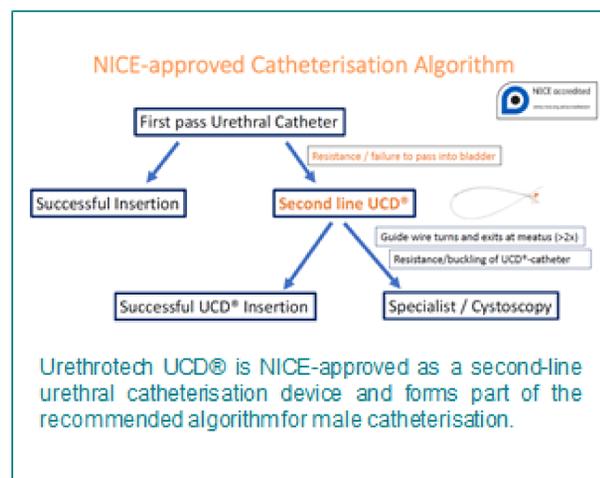


INTRODUCTION

Problematic urethral catheterisation may be painful and associated with complications. For the urologist it is a significant and time-consuming workload which can occur at any time of day or night. It is also associated with significant costs especially in an emergency situation. For these reasons we have introduced a new urethral catheterisation device (Urethrotech UCD®) in our hospital designed to manage difficult or failed urethral catheterisation.

METHOD

- The UCD® consists of a 3-way Foley catheter with integrated atraumatic hydrophilic Nitinol guide wire.
- The aim is to avoid urethral catheterisation injury (UCI) and to reduce urology consultations.
- Training for all emergency and theatre staff was provided.
- A questionnaire recorded success or any complications of UCD-catheterisation and user feedback.



URETHROtech® URETHRAL CATHETERISATION DEVICE® (UCD®)



Figure 1: 16F 3-way Silicone urethral catheter with integrated guide wire for safe second-line urethral catheterisation.



Figure 2: Guide wire is glued to luer lock 'guidewire stopper', which fits securely into catheter guidewire side arm to form one secure Medical Device Unit. Syringe is attached to luer lock 'guidewire stopper' to prime and lubricate the guide wire with sterile water or saline.



Figure 3: Non-traumatic Nitinol guidewire exits the round Nelaton catheter tip.



Figure 4: The guidewire is introduced into the urethral meatus with the penis on stretch and advanced with even movements into the bladder, where it curls up, dragging the catheter behind.

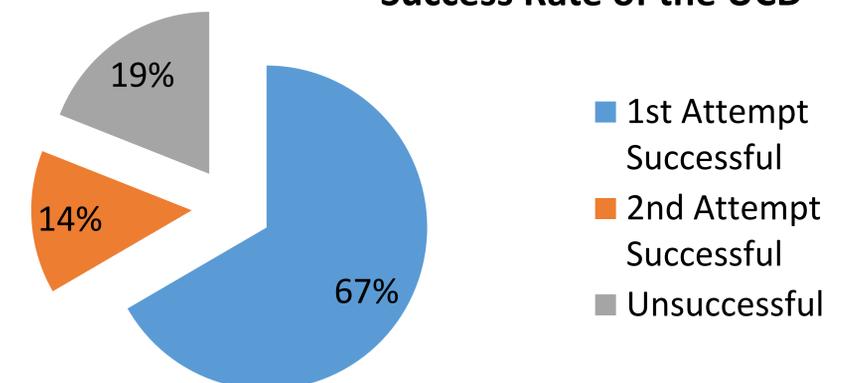


Figure 5: The catheter is then passed over the guidewire into the bladder, bypassing the site of any LUT-GURS and avoiding urethral trauma.

RESULTS

- Over 12-months the UCD® was used in 21 men after failed standard Foley-catheterisation.
- In 81% (17/21) UCD-catheterisation was successful.
- In 19% (4/21) catheterisation failed even with the UCD® and urology referral was necessary.

Success Rate of the UCD



- In 4 men, mild urethral bleeding was recorded as the result of standard catheterisation that did not interfere with UCD-catheterisation.
- 3 patients reported discomfort during the procedure.
- Managing failed standard catheterisation with the UCD® was time and cost effective.
- All staff were highly satisfied with the new device and would use it again as the next step to solve difficult urethral catheterization.

CONCLUSIONS

- The new UCD® offers frontline staff a safe solution to proceed with transurethral catheterisation even in difficult situations avoiding the risk of UCI and hospital admission, providing cost and time effective patient care.
- The single-use device is ready-to-use whenever needed without delay avoiding the wait for specialist instruments or equipment.