National Audit Project provided some guidance for the use of chlorhexidine for spinal procedures

Clinicians must take care to prevent chlorhexidine (CHG) from reaching the CSF

- Keep CHG away from other drugs and equipment being used
- Allow solution to dry prior to beginning procedure
- Avoid using solutions > 0.5% chlorhexidine

**NB: The use of a concentration of CHG >0.5% cannot be supported; this concentration is evidently effective, but a greater one might increase the risk of neurotoxicity from inadvertent contamination, and should be avoided.**

#### 4. Soiled patient-care equipment:

Handle in a manner that prevents transfer of microorganisms to others and to the environment.

#### 5. Environmental control:

Routine care, cleaning, and disinfection of environmental surfaces, especially frequently touched surfaces in patient-care areas.

#### 6. Textiles and laundry:

Handle in a manner that prevents transfer of microorganisms to others and to the environment

7. Needles and other sharps: Do not recap, bend, break, or hand-manipulate used needles; if recapping is required, use a one-handed scoop technique only; use safety features when available; place used sharps in puncture-resistant container.

### **This policy should be read in conjunction with:-**

- Hand hygiene guidelines
- Safe injection guidelines
- Isolation guidelines
- Disinfection guidelines
- laundry guidelines
- Environmental guidelines

\*-During aerosol-generating procedures

-On patients with suspected or proven infections transmitted by respiratory aerosols (e.g. H1N1, SARS), wear a fit-tested N95 or higher respirator in addition to gloves, gown, and face/eye protection.

### **References**

1- Watanakunakorn C, Stahl C. Streptococcus salivarius meningitis following myelography. Infect Control Hosp Epidemiol 1992;13(8):454.

2- Trautmann M, Lepper PM, Schmitz FJ. Three cases of bacterial meningitis after spinal and epidural anesthesia. Eur J Clin Microbiol Infect Dis 2002;21(1):43-5.

3- Philips BJ, Fergusson S, Armstrong P, Anderson FM, Wildsmith JA. Surgical face masks are effective in reducing bacterial contamination caused by dispersal from the upper airway. Br J Anaesth 1992;69(4):407

4. CDC. Guidelines for the Prevention of Intravascular Catheter-Related Infections. MMWR 2002;51(RR10)(10):1-26.

5- Siegel J, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee. 2007 guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings. Available at [http://www.cdc.gov/ncidod/dhqp/gl\\_isolation.html](http://www.cdc.gov/ncidod/dhqp/gl_isolation.html). Accessed January 22, 2010.

6-Siegal JD, Rhinehart E, Jackson M, Chiarello L, and the Healthcare Infection Control Practices Advisory Committee, Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings, 2007.

7- M. Scott, J. Stones and N. Payne. Antiseptic solutions for central neuraxial blockade: which concentration of chlorhexidine in alcohol should we use? British Journal of Anaesthesia 103 (3): 456–62 (2009)