Introduction

Urinary tract infections (UTI) are the most common infections acquired in hospitals and long term care facilities. The major predisposing factor for healthcare associated UTI is the presence of an indwelling urethral catheter. Up to 25% of hospitalized patients have a urinary catheter inserted during their stay in hospital. Approximately 50% of patients catheterized longer than 7 – 10 days develop infection. Nearly all patients catheterized longer than 30 days develop UTIs. An indwelling catheter provides a means of entry for microorganisms. These microbes enter the urinary tract in any of three ways; during insertion of the catheter, or they can travel upward along the catheter – mucousal junction, or if the drainage system has become contaminated, they can travel upward along the inside of the catheter.

Bacteremia secondary to UTI is the most common cause of nosocomial gram-negative sepsis and has been linked to increased mortality.

Policy

1. Urinary catheters will be inserted only when clinically indicated and removed immediately when they are no longer required.

2. Indwelling urethral catheters will be used for a limited duration as much as possible and only after careful consideration of the alternative methods of management.

3. All health care workers providing urinary catheter care will be educated in the epidemiology of and infection prevention and control procedures for preventing urinary tract infections.

Purpose

1. To reduce the risk and incidence of urinary tract infections by following evidenced-based guidelines.
Procedure

1. Insertion
   - Select the smallest gauge catheter that will allow free urinary outflow (with the smallest possible balloon).
   - Perform bladder catheterization using aseptic technique according to the specific SHR Nursing Policies and Procedures, Catheterization-Bladder.
   - Securely tape the catheter to the medial thigh of a female or the upper thigh of a male to prevent movement and urethral traction.

2. Maintenance
   - Maintain a sterile closed drainage system. When disconnection is necessary the catheter/collecting tube junction should be disinfected with a disinfectant and strict, sterile technique observed.
   - Obtain urine samples from a sampling port using aseptic technique. Prep sampling port with a disinfectant (e.g. alcohol 70% or chlorhexidine 0.5%/alcohol 70%) and withdraw with a syringe and needle.
   - Maintain unobstructed, downward urine flow by keeping the drainage bag below the level of the patient’s bladder at all times. Position the drainage bag on a stand that prevents contact with the floor. Keep the tubing free from kinks and obstruction.
   - Empty the urinary drainage bag aseptically and frequently enough to maintain urine flow and prevent reflux. When emptying, use a separate and clean container for each patient and avoid contact between the emptying port and the container. Change gloves and practice good hand cleansing between contact with each drainage system.
   - If a break in aseptic technique, accidental disconnection or leakage occurs, the collection system should be replaced using aseptic technique after disinfecting the catheter-tubing junction with a disinfectant wipe.
   - **Urinary catheters should not be changed at fixed times. Change when blockages occur from intraluminal encrustations, for aesthetic reasons or when urinary tract infection is suspected or present.**
   - **Irrigation of indwelling urinary catheters should be avoided unless needed to prevent or relieve acute obstruction (i.e., post-operative bladder surgery).**
   - **Routine personal hygiene is all that is required to maintain meatal hygiene.**
   - **Routine bacteriological monitoring of catheterized patients is not recommended.**
   - **Prophylactic antibiotics to prevent bladder colonization are NOT effective and are to be strongly discouraged.**
References:


