

# THE USE OF SHEATHS IN MALE URINARY INCONTINENCE

Urinary incontinence is often seen as a predominantly female problem, affecting twice as many females as men (Royal College of Physicians, 1995). However, many men also suffer from this distressing problem. One of the ways that men can be helped to cope is through the use of urinary sheaths. This article looks at best practice in the fitting and management of sheaths.

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Urinary incontinence is often seen as a predominantly female problem, affecting twice as many females as men (Royal College of Physicians, 1995). However, many men of all ages do suffer from this distressing problem but can be helped by the use of urinary sheaths.

Where independent continence is not achievable, for whatever reason, continence aids such as urinary sheaths can provide an effective method of management and can promote dignity by improving patients' quality of life.

Urinary sheaths are soft, flexible sleeves that fit over the penis and attach to a urinary collection system, which are either body-worn, free-standing or attached to the patient's bed. Sheaths are suitable for men with moderate to heavy urinary incontinence and although external urinary collection devices have been designed and produced for women, at the time of writing, they have not proven

reliable or effective and are not available on prescription in the UK.

## BACKGROUND

Urinary collection devices that are attached to the penis have been used for many years. Pearce (1971) describes how in the 1970s these consisted of a long length of thin, flexible, latex tubing.

**'The first urinary sheaths were non-lubricated contraceptive condoms that were attached to the penis using a variety of skin adhesives.'**

The first urinary sheaths were non-lubricated contraceptive condoms that were attached to the penis using a variety of skin adhesives – these were either sprayed or painted onto the penile skin. The sheaths were then connected to body-worn urinary drainage bags, which had a plastic 'punch type' connection – this made a hole in the end of the condom and enabled connection to the drainage bag.

Today, these devices seem very crude in comparison to the very sophisticated and cleverly designed products currently

available. However, they were very effective for many patients and some were reluctant to change to modern systems.

The next generation of urinary sheaths were hardly more sophisticated than the old condoms, instead having pre-fixed outlet tubes to save punching holes in the condom. They were usually attached to the penis using internal or external fixation and though easier to fit, were prone to twisting, ballooning and subsequent detachment.

Some of these products are still available on prescription, but are really only suitable for patients with a larger penis that does not retract. However, there are many patients who still prefer this type of product.

Next on the market came multi-sized sheaths with preformed, integral outlets made initially from latex, although today increasing numbers of non-latex products are available as people become increasingly concerned about latex allergy.

## MODERN SHEATHS

A look through the *Drug Tariff* will demonstrate the huge range

of urinary sheaths currently available (Department of Health [DoH], 2007). There are 14 manufacturers/distributors of urinary sheaths on prescription in the UK, with 12 companies offering fixing strips and adhesives in addition to sheaths. However, no one type of sheath is suitable for all men.

Sheaths vary in type and use from the reusable, such as the Urosheath™ (Bard, Crawley), to single-use catheters. Unless using a one-size sheath, such as the Texas Catheter™ (Tyco, Gosport), it is important that the correct size is selected and used.

Most manufacturers provide sizing kits or measuring guides with regard to the circumference or diameter of the sheath and it is important that the measuring device specific for the individual product is used, as there are differences between manufacturers' stated sizes.

To make life even more complicated for patients and healthcare workers alike, increasing numbers of manufacturers are making sheaths in differing lengths, as well as various circumferences/diameters.

If possible, it is beneficial for the patient to try different types of sheaths and fixation methods in order to find the optimum system for their individual needs. This can be a time-consuming process and local appliance practitioners will often have a range of product samples for men to try. This is an invaluable resource for both patients and community healthcare workers.

However, the roles of many appliance practitioners are currently under review by the DoH and it would be a serious loss if access to their expertise was no longer available.

### ASSESSMENT

When considering urinary sheaths as a method of management for urinary incontinence, the first factor to consider is patient need. A wide variety of men with differing urinary problems may benefit from using sheaths, ranging from those with occasional urinary incontinence problems to those with heavy, uncontrolled urinary loss.

**'Sheaths also have a more masculine image as they are associated with the use of condoms.'**

A major advantage of urinary sheaths is their versatility – they may be used intermittently, for example, when away from easily accessible toilet facilities, or continuously, for those unable to use other forms of toileting aids.

Sheaths can be used during the day, when travelling, or at night when nocturnal enuresis (bed-wetting) may be a problem. Another advantage of urinary sheaths is that they can be used by patients who have partial/intermittent sensation of the need to void. If the patient is aware of the need to void and toilet facilities can be accessed in time, he can disconnect the sheath from the drainage system and void urine continentally into the toilet or urinal through the sheath,

reconnecting to the drainage system in case of later incontinent loss of urine.

Sheaths also have a more masculine image as they are associated with the use of condoms for sexual purposes, while pads tend to have a more feminine image, associated with sanitary protection or nappies. This makes sheaths a more acceptable option for some male patients.

Though a very useful incontinence aid, urinary sheaths are not suitable for all patients. For example, they are not recommended in patients who have a permanently retracted penis or those whose penis retracts when they bend or sit down, as the sheath will tend to roll off and result in the leakage of urine.

Sheaths should also not be used if the patient has broken or excoriated skin, as the adhesive used to affix them to the penis may cause an exacerbation of this problem. Some men can develop sensitivity to the sheath's material, for example, latex, or to the adhesive used to fasten the sheath to the skin.

In these cases, experimenting with different sheaths and/or adhesives may help, as will the use of skin preparation wipes, such as those used with stoma appliances. Advice on the differing types of products should be available from the local continence advisory service or the manufacturing company.

Additional problems can arise if a patient is unable to apply and change the sheath and

drainage system himself. It may be possible to teach a partner or informal carer to do this. Alternatively, healthcare workers may be able to do this if instructed in the various procedures, such as fitting the sheaths and drainage system and emptying the drainage bag. Again, the local continence service will be able to help with this training.

### Alternatives

For men who are unsuitable for urinary sheaths, there is a wide range of urinary collection appliances available on prescription, such as pubic pressure urinals and pubic pressure flanges. These are a more specialist type of aid and require careful measurement and fitting to be effective. There are incontinence appliance companies and trained fitters across the UK who will be able to help.

A more recent solution to this problem has become available on prescription in the UK in the form of an adhesive device, BioDerm™ (CliniMed, High Wycombe), which is fitted directly on to the glans penis of the man. If the penis subsequently retracts into the body, the device remains in situ and continues to function normally. Though expensive, it can offer an effective alternative to catheterisation for some men.

### APPLICATION

Having selected the optimum type of sheath, the next choice is the method of fixation, as very few men can use a urinary

sheath without any form of fixation. Again a look at the *Drug Tariff* will demonstrate the wide range of fixation methods available, however, these can be basically divided into internal and external methods.

Generally, external fixation methods (also called two-piece sheaths and utilising tapes and straps) are less effective than internal methods, which include skin adhesives applied to the penis before applying the sheath or double-sided adhesive strips. Although still used by many men, external fixing methods are being gradually replaced by sheaths with internal adhesive due to their ease of application.

**'Complete pubic shaving, once a common procedure before fitting sheaths, is no longer recommended.'**

Two-piece urinary sheaths can still offer advantages for men whose glans penis is large in relation to the girth of their penile shaft. The adhesive strips can be used to build up the penile shaft and allow a better fit. Other than these cases, it is probably easier to fit a one-piece sheath that incorporates adhesive fixation, especially if the man is fitting the sheath himself.

No matter who is fitting the sheath, general principles of skin hygiene must be followed in order to prevent skin damage. Although there is a variety of skin cleansing preparations available, washing with plain soap and water followed by gentle drying to remove all traces of adhesive

or barrier creams will help prevent problems for most men.

Any residual barrier creams may reduce the effectiveness of the fixation method. Complete pubic shaving, once a common procedure before fitting sheaths, is no longer recommended due to the risk of skin irritation and discomfort on re-growth. However, it is still good practice to trim long pubic hairs before applying the sheath to prevent them becoming trapped in the sheath adhesive and causing pain on removal of the sheath.

Some sheath manufacturers now supply a hair guard, which can be placed over the penis to keep any remaining hairs away from the sheath. Alternatively, a hole may be torn in a piece of paper and placed over the penis for the same purpose.

As previously stated, it may be useful to apply a skin protective to the shaft of the penis and allow it to dry before applying the sheath. This has the dual effect of protecting the penile skin from the adhesive and improving the effectiveness of the adhesive.

When fitting a sheath on an uncircumcised man who wears his foreskin over the glans penis, it is important that a sufficient space is left between the head of the penis and the drainage outlet of the sheath. If this is not done, the foreskin may get sucked into the outlet of the sheath, resulting in trauma and restricting drainage.

In order to prevent this, the sheath should be rolled back one turn before application in order to leave

a space of 1–2cm between the end of the penis and the sheath outlet. It is important not to make the space too large or the sheath may twist or kink, preventing urine drainage and resulting in a back-flow of urine, leakage of urine and possible detachment of the sheath.

Initially, it is good practice to change sheaths on a daily basis, allowing cleansing of the skin and observation for possible skin reactions. The modern, non-latex sheaths are often clear and the skin's condition can be assessed through the material. Many men find that they can gradually increase the length of time that individual sheaths are worn without detrimental effects and the patient should be regarded as the expert in deciding the length of time that sheaths can be left in situ.

Rather than applying traction, sheaths should be removed by using warm soapy water and rolling the sheath off the penis. In the patient's home, used sheaths may be washed and disposed of with normal household waste, although local policies may differ. In hospital and residential care homes they should be disposed of as clinical waste.

## URINARY DRAINAGE SYSTEMS

As with sheaths, there is a wide range of urinary drainage systems suitable for use with urinary sheaths. Many are available on prescription in the UK and patients should be able to try differing types of drainage bags to see which best suit their individual needs. Again, appliance practitioners can offer a valuable service.

Drainage bags can be divided into two main types:

- » Body-worn drainage bags
- » Night drainage bags.

Body worn drainage bags, usually fastened to the patient's leg, come in a variety of capacities with differing types of drainage taps. Manufacturers often provide adjustable length inlet tubes, which enable patients to cut the tube to the most comfortable length. Drainage bags are available in capacities ranging from 350–750mls, with specialist bags available that will hold up to 1300mls – these are designed for chair-bound men as they are too heavy to be worn on the body.

There are a variety of support systems available as alternatives to the leg straps usually supplied with the bags. These distribute the weight over a wider area of the leg and may be more comfortable. Alternatively, the drainage bags can be supported by pouches worn inside the patient's trousers. Occupational therapists can also offer suggestions on clothing various adaptations to help individual patients.

Night drainage bags should be supported on bag hangers, either free-standing or attached to the bed rather than left lying on the floor. Men who void large volumes of urine each time they micturate will probably find the drainable-type bags more effective as they have a wider inlet tube, allowing more efficient drainage.

As with sheaths, urine drainage bags should be disposed of according to local policy.

## Key Points

- » Many men of all ages suffer from urinary incontinence and can be helped by the use of urinary sheaths.
- » Urinary sheaths are soft, flexible sleeves that fit over the penis and attach to a urinary collection system, which are either body-worn, free-standing or attached to the patient's bed.
- » Sheaths are suitable for men with moderate to heavy urinary incontinence.
- » It is essential that patients are provided with skilled professional advice on the optimum type of sheath, fixation method and drainage system.

## CONCLUSION

Urinary sheaths are a valuable method of management for men with urinary incontinence. However, it is essential that patients are provided with skilled professional advice on the optimum type of sheath, fixation method and drainage system for their individual needs. **CE**

## REFERENCES

- DoH (2007) *Drug Tariff*. HMSO, London
- Pearce E (1971) *A General Textbook of Nursing*. Faber and Faber, London
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