UROSKOP Access: Transforming Urodiagnostics

Sometimes an idea is so logical, it seems odd that no one has thought of it before. The UROSKOP Access urodiagnostic table is the first and only system in the world to offer access from all sides, taking the workflow of urological surgery to an entirely new level.

By Diana Smith

Three years ago, Geisinger Wyoming Valley Medical Center in Wilkes-Barre, Pennsylvania, needed a new urological surgery system, but wanted to invest its capital equipment dollars as wisely as possible. For direction, hospital leaders turned to Steven Kurzweil, M.D., chief of urology at the medical center and an expert in brachytherapy for prostate cancer.

In practice for more than a decade, Kurzweil was more than familiar with the limitations of traditional urological tables. With them, physicians can lose precious minutes in the operating room, explains Kurzweil. "Patient access is limited to one side; patients often have to be repositioned and the anesthetist has to change position. Repositioning patients can be difficult and lengthens the time under anesthesia, which increases risk," he adds. "Quite frankly, the old tables were a logistical nightmare."

Kurzweil took on the challenge of finding the best system for his hospital. "My partner and I literally went shopping," he says. "Independent of each other, we made multiple site visits and multiple calls. We looked at every table on the market from five different vendors and basically reviewed all the points we needed – patient access, flexibility, and durability. We both arrived at the same conclusion: the UROSKOP® Access system is the best system to meet our needs."

Improved Safety and Efficiency

Having made its debut in 2001, UROSKOP Access is the first floor-mounted urodiagnostic table that offers truly symmetrical and unrestricted patient access. That means that neither patient nor anesthetist have to be repositioned during intervention.

"Clearly, we have a keen interest in patient safety," emphasizes Kurzweil. "One of the main reasons we selected this system is because it can eliminate the need for potentially dangerous and time-consuming repositioning. We can lessen the risk of complications because a patient is under anesthesia for less time."

Since its introduction, UROSKOP Access has been the only urodiagnostic table in the industry with such unfettered patient access. "This is important," continues Kurzweil, "because once a patient is positioned, the urinary tract can be covered by moving only

THE UROSKOP ACCESS urodiagnostic table allows access from all sides, making patient repositioning a thing of the past. Says Dr. Steven Kurzweil from Geisinger Wyoming Valley Medical Center in Wilkes-Barre, PA: "Repositioning patients can be difficult and usually lengthens time under anesthesia, which may increase risk."

the X-ray tube, not the patient." That means urologists have the flexibility of doing many variations of the same procedure without having to reconfigure the operating room. With this system, medical teams realize improved clinical workflow and less complexity in daily routines. That reduces OR setup time, surgical time, and reconfiguration for the next patient. Hospitals can see immediate increases in efficiency and scheduling – up to 30 percent.

Crystal-Clear Images

UROSKOP Access is a unique system that combines a high-powered generator with a heavy-duty X-ray tube to ensure maximum image quality. An image intensifier with an almost unlimited field of view and a high-resolution digital matrix provide brilliant, high-contrast images. "Good image quality is key," explains Kurzweil. "You have to be able to see what you are working on and make informed decisions based on accurate images. If you don't have good images, you can miss something. This system, without a doubt, graphically had the best image quality. It's like high-definition TV versus regular TV. And," he adds, "if there's a question, I can enhance or magnify the picture or change contrast." A new feature of UROSKOP Access allows a physician to actually stop and replay a picture – "just like TiVo®," says Kurzweil.

The table, X-ray tube, and image intensifier are motorized and can be positioned individually. UROSKOP's high-resolution flat-screen monitors, which are mounted onto a swivel arm, can be moved into any position around the table. "With other equipment, you had the patient and equipment in front of you, but the video and camera to the side, so the surgeon had to constantly turn back and forth," notes Kurzweil. With the UROSKOP Access, the crucial information is in the field of view.

Accommodating Design

"This is a very ergonomic design and allows for more efficient surgery, because the surgeon does not have to contort himself to be able to visualize what he is doing and work on the patient at the same time," says Kurzweil. "And it frees up space in the OR."

The UROSKOP Access table was designed to accommodate patients of almost any size, from small children to adults who weigh up to 450 pounds. "With traditional equipment, it could be difficult to get clear images in heavier patients. The generator is so powerful, and together with the high-resolution image intensifier, it allows us to get very adequate images even with difficult-to-image patients," Kurzweil says.

Additionally, the table has a tilt motion range of plus or minus 90 degrees, which allows the patient to be turned from a horizontal to a vertical orientation. The patient can either stand on a footrest or sit upright on a rotation seat having both feet on the

ground. Last, but not least, a flexible drain bag replaces older metal trays and allows for drainage with better control. According to Kurzweil, the surgical staff appreciates the innovative accessories accompanying the table. "Some of the older tables were metal and the leg extensions were very heavy and cumbersome, weighing up to 125 pounds," he says. "The Siemens UROSKOP Access table features new, lightweight table extensions and easily attachable leg supports. They are lighter, but with a high weight capacity and are much more user-friendly. I have no qualms about handing them off to my surgical nurse. And, I don't get a single complaint!"

Protecting Surgical Staff

With any radiological procedures, repeated exposure is a concern for staff, says Kurzweil. The UROSKOP Access system incorporates specific dose-reduction features to protect patients and staff. These technological advances, such as electronic shutter settings on the last-hold fluoro image avoid the use of radiation during the setup phase of an exam. Together, with the use of pulsed fluoroscopy, dose savings of up to 70 percent can be achieved.

The system can be easily controlled via the flexible hand control, the multifunctional foot switch, or the separate control console. "It's like driving a car," says Kurzweil. "With a hand switch and a foot switch, I don't even have to look. It's a very intuitive piece of equipment." Dr. Kurzweil is very happy with the service he has received from Siemens. Geisinger Wyoming Valley Medical Center purchased its UROSKOP Access model two years ago and received the system after about 10 weeks. "That's lightning fast in the medical industry," says Kurzweil. "It has only been down two days, and ours is one of the first ever shipped." UROSKOP Access tables are offered with remote access service from Siemens, potentially keeping downtime to a minimum, which can be crucial for providing quality patient care and optimum workflow.

Kurzweil concludes, "This system is flexible as well as patient-, surgeon-, and OR-friendly. The bottom line is that better diagnostics allow you to make better treatment decisions. And that translates into lower complication rates and happier patients."

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At a Glance: UROSKOP Access

- Powerful generator (65 or 80 kW) and X-ray tube to ensure maximum image quality, even in obese patients
- Image intensifier offering full 16˝ anatomical view without blurring the edges of images
- High-resolution digital 1K² matrix
- Motorized table, X-ray tube, and image intensifier
- Dose savings of up to 70 percent with pulsed fluoroscopy
- Freely positionable, high-contrast TFT displays for brilliant display of X-ray and endo images
- Comprehensive postprocessing without additional equipment
- Local storage capacity of 15 000 images
- Table tilt of + or - 90 degrees, allowing table to be turned into a horizontal or vertical position
- Accommodation of patients of up to 450 pounds
- Remote service and more than 4 500 service engineers worldwide to maximize uptime and productivity