Urinary Catheterisation

Educational objectives and program outputs to be satisfied in this session:

Clinical Competence

The student will:

- Obtain a sufficient level of medical knowledge to understand the basic facts, concepts and principles essential to competent medical practice.
- Exhibit the highest level of effective and efficient performance in clinical skills data gathering, organization, interpretation and clinical decision-making in the prevention, diagnosis and management of disease.

The student should have mastery of the concepts and skills upon completion of each session.

Aim: To teach students the skills necessary to undertake the procedure of urinary catheterisation for males and females.

Objectives:

- The students will identify the anatomy of the urinary systems of males and females.
- The students will outline the indications/contraindications for catheterisation.
- The students will identify the possible complications of catheterisation.
- The students will identify and arrange equipment used for catheterisation.
- The students will insert catheters in male and female catheterisation trainers.
Methods: Small group session with clinical skills tutors. The students will watch tutors demonstrate and explain procedure and will then practice on the simulation models.

Assessment: Students will successfully and correctly perform catheterisation on the catheterisation models under supervision of the tutors.

**Urinary catheterisation**

**Equipment:**

- Urinary catheter of appropriate size/material
- Sterile pack
- Sterile gloves
- Antiseptic solution
- Disposable gown
- Anaesthetic gel
- Syringe and sterile water (volume appropriate to catheter)
- Urine collection bag
- Kidney dish

**Male Patient:**

It is essential that the student demonstrates an understanding of the importance of aseptic technique when performing this task. The student should state that one must never attempt to catheterise an erect penis, use force or proceed if difficulty is persistent.

The Student must:

1. Introduce self and explain the procedure to patient. Obtain patient consent.
2. Wash hands and put on disposable gown.
3. Ensure that the patient appropriately exposed and is lying on a disposable drape.
4. Open packs using a no-touch, aseptic technique.
5. Turn sterile Foley catheter and sterile anaesthetic gel onto open catheterisation pack, ensuring that the entire area remains uncontaminated.
6. Draw sterile water into 10ml syringe checking volume required to inflate balloon and leave to one side with collection bag.
7. Place kidney dish between patients legs to retain spillage.
8. Pour antiseptic solution into sterile dish in catheterisation pack.

9. Put on sterile gloves in correct manner.

10. Put on sterile drapes taking care not to contaminate both gloves. Hold penis with one hand only (usually non-dominant hand; consider this hand non-sterile from this point onward).

11. While holding penis in same hand as before, use the other hand to take sterile swab in forceps provided and clean penis with solution from sterile dish. This can be repeated at least once using new swab and forceps each time. If a foreskin is present this must be retracted firmly before cleaning and for remainder of procedure.

12. Take anaesthetic gel with clean hand and first put a small volume onto the sterile surface of pack; then apply a small amount onto meatus. Wait for anaesthetic to take effect; then, holding the penis vertically, slowly instil 10ml of the gel into the urethra, ensuring that it tracks down the length of the ureter.

13. While occluding urethral meatus, wait 2 to 3 mins (5 mins in young patient); keep penis vertical to minimise loss of anaesthetic gel.

14. Take Foley catheter in free, clean hand and take care to maintain the sterility of catheter. Dip the tip of catheter into gel on sterile drape and carefully insert this into the urethra. Keep a firm hold of penis, with foreskin retracted if appropriate, and slowly introduce catheter 1 or 2 cms at a time. If resistance is felt, a slight change of angle or increase in tension on penis may be sufficient to complete the procedure. If difficulty in advancing the catheter persists, the student must state that he/she would not continue in the attempt but would seek senior/expert assistance.

15. When urine is flowing freely attach the bag, taking care to maintain the sterile status of catheter. Introduce a further 5 cms of catheter into the bladder to ensure that the balloon has advanced beyond the urethra and neck of bladder.

16. Hold catheter firmly in place and inflate balloon with correct volume of sterile water. Gently withdraw catheter until slight resistance is felt, indicating proper positioning of balloon in the neck of bladder.

17. Re-extend the patients foreskin. For the purpose of this exercise the patient is deemed to be uncircumcised.

18. Clean and dry around area of catheterisation. Remove drapes and kidney dish and fix bag and tubing in correct manner. Dispose of waste appropriately.

**Female Patient:**

**The Student must know the following:-**

1. All washing, aseptic and anaesthetic gel techniques are as above.

2. To position the patient in lateral recumbency. Abduct and flex the patient’s upper leg and rest on pillow or similar.

3. To stand in position as for p.r. exam and separate the labia covering the vagina with one finger.

4. To insert the catheter above this finger and into urethra.

This positioning of the female patient is both less embarrassing for the patient and is the optimum position for dealing with a difficult catheterisation.