PAEDIATRIC INDWELLING URINARY CATHETER DECISION AID

Nurses should adhere to organizational policies and procedures and nursing regulatory body

Female Anatomy

Typical sizes: 8 (blue), 10 (black), 12 (white), 14 (green)

Size

The smallest external diameter size that allows for adequate drainage should be selected, Balloon ports are colour-coded to allow for ease of recognition

Male Anatomy

Typical sizes: 8 (blue), 10 (black), 12 (white), 14 (green), 16 (orange)

Balloon Size 3, 5, or 10 ml

Hydrophilic

- activation of lubricated surface can be ready-to-use or require a package to be broken
- · no added lubrication needed
- reduces friction and trauma
- may reduce the risk of UTI

Material

Due to latex allergies and sensitivities, latex is not recommended

Silicone

- · short and long term use
- less flexible compared to latex catheters
- better for sediment drainage
- · less encrustation

PVC

- · short term use
- · high risk of encrustations
- may contain phthalates

Latex - hydrogel coated / latex - silicone coated / latex - Teflon coated

- · short and long term use
- · less trauma
- · less encrustation
- · careful with latex allergy

Tip/End

Standard/straight/Nelaton

· indicated for most insertions

Coudé/Tiemann/curved/rounded/olive

• indicated if postoperative edema or challenging insertion / urethral stricture / male anatomy

Frequency

All indwelling catheters should be changed as per manufacturer's IFU or after less than 30 days (Health Canada) or when clinically indicated such as when the catheter is blocked, urine bypassing, or to collect a urine sample

Insertion

- only with a most responsible ordering practitioner [or as per scope of practice/organizational policy and procedure]
- optimize positioning for insertion
- insert slowly and note any resistance
- · assess for urine return
- inflate balloon with sterile water slowly assessing for pain or discomfort
- · assess patient for pain, bleeding, or signs of trauma
- · if size is not ordered consider using smallest catheter that will allow for adequate bladder drainage
- follow manufacturer's IFU on the amount to fill the balloon. Do not under or overfill as can result in dislodgement or balloon malfunction
- larger balloons are available but these should only be used when ordered as they can be irritating to the bladder and bladder neck. Increases bladder spasms
- larger catheters are generally used when clotting is an issue and / or irrigation is required (18 Fr and above)
- · irrigate a minimum of once daily if risk for AD
- specialized catheter tips (Coudé/Tiemann/Curved) are used when urethral or bladder neck obstruction is a probability based on the patient's history post op
- monitor patient's condition and when appropriate advocate for catheter removal
- · secure catheter with catheter securement device to reduce bladder neck trauma and urethral erosion
- the catheter securement device needs to be rotated to various parts of the abdomen or upper thigh with each change, according to manufacturer's IFU and PRN

Removal

• monitor patient's condition and when appropriate advocate for catheter removal

Troubleshooting

- no return of urine when inserting catheter (catheter has coiled inside the urethra-encourage patient to relax by breathing slowly, try repositioning, assess for full insertion past the bladder neck and into the bladder, consider different tip or type of catheter)
- bladder scan post catheterization to check complete emptying, if available
- UTI general rule of thumb is if a UTI is suspected the catheter should be removed and a sample for C&S obtained from a newly inserted catheter but check and follow organizational policy and procedure
- with bleeding consider inserting a catheter for 3 to 5 days and up to 2 weeks. Review stiffness of catheter, size, technique, medical condition to prevent bleeding
- pain (catheter properties, technique, consider anesthetic gel inserted into urethra with a syringe, etc.)
- do not use anesthetic gel if urethral bleeding is present or patient is allergic
- no urine output, check position of catheter and ensure it is not kinked
- if patient has risk for AD a patent Foley should be maintained and bladder irrigation scheduled QHS and PRN
- Coudé/Tiemann/curved-indicated if postoperative edema or challenging insertion/urethral stricture/male anatomy

Notes: Abbreviations AD = autonomic dysreflexia, C&S = culture and sensitivity, IFU = instructions for use, PRN = pro re nata, PVC = polyvinyl chloride, QHS = quaque hora somni, UTI = urinary tract infection

Nurses must practice within nursing regulatory body scope of practice and in accordance with health care organizational policies and procedures. Always refer to manufacturer's instructions for use.

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