

Study on Reusable, Non Adhesive Silicone Male External Catheter: Clinical Proof of Study and Quality Improvement Project

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Abstract : Introduction: Male external catheters (MECs) are commonly used to collect and drain urine. MECs are increasingly used in acute care, long-term acute care hospitals, and nursing facilities, and in other patients as an alternative to invasive urinary catheters to reduce catheter-associated urinary tract infections (CAUTI). MECs are also used to avoid the need for incontinence pads and diapers. Most of the Male External Catheters are held in place by skin adhesive, with the exception of a few, which uses a foam strap clamp around the penile shaft. The adhesive condom catheters typically stay for 24 hours or less. It is also a common practice that extra skin adhesive tape is wrapped around the condom catheter for additional security of the device. The fixed nature of the adhesive will not allow the normal skin expansion of penile size over time. The adhesive can cause skin irritation, redness, erosion, and skin damage. Acanthus condom catheter (ACC) is a patented, specially designed, stretchable silicone catheter without adhesive, adapts to the size and contour of the penis. It is held in place with a single elastic strap that wraps around the lower back and tied to the opposite catheter ring holes criss cross. It can be reused for up to 5 days on the same patient after daily cleaning and washing potentially reducing cost. Methods: The study was conducted from September 17th to October 8th, 2020. The nursing staff was educated and trained on how to use and reuse the catheter. After identifying five (5) appropriate patients, the catheter was placed and maintained by nursing staff. The data on the ease of use, leak, and skin damage were collected and reported by nurses to the nursing education department of the hospital for analysis. Setting: RML Chicago, long-term acute care hospital, an affiliate of Loyola University Medical Center, Chicago, IL USA. Results: The data showed that the catheter was easy to apply, remove, wash and reuse, without skin problems or urine infections. One patient had used for 16 days after wash, reuse, and replacement without any urine leak or skin issues. A minimal leak was observed on two patients. Conclusion: Acanthus condom catheter was easy to use, functioned well with minimal or no leak during use and reuse. The skin was intact in all patients studied. There were no urinary tract infections in any of the studied patients.

Keywords : CAUTI, male external catheter, reusable, skin adhesive

Conference Title : ICNHR 2021 : International Conference on Nursing and Healthcare Research

Conference Location : San Francisco, United States

Conference Dates : June 07-08, 2021