

# Robotic advantage *brings increased precision*



The robotic arms replicate the surgeon's movements in real-time and extend dexterity by rotating beyond the ability of a human hand.

Recently added to Hoag Hospital's arsenal of advanced surgical technology is the latest da Vinci® S HD™ Surgical System. This revolutionary device provides even further advantages to patients and surgeons than previous versions.

Equipped with HD optics, the new system features superior visualization, providing surgeons an intuitive, three-dimensional view of the operating field. And with unsurpassed dexterity, the four robotic arms allow surgeons to rotate instruments more than 360 degrees through tiny incisions, providing even greater precision and control.

Utilizing the latest in state-of-the-art robotic technology also provides clear advantages to patients, including shorter hospital stays, smaller incisions and less scarring, less blood loss, less risk of post-operative complications, less post-operative pain and a quicker return to daily activities, to name just a few.

Currently, Hoag is utilizing the robotic device for three primary applications – minimally invasive prostatectomy, hysterectomy and complex heart surgery. However, the potential exists for this innovative device to be utilized for multiple other minimally invasive surgical procedures.

### **Nerve-sparing robotic prostatectomy**

Minimally invasive robotic prostatectomy offers considerable advantages over the traditional radical procedure. The enhanced control and superior magnification and resolution provided by the new robot assists surgeons in performing a more precise dissection.

"The precision the robot affords is vital in preservation of the nerve bundles responsible for erections, and is very helpful for various dissection and reconstruction techniques," explains robotic prostatectomy surgeon Jeffrey Yoshida, M.D., associate medical director of Hoag's urologic oncology program. "Patients therefore often benefit from an improved time to recovery of continence, as well as erectile function, after robotic surgery."

In addition to prostatectomy, other urologic surgeries have the potential to be performed utilizing robotic assistance, including complex surgeries of the kidney and bladder.

### **Robotic gynecologic surgery**

Minimally invasive gynecologic surgery utilizing the new da Vinci S HD robot offers significant advantages to patients undergoing a complex hysterectomy. The technique is especially applicable for the treatment of gynecologic cancers, allowing the surgeon to readily access the lymph nodes in the pelvis and para-aortic region for cancer staging, as well as the deep pelvis for a hysterectomy.

According to gynecologic oncologist John Brown, M.D., one of the pioneers in gynecologic robotic surgery at Hoag, "The versatility and precision of the new da Vinci system is exceptional. This creates a nearly ideal environment in which to perform surgery, resulting in improved patient outcomes."

### **Complex heart surgery via robotic assistance**

Hoag was the first hospital in Orange County to utilize the new da Vinci S HD robot for heart valve surgery. Currently, Hoag cardiovascular surgeons use the new robot to assist with complex mitral valve repair – many of the valve repair cases managed by Hoag surgeons are among the most complex and intricate in Southern

California. Since Hoag surgeons use the latest robotic-assisted technology, only small incisions are required to conduct the surgery, greatly reducing patient recovery time and the amount of pain after surgery.

Hoag surgeons also utilize the new robot for other delicate heart procedures, including removal of tumors of the heart, atrial septal defect (ASD) – a hole in the wall between the two upper chambers of the heart, and patent foramen ovale (PFO) – a condition where a small, flap-like opening in the wall between the chambers of the heart fails to close after birth.

"Hoag is not only committed to equipping the medical staff with the latest technology, but also providing advanced training for physicians," states Aidan A. Raney, M.D., F.A.C.C., medical director of cardiovascular surgery. "This benefits patients by ensuring they receive the highest level of care available."

In the future, Hoag cardiovascular surgeons anticipate using this new technology for other procedures such as a hybrid approach to coronary artery bypass grafting (CABG) – using a combination of robotic-assisted bypass graft and stents.

### **Leading the way in robotic surgery**

Through the use of the new da Vinci S HD Surgical System, Hoag surgeons are setting a new standard for surgical care, combining surgical expertise with state-of-the-art equipment. And as one of the few hospitals in Orange County to provide robotic-assisted surgery, Hoag remains at the forefront of this rapidly evolving technology.

## **Medication Safety**

Hoag Hospital is offering a free medication card to the public. The card enables you to write down all of your medications to help better track your medication dosages and times. Should you require hospitalization, a medication card can help to prevent medication errors and/or allergic reactions during a hospital stay. The card is also important in the event of an emergency to help inform emergency medical personnel about the medications you must receive. To obtain a free medication card, please call **800/514-HOAG (4624)** or visit **[www.HoagHospital.org](http://www.HoagHospital.org)**.