

VirtaMed UroS™

Virtual reality training simulator for urology

Realistic training

- Photorealistic graphics
- Robot for best in class tactile sensation
- Original instruments ease transfer of skills to the OR
- Resectoscope with working element for electrosurgery (active and passive)
- 3 different camera optics: 0°, 12°, 30°



Portable platform

- Versatile and compact laptop-based simulation platform with 17" multi-touch screen
- Complete system easily transportable in one robust trolley case

Independent learning

- Endless variety of training cases, pathologies, and complication handling
- SimProctor™ guidance for independent learning
- Objective performance feedback and expert-defined scoring metrics



Ergonomic platform

- Mobile and height-adjustable display cart with movable 27" multi-touch screen
- Compatible with all VirtaMed training modules, including general surgery, ob/gyn and orthopedics

Urology training modules on UroS™

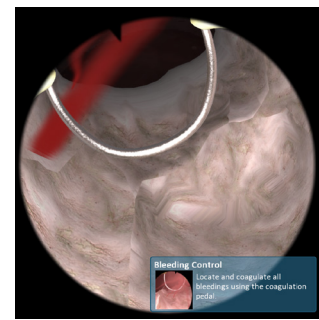
TURP basic skills

8 training cases introduce beginners to trans-urethral surgery. The basic skills module breaks down and teaches the steps of TURP before attempting the full procedure. The module contains different basic tasks, including visualization of important landmarks such as verumontanum or ureteral orifices, bleeding control, and partial resection of either the median lobe or the side lobes. Learning objectives of this module include understanding of the anatomic landmarks, depth perception and hand-eye coordination during urologic surgery, and controlling of the flow and bleedings for a clear view.



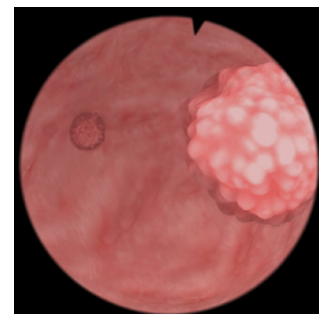
TURP full procedures

8 training cases offer patients with varying prostate sizes for complete trans-urethral resection of the prostate (TURP). The full TURP cases allow trainees to get familiar with each step of complete procedures using an original active or passive resectoscope: A high realistic scenario that eases the transfer of skills to the OR. Trainees need to properly manage fluid handling, coagulate bleedings throughout the entire virtual surgery, and respect delicate regions, e.g. at the bladder neck or close to the sphincter. Helpful didactic tools like a resection map show trainees differences between prostate tissue and capsule.



TURB

4 virtual patients with different, multiple papillary and solid bladder tumors offer trainees the opportunity to perform complete TURB procedures in a safe environment without involving patient-related risk. The level of difficulty of the cases differs in the type of the bladder tumors, their location and the intensity of the complications, such as bleedings and risk of perforating the thin bladder wall. As in every VirtaMed simulation module, at the end of the procedure an objective feedback report completes the learning process. The report includes an exportable movie of the procedure, pictures, and data.



Laser BPH

8 training cases for partial and full procedures with ThuLEP or HoLEP laser teach surgeons the removal of prostatic tissue with different endoscopic laser techniques: vaporization, enucleation, and vaporesction. Goal of the BPH education module is the learning of the different power setting applications as well as differences and benefits of advanced techniques. Trainees gain experience in removing prostates varying from 55 to 90 grams while safely handling the laser fibre. The original instruments require safe and correct management of irrigation fluid, camera and laser power.

