UROLOGY – SUPRAPUBIC CATHETER

MODULE: UROLOGY

TARGET: CT1 – ST4

BACKGROUND:

Insertion of supra-pubic catheters in the ward setting is associated with significant morbidity and mortality. Whilst recommendations are that this should be performed in a clean area (eg. Theatre) with cystoscopic guidance, trainees report that they may on occasion be expected to perform this procedure on the ward.
This scenario is about managing risks and managing the environment.

RELEVANT AREAS OF THE CURRICULUM

Module 3: Basic Surgical skills

Administration of local anaesthesia
Creation of a sterile field
Antisepsis
Draping

Module 6: Technical skills and procedures

Urethral catheterization
Supra-pubic catheterization

Professional behaviour and leadership skills

Communication with patients
Communication with colleagues
Awareness of risks to patient safety

INFORMATION FOR FACULTY

LEARNING OBJECTIVES

- Learners will have the opportunity to use a suprapubic catheter on a model – allowing familiarisation with steps of the procedure and equipment
- Learners will practice communication with colleagues during a technical procedure and will receive debriefing upon their communication style
- Learners will practice communicating with a patient both prior to and during a technical procedure and will receive debriefing about their communication style

SCENE SETTING

Location: Ward cubicle 1am (early hours of morning)
Can use a dedicated SimSuite or Imperial College Distributed Simulation system

Expected duration of scenario: 25 mins Expected duration of debriefing: 20 mins

EQUIPMENT AND CONSUMABLES

DS 'igloo'
Patient trolley / bed
Metal procedure trolley
Sterile pack – 1 per learner
Consent forms – 1 per learner
Lignocaine gel syringe – 2 per learner
Local anaesthetic – 1% lignocaine plus adrenaline
10ml syringes
Blue needle
Green needle
Fenestrated drape
Patient notes with drug chart
Selection of urethral catheters including 3 way and Caude tip
2 Gallipots
Antiseptic cleaning solution
Selection of sterile gloves
Aprons
Urometer
Betadine
Water
Red food colouring
Cotton wall balls
Either SimMan obs or IPAD with Cardiac parameter app plus IPOD controller eg. SimMonitor
Sats probe
BP cuff
Inco pads

PERSONNEL-IN-SCENARIO

Foundation year doctor
Ward nurse
Patient (actor – MALE) The Harry Partnership

Patient ID wrist band and allergy bracelet
Hospital gown for actor
Hospital blanket
Venous cannulae plus cannula dressing
Advanced catheterisation trainer (Limbs and Things) with suprapubic bung £1229.00 Part 60150 (most medical schools will have the basic trainer and then will only need to purchase bungs)
Supra-pubic catheter bungs £49 for 2

Take apart the Catheterisation model and block the urethral passage by placing tape across at the level of the prostate, additionally a cotton wall ball at this position will ensure that the model cannot be catheterised via urethra.

Place some red food colouring at the urethral meatus.

Place the fenestrated drape over the penis, which is placed between the actors legs. Use a gown to hide the join between the two.

Have a urethral catheter and sterile pack open as the F1 doctor has been trying to catheterise the patient.

PARTICIPANT BRIEFING

You have been called to the orthopaedic ward to help the on-call surgical F1 who is having difficulty inserting a urethral catheter. The patient is in retention and is distressed. The nursing staff are busy and the patient is in a small ward cubicle.

FACULTY BRIEFING

After a THR the patient had a catheter in-situ, this was removed last night. Since then he has been unable to pass urine and has been increasingly uncomfortable with a full bladder. The house officer has tried 3 times to pass a urethral catheter and been unsuccessful, she now calls the Core Trainee for help.

It is impossible to pass a urethral catheter, the trainee may or may not call a urologist for advice, which will be to insert a supra-pubic catheter.

The actor will have a part-task trainer (male genitalia) resting on their groin.
The scenario will end with successful catheterization or failed SPC catheterization.

'IN-SCENARIO PERSONNEL' BRIEFING:

Overview -

It is 1am in the morning. The patient is an in-patient at X Hospital on ward 1 (Orthopaedics) after a routine total hip replacement for osteoarthritis. The ward is poorly lit. The only nurse on duty is busy with a sick patient and keeps wandering in and out (not available for assistance). The ward cubicle is cramped with magazines and papers with little space for a sterile area.

The trainee will enter a ward cubicle where the Foundation year doctor is attempting to catheterize the patient. The Foundation doctor says that she cannot do it and wants the Core Trainee to take over. There is no nurse available to help to the F1 doctor stays to act as help and get things for the trainee. The part-task trainer will be impossible to catheterize urethrally.

A supra-pubic catheter will be required which will be inserted under local anaesthetic. During this time the patient will be distressed by pressure on the full bladder.

'SIMULATED PATIENT / ACTOR' BRIEFING:

Need to wear small briefs – Underpants.

You are Mr. Derek Branning a 79 year old gentleman who has had a left total hip replacement 3 days ago. When you woke up after the surgery you had a catheter in the penis to collect the urine but this was removed last night. Since then you have been unable to pass urine and are becoming uncomfortably full. You have tried standing in the bathroom with the tap running but to no avail, you have not passed any urine since the catheter was removed. You now have pain in your tummy and feel distended and full of urine. It is very uncomfortable when the doctor pressed on your abdomen.

You had the hip replacement done for osteoarthritis of the hip and you would like the other side done in the future too. You normally take warfarin for an irregular heart beat. This was stopped for 5 days before you operation, you have been back on it now for 2 days since the surgery. You do not have any allergies and do not have any other medical problems.

If asked directly, you have noticed over the last year or so that your urinary stream has been poor and that you have had to stand a long time in the toilet before being able 'to get going'. There is not normally pain when you pass urine and you have never not been able to pee like this before.

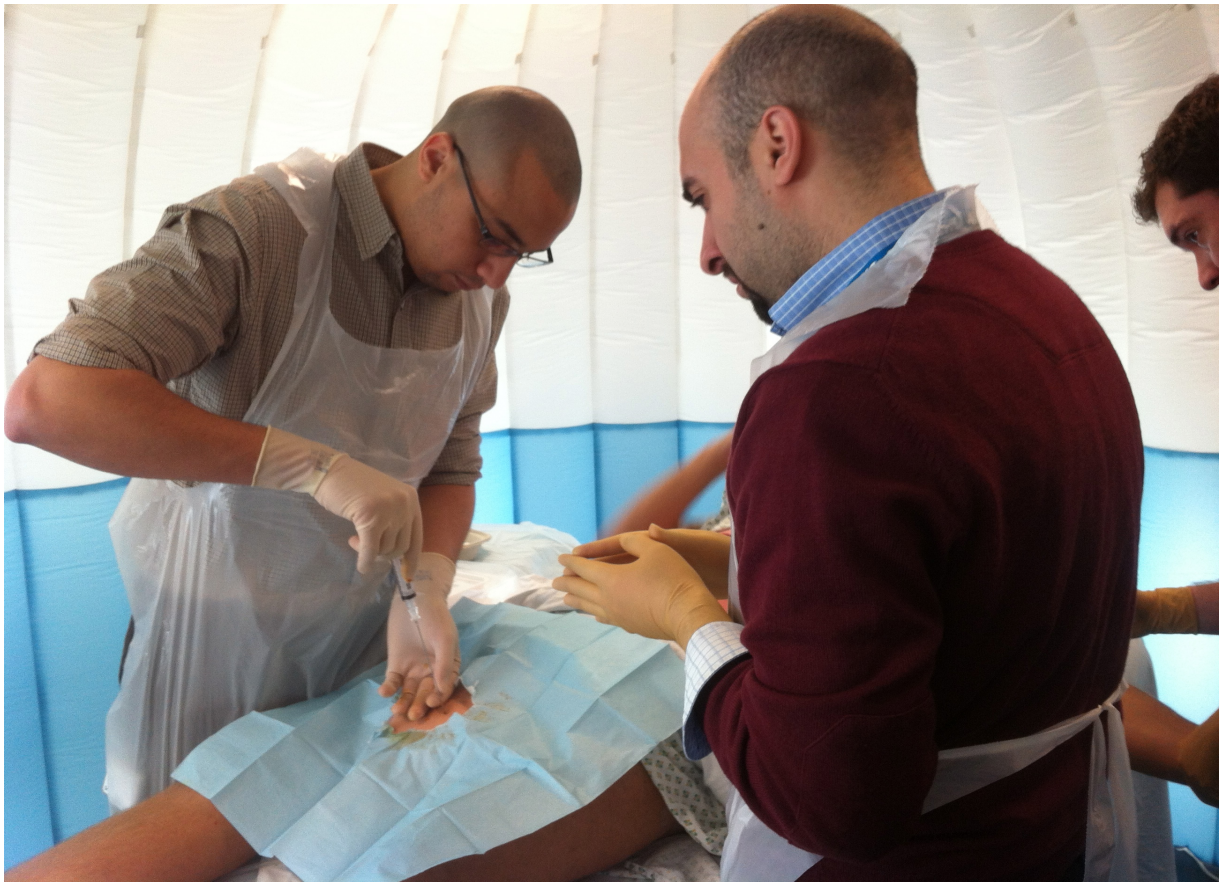
The doctor may have another attempt to catheterize the penis of the part-task trainer – you find this a little uncomfortable. The doctor will then likely want to insert a supra-pubic catheter this goes through the abdomen into the bladder (it is performed on the part-task trainer), whilst this is being done there is pressure on your abdomen which you find pretty uncomfortable.

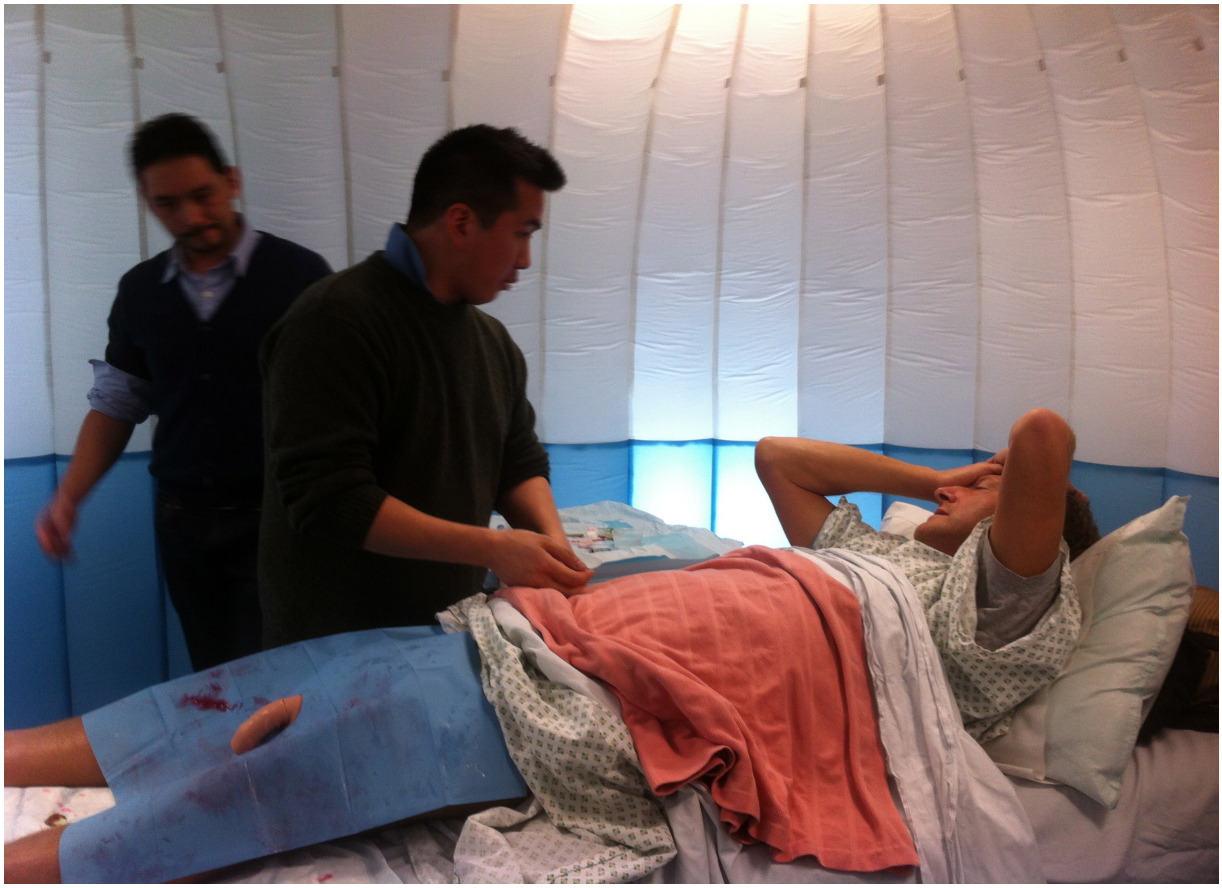
If the doctor manages to insert a catheter and drain urine shortly afterward you feel relieved and much more comfortable and thank the doctor very much. If the doctor does not manage to drain the urine then terminate the consultation by asking them to leave you alone and ask them for a sleeping tablet so that you can try to get some rest.

ADDITIONAL INFORMATION

The SimMonitor will show Atrial fibrillation – rate 80/min.

The patient is on Warfarin but this will only become apparent if the patient is asked or if the Core Trainee looks at the drug chart.





DEBRIEFING

Debriefing to be led by external observer surgeon faculty

Use actor to lead debriefing on communication skills

POINTS FOR FURTHER DISCUSSION

- Optimising environment – lighting, space, appropriate assistance
- Consent in an emergency / urgent setting
- Prophylactic antibiotics – multiple urethral trauma post THR
- When might a procedure be contra-indicated in the presence of warfarin
- Maintenance of sterile field
- Methods of communicating / instructing a colleague whilst in front of an awake patient
- Documentation post-procedure

DEBRIEFING RESOURCES

British Urological Society Guidelines

http://www.baus.org.uk/AboutBAUS/publications/spc-guidelines

SURGERY > IMMERSIVE SCENARIO 3 > SUPRAPUBIC CATHETER

INFORMATION FOR PARTICIPANTS

KEY POINTS

- Think how the environment can be optimised
- What patient safety issues are there – bleeding? Antibiotic thromboprophylaxis?
- What equipment is needed?
- Assemble everything in advance and do 'talk thorugh' with assistant outside of cubicle
- Assign someone to look after the patient
- Set up and maintenance of a sterile field
- Ensure notes and documentation are adequate

WORKPLACE-BASED ASSESSMENTS

There is a DOPS for supra-pubic catheter insertion

ISCP INTERCOLLEGIATE SURGICAL CURRICULUM PROGRAMME

Direct Observation of Procedural Skills (Surgical DOPS)

Trainer/Trainee Guidance Points

These guidance points are to be used in conjunction with point 6 ('performs the technical aspects in line with the guidance notes') on the main Surgical DOPS form. A mark should not be given for each of these points – they should instead be used to inform the mark to be given for point 6.

Specialty: Urology

Procedure: Suprapubic catheter insertion

Steps to be performed

1. Check that the bladder is distended and the level of the dome of the bladder is clearly palpable
2. Clean skin and infiltrate local anaesthetic just above the pubic symphysis
3. Make small skin incision to allow easier catheter insertion
4. Insert a white needle with a 2ml syringe attached into the bladder and aspirate clear urine
5. Insert catheter with introducer until urine obtained
6. Remove introducer and feed the catheter in further to ensure that it does not come out of the bladder as it empties
7. Inflate balloon with saline or water if necessary
8. Secure catheter flange to skin

PARTICIPANT REFLECTION

What have you learned from this experience? (Please try and list 3 things)

How will your practice now change?

What other actions will you now take to meet any identified learning needs?

PARTICIPANT FEEDBACK

Date of training session:.....

Learner grade:.....

	Strongly Agree	Agree	Neither agree nor disagree	Disagree	Strongly Disagree
I found this skills simulation useful					
I understand more about the simulation subject					
I have more confidence to deal with this operative case					
The material covered was relevant to me					

How could this simulation be improved for future participants? This is especially important if you have ticked anything in the disagree/strongly disagree box.

FACULTY DEBRIEF – TO BE COMPLETED BY FACULTY TEAM

What went particularly well during this simulation?

What did not go well, or as well as planned?

Why didn't it go well?

How could the simulation be improved for future participants?

Date of training session:.....