

Comparison of Catheter-Securing Devices

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The practice of urology has become more sophisticated over the past 25 years. Urologic nurses, as key members of the urology team, are required to look increasingly at their practices in relation to patient care (Karłowicz, 1995). Urologic surgery usually requires a post-operative urethral urinary catheter (UUC) for bladder drainage. Research for evidence-based practice in managing UUCs, as a basic component of urologic nursing, is essential.

The question of securing a UUC is not effectively addressed in the literature. Individual preference, knowledge of securing, or availability of devices within a unit dictate how an UUC is secured to the patient. There is also no conclusive evidence to support that when an UUC is secured to a patient, that patient comfort is improved, displacement prevented, or infection impeded.

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Note: The commercial catheter-securing device evaluated in this article is an adhesive-based device made with nonwoven polyamide.

Care of urethral urinary catheters is a major part of urologic nursing. Basic procedures, such as securing of urinary catheters, are poorly researched or reported in the literature. The question of how to secure a urinary catheter and with what device often relies on knowledge, availability of equipment, and on information supplied by manufacturers of commercial devices. Manufacturers claim that their devices are easier to apply, have longer "wear-times," add to patient comfort, prevent infection, and are thus more cost effective than the traditional adhesive tape and pin device. However, it was discovered in this study that sometimes the cheaper, more easily accessible option can still be the best for patients.

In the urology department at Auckland Hospital, there was variation in the practice of securing UUCs. The variation occurred between surgeons as to if and how they wished an UUC to be secured. Variation also occurred between nurses and wards as to how the UUC is secured, and if deemed necessary to secure, on what that decision was based. The only instance when UUCs were always secured was with the postoperative radical prostatectomy patient. This is to prevent any movement or displacement of the UUC which may damage the anastomotic site between the urethra and the bladder. The method of securing varies between clinicians, and whether displacement is prevented has not been established or supported by research. Given these variations and the lack of evidence to support UUC securing practices, a pilot study was conducted within our department. The purpose of the study was to establish whether the use of different securing devices on UUCs affected patient comfort,

and prevented movement and/or displacement of the UUC.

Literature Review

While there is an abundance of literature available on UUC care and management, there is a dearth on the actual securing of UUCs. Much of the literature available relates to securing of all types of drainage or percutaneous tubes, not specifically UUCs. The predominant themes within the literature relate to patient comfort, preventing UUC movement or displacement, and reducing infection.

While Pomfort (1991) is the only author who discusses securing UUCs at some length, he does not address the issue of deciding how the UUC should be secured. His article reports on a study conducted to establish whether nurses were in fact securing UUCs to patients' legs in hospital and community settings. In the hospital setting, 70% of nurses secured UUCs to some patients' legs, but the remaining 30% never did. In the community setting, 85% of nurses reported that