

Catheter securement: a need for the right device

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Urinary indwelling catheters are used in all care settings and the problems associated with them are well-documented. However, while securing, stabilising or fixing the catheter to prevent further complications is identified as an important part of catheter management (National Institute for Health and Care Excellence (NICE), 2012; Royal College of Nursing (RCN), 2012; Loveday et al, 2014), it still remains an ad hoc practice. A best-practice statement from NHS Quality Improvement Scotland (2004), supported by the Health Protection Surveillance Centre (2011) and Wound, Ostomy and Continence Nurses Society (WOCN) (2012), advises that the catheter and drainage systems be well-supported and secured in a comfortable position to prevent complications for the individual. Complications associated with inadequate or poor securing and fixation of catheters are:

- Catheter migration, which can lead to accidental removal of catheter and urethral trauma, including cleaving, infection and patient discomfort (Bierman and Carignan, 2003)
- If the catheter drainage bag is not well-supported then it can get too heavy and potential damage to the bladder neck can occur
- Higher risk of urinary tract infections (Hanchett, 2002; Spinks, 2013)
- Inflammation can lead to infection, tissue necrosis, blockage of urethra, bladder irritability, spasms and bypassing, and may increase incidents of unplanned changes (Hanchett, 2002; European Association of Urology Nurses (EAUN), 2012).

While in the past health professionals have been ingenious in developing aids to secure indwelling catheters, there is now a range of devices that are made along with the catheter for this particular purpose. It is the role of the professional to make sure they are kept up-to-date with new devices and that they are used in line with manufacturers' guidelines, and only used for their designed purpose (RCN, 2012).

For ease of understanding the author has split the devices into two categories namely securing devices, which include leg straps and sleeve devices, and fixation devices which include adhesive and strap devices

Securing devices

Velcro leg straps

Leg straps are usually supplied by manufacturers with all leg bags and consist of a pair of latex-free straps (one for the top of the bag and another for the bottom). It is important that both straps are used to support the leg bag to evenly distribute the

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weight of the urine (Yates, 2008). Problems have been identified with the use of these devices, including the potential to act as a tourniquet, as there is no guidance on the tension to apply, and also the restriction of venous and lymphatic flow (Freeman, 2009). According to Carigan (2004), they have a tendency to work loose and slide down, the hygiene of their straps is difficult to maintain, and they can irritate the skin.

Sleeve device

An alternative to straps is a sleeve device, which encompasses the leg bag. It comes in a variety of sizes and has a small opening for the tap to go through for the ease of emptying. This device has some advantages over straps, as it provides a more even distribution of weight and places less tension on the leg, but only if the right size is provided. It still has a hygiene problem and requires regular washing.

Fixation devices

All fixation devices should be used in conjunction with securing devices, not instead of them. They provide stabilisation of the catheter and prevent tension or pulling when movement occurs, and individuals should be assessed for the most appropriate product to suit their needs.

Strap fixation devices

These come as a non-latex strap that wraps around either thigh or abdomen for supra pubic, with a smaller strap that wraps around the catheter, and is secured in place by Velcro.

Adhesive device

Adhesive devices are appropriately placed on either thigh or abdomen and have a swivel clip, which allows the catheter to be secured in place, can be used for up to 7 days and then replaced. An alternative device has a silicone gel pad with a revolving clip again used for 7 days.

With all these securing and fixation devices, there needs to be individual patient assessment, including skin integrity, as each of them has advantages and disadvantages. Professionals should be aware that the devices are designed for purpose, place no tension on the catheter, and are appropriate for the individual. All of these devices are available on prescription and professionals need to understand that not only should a catheter be secured appropriately but also fixed. **NRC**

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