THE da Vinci SURGICAL SYSTEM
A New Era of Surgical Services

The introduction of the da Vinci surgical system has sparked a robotics movement at Gordon Hospital. While the system is currently being used by Gordon Urology's Hak J. Lee, MD, for urologic procedures, Gordon is already looking to expand its robotics services. The da Vinci surgical system is capable of performing numerous types of minimally invasive procedures, enabling Gordon Hospital to provide its surgical patients with even higher quality of healthcare.

The da Vinci surgical system is the latest in robotic surgical technologies. Surgeons use the system by operating through a few small incisions with a 3D high-definition vision system and wristed instruments that act more efficiently than human hands. The da Vinci system provides an outlet for multiple types of minimally invasive procedures including cardiac, colorectal, gynecological, head and neck, thoracic, urologic, and general surgeries.
With less patient discomfort and improved results, minimally invasive surgery using robotic systems has become an increasingly popular option over traditional open surgery. Patient benefits of robotic-assisted surgery are a shorter hospitalization period, quicker healing and return to normal activity, reduced blood loss, and reduced post-procedure pain. For the physician using the robot, advantages include an enhanced and magnified view of inside the patient’s body, instruments that bend and rotate farther than human hands, and overall enhanced precision and control.

Further advancements in surgical robotic technology are already occurring as more and more surgical specialties move toward using systems like da Vinci. Some expectations of robotic technology in the future involve single arm and single site robotics that would limit the number of incision sites and use the natural orifices of the body. There are also some expected developments in fluoroscopic imaging, which would then likely improve the outcomes of robotic procedures even further.

Through the da Vinci system provides enhanced vision and precision, it is important to remember that the surgeon using the robot is even more important than the technology. The key to successful robotic-assisted surgery is the experience and proficiency that is gained through extensive training. It is also crucial to have a team of robotic-trained nurses, anesthesiologist, and technicians who assist the surgeon throughout the surgery.

Dr. Lee is Gordon Hospital’s first physician to be trained and certified in da Vinci robotics, and he is the region’s only robotic-trained urologic oncologist. He completed his six-year urology residency at the University of California, Irvine, and his two-year urologic oncology fellowship at the University of California San Diego Health System. Within both programs Dr. Lee received specialized training in minimally invasive surgery in laparoscopy and robotics. In addition to his training, he completed a year of research on laparoscopic and robotic surgery.

As a urologic oncologist, Dr. Lee has performed a variety of robotic-assisted surgeries using the da Vinci surgical system. He looks to provide his patients with any surgical procedure that will give them the greatest benefit. Dr. Lee has successfully performed numerous procedures using robotic technology including:

- Radical nephrectomy
- Trans-peritoneal and retro-peritoneal partial nephrectomy
- Pyeloplasty
- Simple and radical prostatectomy
- Pelvic lymph node dissection
- Partial and radical cystectomy
- Ureteral re-implant
- Bladder reconstructive surgery

Wanda Rogers, a surgical patient of Dr. Lee, had a routine colonoscopy and an indentation was found in her colon. She then had a CAT scan which revealed that she had an enlarged appendix and her right kidney needed to be removed. Once this was determined, Rogers was referred to Dr. Lee.

“When I found out that I needed surgery, Dr. Lee scheduled it immediately. I didn’t have to wait around and worry about it,” said Rogers. “He explained the results of my CAT scan and the surgery in a way that my husband and I completely understood.”

Dr. Lee decided that it would be best to have Rogers’ appendix and right kidney removed in the same surgery so she wouldn’t have two recovery periods. Choosing to have a robotic-assisted surgery benefited Rogers greatly by reducing her post-surgery pain and allowing quicker healing.

“I don’t feel like I had surgery,” said Rogers. “My incisions felt more like small scratches, so pain wasn’t an issue. I had a hysterectomy in 2001, and it was a traditional surgery. I was very sore, and it was hard to walk afterwards. My robotics surgery didn’t stop me from walking around, and I wasn’t as sore.”

Though Dr. Lee is relatively new to Gordon Hospital, he has already completed over 23 robotic surgeries. But with 10 years of robotic-assisted surgery experience, Dr. Lee is excited about the future of Gordon Hospital’s robotics program. Having a surgeon like Dr. Lee available to our community is a significant step forward in providing world-class healthcare right here at home.

“I felt fortunate to have Dr. Lee do my surgery,” said Rogers. “Because he is new to Gordon Hospital, I tell people that I am glad I didn’t have to have my surgery any earlier because I wouldn’t have had Dr. Lee as my surgeon.”