A Single Device for Vaginal Dilation and Flushing

Technology #2019-196

Vaginal Dilation and Flushing Device for Long-term Use

This medical device is a modular vaginal dilation and flushing device that helps improve patient compliance and prevent serious postoperative complications associated with vaginoplasty. Patient compliance is improved by reducing the number of painful dilation and douching procedures required during the 90-days post-op period. The device can be used for preventing both acute and chronic post-op complications, including risks of infection, necrosis due to uneven pressure, vaginal stenosis, and neovaginal prolapse.

Modular Design to Minimize Dilator Removal Frequency

By exploiting a stent design, the device reduces severe complications caused by vaginal packing with lubricated gauze, and frequent insertion and removal of hard plastic dilators. This all-in-one modular device replaces lubricated gauze, plastic dilators, and the douching mechanisms that are commonly used in perioperative and postoperative period following a vaginoplasty procedure. The device is designed to simultaneously provide uniform radial support to the neovaginal cavity as well as facilitate douching procedures. The flexible stent layer and soft external layer reduces pain during dilation/cleaning procedures, thereby improving patient compliance and reducing the risk of tissue trauma, infection, skin slough or vaginal prolapse. Channels built in the device promote coating of douching fluid to the entire neovagina, providing a better clean than typical douching.

Phase of Development

- Prototype. Additional testing of minimal viable product needed.

Learn about more groundbreaking discoveries at www.research.umn.edu/techcomm
Benefits

- Improves patient compliance by reducing painful post-op procedures
- Reduces risk of neovaginal infection, tissue trauma, neovaginal prolapse, neovaginal stenosis, local abscess, and focal necrosis
- Reduces patients’ required time commitment

Features

- Soft external surface to reduce pain and tissue ingrowth
- Flexible design with consistent radial pressure for uniform, anatomically-designed support
- Built-in channels for vaginal douching

Applications

- Vaginal plastic surgeries
- Transgender surgery
- Improving standard of care for transgenders
- Feminine hygiene

Interested in Licensing?

The University relies on industry partners to further develop and ultimately commercialize this technology. The license is for the sale, manufacture or use of products claimed by the patents. Please contact Kevin Nickels to share your business needs and licensing and technical interests in this technology.

Inventors

Lyndsey Ellen Calvin, MSc

Fellow, Earl E. Bakken Medical Devices Center

Learn about more groundbreaking discoveries at www.research.umn.edu/techcomm
Amy Hoelscher, DNP, RN, CPXP
Fellow, Earl E. Bakken Medical Devices Center

Nicholas Kim, PhD
Assistant Professor, Department of Surgery

Yasheen Brijlal, MSc
Fellow, Earl E. Bakken Medical Devices Center

IP: UM Docket 2019-196

For additional information, contact
Doug Franz
Technology Licensing Officer
exprlic@umn.edu
612-624-0869

Learn about more groundbreaking discoveries at www.research.umn.edu/techcomm