CAUTI PREVENTION WITH ADVANCECATH

MEDICAL DEVICES

A flexible, indwelling catheter with unique design for preventing urinary tract infections that does not involve antimicrobial coatings.

TECHNOLOGY SUMMARY

Catheter-associated urinary tract infections (CAUTIs) affect over one million patients in the United States annually and contribute to approximately 13,000 deaths and $1B in healthcare costs. Two-thirds of CAUTIs develop due to Foley catheter design flaws that limit urine flow and allow bacterial colonization on the catheter’s external surface. AdvanceCath is a flexible, indwelling catheter that keeps the sphincter and prostate urethra open, which allows urine to flow around the entire catheter and eliminates the space where bacteria typically spreads. A condom-like catheter collects urine and stores it in a sterile bag. The system also has the ability to flush the urethra with an antibacterial solution to reduce risk of infection further. A bladder retention mechanism under development includes a fail-safe component that will collapse the retention component under excessive pressure and prevent damage to the urethra as the device is removed.

FEATURES AND BENEFITS

- Design features eliminate biofilm formation without antibacterial coatings.
- Facilitates flushing the urethra with antibacterial solution.
- Reduces healthcare burden of hospital-acquired infections.
- Thin, flexible design improves patient comfort.
- Lessens chance of damage when removing catheters.

INVENTOR PROFILE

William Brant, M.D., Urologist - University of Utah Healthcare
Garrett Coman, M.D., Resident Physician - School of Medicine
Nick Blickenstaff, M.D., Dermatology Resident
Ryan O’Callaghan, M.S., Regulatory Associate Consultant