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Urinary Catheter Stabilization Device

A urinary catheter support device that prevents penile erosion arising from the use of indwelling catheters.

Technology ID
20180237

Category
Engineering & Physical Sciences/Design Specifications
Life Sciences/Human Health
Life Sciences/Medical Devices

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IP Status: US Patent Pending; **Application #:** 15/973,689

Applications

- Urinary catheter stabilization accessory for men

Key Benefits & Differentiators

- Reduces risk of Never Events such as penile erosion
- Improves patient comfort during movements while wearing a catheter
- Simplifies removal and reinsertion procedures

Overview

An indwelling urinary catheter is a tube inserted into the body, through the urethra, to drain and collect urine from the bladder. The discharge end of the tube remains outside the body and is connected to a bag into which the urine is collected. These indwelling catheters are left inserted into the penis for upto 3 months. Inadvertent pull caused by patient movement or by the weight of urine collection bag can result in penile discomfort, pain, inflammation, and erosion/tearing; all of which are considered Never Events that can be avoided by properly securing the catheter in place relative to the penis. However, existing solutions (such as taping the tube to the patient's leg) do not solve this issue effectively.

Researchers at the University of Minnesota's Earl E. Bakken Medical Devices Center have developed a male urinary catheter support device that will combat penile erosion arising from the use of indwelling catheters. This device attaches directly onto the penis such that the catheter is slipped into the device and the penis. The device secures the catheter such that relative movement between the catheter and the penis is minimized, thereby significantly

improving patient comfort, safety, and overall outcome. In addition, the device allows for easy attachment and removal of catheters, which in turn simplifies catheter replacement procedures.

Phase of Development

TRL: 4-5
Working prototype tested in model.

Desired Partnerships

This technology is now available for:

- License
- Sponsored research
- Co-development

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Researchers

- Shawn Sisco
- Anthony Itambo
- Austin Andrews
- Bita Rajablou
- Andrew Wloch