

OPENING DOORS

Minimally Invasive Surgery



The future of surgery is getting smaller. Increasingly, surgeries are being performed with minimally invasive techniques through tiny incisions. For patients, minimally invasive surgery (MIS) offers many benefits, including shorter hospital stays, faster recovery, reduced pain, smaller scars and less blood loss.

At UC Irvine Medical Center, Orange County's only university medical center, surgeons provide a full spectrum of MIS services and actively participate in clinical trials to further the field.

Many MIS procedures are performed with endoscopes. Guided by advanced imaging systems, UC Irvine doctors can access almost any part of the

body through blood vessels or other anatomical passageways. Common endoscopic procedures include removing growths or diseased tissue, inserting stents and performing controlled tissue ablation.

Laparoscopic surgery involves operating through small "keyhole" incisions. Many operations involving the digestive tract – bariatric surgery for weight loss and colorectal cancer surgery, for example – are performed laparoscopically, as are surgeries involving orthopaedic, neurologic, urologic and gynecologic systems. For many laparoscopic procedures, UC Irvine surgeons use the da Vinci robot to further enhance precision.

Gynecologic Procedures

Innovative MIS approaches are routinely used for gynecologic procedures such as hysterectomies. Treatment of pelvic floor conditions, fibroids and other conditions are treated with a number of minimally invasive procedures.

Spine Surgery

UC Irvine spine doctors – neurosurgeons and orthopaedic surgeons – specialize in minimally invasive procedures for numerous conditions, such as stabilizing the spine with extreme lateral interbody fusion (XLIF) and treating spinal stenosis using a new small-incision technique.

Stroke and Vascular Treatments

Using endoscopic techniques, UC Irvine doctors thread catheters into the brain to repair aneurysms and to treat other vascular conditions throughout the body, avoiding the need to perform open surgery.



Urologic Procedures

UC Irvine urologists have performed more than 1,000 prostatectomies – removal of cancerous prostate glands – using the da Vinci surgical robotic system, and were among the world's first to use laparoscopic approaches to remove kidney and ureter malignancies. Today, more than 90 percent of all urology procedures are performed laparoscopically at the medical center.

Advancing Minimally Invasive Surgery

- More than 10,000 surgical procedures were performed in fiscal year 2007-08 at UC Irvine Medical Center. A growing number, particularly urologic and gastrointestinal surgeries, were MIS procedures.
- UC Irvine doctors have pioneered several MIS approaches, including laparoscopic nephrectomy for kidney removal and endoscopic ultrasound-guided fine needle aspiration for gastrointestinal conditions.
- The entire second floor of University Hospital is dedicated to surgical procedures in support of trauma care, heart surgery, brain surgery and all other specialties' open surgery and MIS procedures.
- Fifteen state-of-the-art ORs feature best-in-class lighting, imaging, climate, ergonomics and infection control capabilities. Eight of the ORs are specially outfitted for MIS procedures and easily accommodate the da Vinci surgical robot. Four additional ORs will be added when Phase II of construction is completed.