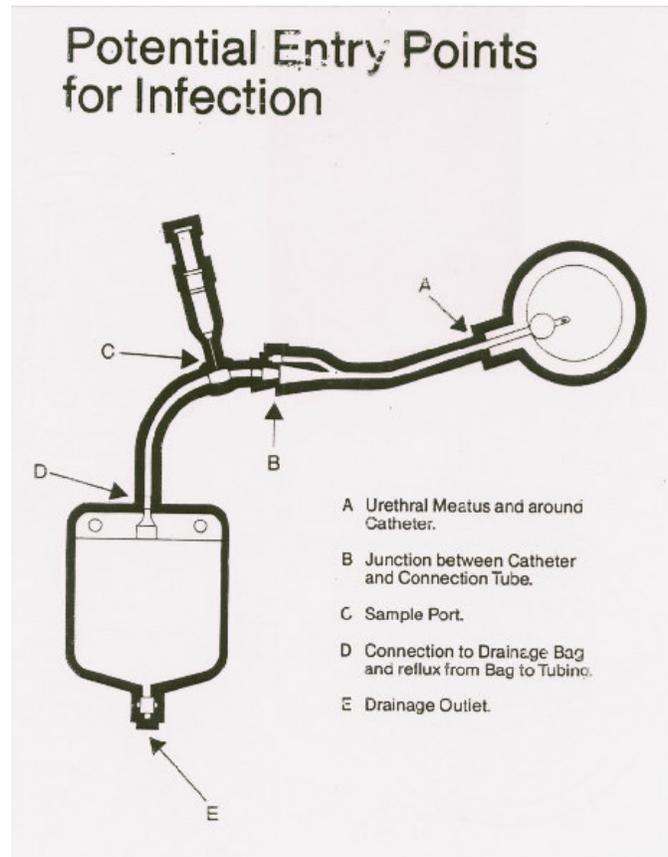


Infection Control: Implications in Catheterization



Introduction

- ▲ U.T.I. is the commonest of all Hospital Acquired Infections—About 40 % of all cases of Nosocomial Infection.
- ▲ Between 10% - 12% of patients admitted to hospital are catheterized at some time during their stay. It is estimated that 2 patients out of every 1000 patients catheterized die from acquired U.T.I
- ▲ When one interprets the above figures, nearly 2% of ALL hospitalized patients will acquire a Nosocomial Urinary Tract Infection due to urethral Catheterization

Causes of Nosocomial Urinary Tract Infections

- ⤴ Lack of adherence to sterile protocol at the time of insertion (direct inoculation of the organism).
- ⤴ Trauma to the urethral lining at the time of catheterization.
- ⤴ Biofilms that can develop in the inner or outer surfaces of the catheter and migrate into the bladder
- ⤴ Cross infection from rectal area.
- ⤴ Ascending migration of bacterial from the drainage bag into the bladder.

Selection of the most suitable material

- ⤴ If urine is **clear** use a 12 Ch /14 Ch catheter.
- ⤴ If urine is **cloudy** use a 16 Ch/18 Ch catheter.
- ⤴ If urine contains debris or clots use an usual size I.e. 18 Ch, 20 Ch or 22 Ch catheter
- ⤴ Male length 38 cm Female length 22 cm

Type of Material and duration

Latex:

- ⤴ *Short term Up to 7 days*
- ⤴ *Short life span of catheter*
- ⤴ *Inexpensive*
- ⤴ *Can cause urethra irritation*

Latex coated with inert material such as Teflon or Silicone coated:

- ⤴ *Longer life up to 3 weeks*
- ⤴ *Expensive*
- ⤴ *No known allergic responses*

100% silicone or Hydrogels:

- ▲ *Long term catheterization Up to 4-6 weeks*
- ▲ *No known allergic response*
- ▲ *Expensive*

Type of Length of Catheter

- ▲ *Female length 20 cm*
- ▲ *(standard length is 38 cm)*

- ▲ *Allows bag to be positioned high on thigh*
- ▲ *Reduces the possibility of stagnation of urine*
- ▲ *Prevents infection*

Selection of the Most suitable catheter

- ▲ *Always use a 5 – 10 ml balloon unless specifically ordered by medical officer.*
- ▲ *Always use sterile water and not saline or air.*
- ▲ *Always check when a two way or three way catheter is needed.*

Aseptic Technique

- ▲ *Clean perineum and external meatus with soap and water and dry area well.*
- ▲ *Wash hands with Hibisol before donning sterile gloves*
- ▲ *If tip of catheter accidentally touches the labia before introduction into the urethra, it must be discarded.*
- ▲ *Always use sterile towel in position between the patient's legs.*

- ▲ *Prepare the patient and all other equipment before donning sterile gloves.*
- ▲ *Be sure how to use the sample port.*
- ▲ *Wash gloves with Chlorhexidine in alcohol prior emptying of urine bag.*