Growing Thoracic Surgery Program Emphasizes MINIMALLY INVASIVE, ORGAN-SAVING Procedures

From video-assisted thoracic surgery to laparoscopic procedures and sleeve lobectomies, the Thoracic Surgery Division at Stanford has an overriding goal of imparting a cure with the least invasive procedure available. Patients who come to Stanford have surgical options that are not widely available in the community, or even at many other academic centers, according to Joseph Shrager, MD, Chief of the division.

With Shrager’s recruitment just over a year ago, Stanford renewed its focus on thoracic surgery, creating what Shrager feels is rapidly becoming “the premier clinical and research thoracic surgery program in the West.” Previously Chief of Thoracic Surgery at the University of Pennsylvania, Shrager joined highly respected Stanford faculty member Richard Whyte, MD, and immediately brought on two additional thoracic surgeons – Chuong Hoang, MD, and Robert Merritt, MD – to round out the department.

“With the additional surgical staff, all super-specialized in non-cardiac thoracic surgery, we are able to do a number of things that haven’t been done at Stanford before in any consistent way,” he says.

A focus on minimally invasive procedures
Stanford thoracic surgeons have a high level of experience with minimally invasive techniques, and a philosophy to use them whenever possible. These techniques include: video-assisted thoracic surgery (VATS) lobectomy, laparoscopic Nissen fundoplication, transcervical thymectomy and VATS sympathectomy – to name a few.

VATS lobectomy, usually done for lung cancer, allows surgeons to carry out the same operation as by thoracotomy, but through three to four small incisions rather than the large incision with rib spreading that a thoracotomy entails. Similarly, transcervical thymectomy allows removal of the thymus gland through one small incision rather than the breastbone-splitting median sternotomy that is otherwise used. This is appropriate for patients with Myasthenia Gravis as well as some small thymic tumors, and it can be done as an outpatient procedure. Using thoracoscopic (VATS) sympathectomy, surgeons can provide a long-term cure for hyperhidrosis, severe sweating of hands. Through two, 2 mm incisions, surgeons pass a tiny video camera and a single dissecting instrument into the chest. The incisions are so small that this procedure is sometimes called “needlescopicsurgery” – it creates almost no pain. With this minimally invasive approach, more patients are taking advantage of a surgical cure for their hyperhidrosis.

Esophageal diseases such as reflux and hiatal hernia can be treated laparoscopically, giving patients the same benefits of shorter hospital stays and quicker recoveries. Dr. Robert Merritt has extensive experience with these esophageal diseases.

Lung sparing treatment for lung cancer
In addition to its focus on minimally invasive techniques, Dr. Shrager points out that Stanford has a philosophy of avoiding pneumonectomy if at all possible when managing lung cancer. In addition to performing the standard lung cancer resections such as lobectomy, pneumonectomy, segmentectomy and wedge resection, Stanford surgeons also perform the more complex sleeve lobec-
Thoracic Surgery (from page 1)
tomy, which allows complete removal of the tumor, without complete removal of the lung, in cases where most surgeons would carry out a pneumonectomy.

“This approach provides the same chance of cure as pneumonectomy, with far lower operative complications and better post-operative quality of life,” says Shrager. Stanford is one of the few centers in the country with extensive experience performing this procedure.

“Several studies show that patients do better when complex lung and esophageal resections are performed by physicians who do large volumes of these resections,” cites Shrager. “There are not only fewer complications at high volume centers like Stanford; it has even been shown that there are greater long-term survival rates from the cancer.”

Stanford also takes on the challenge of treating patients with more aggressive lung cancers such as Pancoast tumors or Stage 3A lung cancers that involve mediastinal lymph nodes. “These are more complicated surgeries that involve chemotherapy or chemoradiation treatment before surgery,” says Shrager.

Clinical trials provide next generation treatment
Stanford’s Division of Thoracic Surgery is also involved in testing new treatments and surgical techniques by participating in national and international trials through its Clinical Trials program. For example, Part of that patient care philosophy is having patients with mild to moderate disease cared for in their own communities by their primary care physicians. For patients with more advanced kidney disease, Stanford nephrologists work in concert with other Stanford specialists in internal medicine, cardiology, urology, oncology and other subspecialties, all of whom have an interest in kidney disease.

“Access to other outstanding Stanford physicians and surgeons is a big advantage for our patients,” says Chertow. Another advantage is that the group has many cutting-edge research protocols available for patients. These include studies of controlling hypertension to reduce the risk of cardiovascular disease, slowing the progression of chronic kidney disease, treating glomerular diseases and polycystic kidney disease, forestalling the need for dialysis, as well as

A Re-Energized Kidney Program

Kidney disease is not sensational. There are no superstars with kidney disease. And even though one in nine adults in the U.S. has kidney disease, it doesn’t get a lot of attention. Glenn Chertow, MD, head of Stanford’s Nephrology Division, would like to change that.

A silent disease
Kidney disease often goes undetected, and afflicts poor and minority groups at a higher rate. Many patients are not diagnosed until their disease is in an advanced stage, when treatment is more complex, and less able to preserve kidney function.

The early signs of chronic kidney disease can be very subtle – changes in urination, swelling, fatigue, shortness of breath, itching, metallic taste in mouth, nausea and vomiting, feeling cold, dizziness and trouble concentrating. And many of these symptoms can be caused by conditions other than kidney disease.

Yet kidney disease can be easily detected by routine blood and urine tests. Because patients with even mild or moderate cases of kidney disease are at heightened risk for a cardiovascular event, early detection can help improve their outcomes and prevent other serious complications, Chertow explains.

A team effort
“We want to bring kidney disease and its treatment to the forefront,” he says. Just two years into his appointment as Director of Nephrology at Stanford, Chertow has recruited several researchers and clinicians to join Stanford’s growing division. “Bringing in new faculty with new interests re-energizes the staff, and the clinical and teaching programs,” he says.

“All of our clinicians practice evidence-based medicine,” Chertow says. “There is a heightened attention to detail here, with a keen understanding of how kidney disease affects people’s lives. We help patients learn to live with kidney disease, not suffer from kidney disease.”

Stanford is well known for its cardiovascular and cancer care, he says. What’s less well known is that the Division of Nephrology at Stanford is among the top 20 programs in the country, and Stanford’s kidney transplant program consistently yields among the best patient outcomes in the nation.

“Some institutions consider stage 3A tumors inoperable. We believe the evidence is strong that many 3A patients benefit from aggressive, multi-modality therapy including surgery, as long as that surgery is done by individuals experienced in managing these difficult cases.”

KIDNEY DISEASE: WHO’S AT RISK?
– Persons with diabetes
– Persons with hypertension
– Elderly
– African Americans, Hispanics, Native Americans and Pacific Islanders
– Family members of persons with kidney disease
in the “MAGE-A3 Vaccine Trial,” the surgeons are evaluating the effectiveness of a vaccine that harnesses a patient’s own immune system to attack microscopic cancer cells and prevent a recurrence. In a national surgical trial evaluating “sublobar” resections, they are determining if a technique that removes less than an entire lobe of the lung can offer patients with smaller tumors the same cure rate as a full lobectomy.

**Working with referring providers**
Stanford’s thoracic surgeons work closely with referring physicians to ensure that patients receive the most appropriate pre- and post-operative care.

“I am an extremely strong believer in maintaining close communication with referring physicians,” explains Shrager, who sends a letter to the patient’s primary and referring specialists within 5 days of any patient visit. Stanford thoracic surgeons also, as a routine, call referring physicians on the day of surgery, and send them a fax at the time of discharge briefly summarizing the patient’s hospital course and any other information the local doctor may need in caring for the patient post-operatively.

**Communication and access**
After a patient is seen at Stanford, their referring physician receives a detailed letter, outlining the patient’s diagnosis and care plan. “We strive to have a very open dialogue with our referring physicians,” says Stanford nephrologist Richard Lafayette, MD, a fourteen year veteran of Stanford’s program. “Through our electronic health record system, physicians outside of Stanford can log in and see their patients’ test results, labs and physician notes. We keep physicians informed while their patients are in our care,” he adds. With regard to access, Lafayette says “New patients can be seen within two weeks, or two hours if necessary.”

To refer patients to Stanford’s Nephrology practice, call the Stanford Physician Concierge Service at 866-742-4811 or fax referrals to 650-320-9443.

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“Some of our referring doctors may think we communicate too much,” Shrager adds. “But all of my frequent-referrers have my cell phone number and know they can reach me at any time. I know the same is true of my partners.”

To speak directly to one of Stanford’s thoracic surgeons, please call 650-721-2086 and ask for the particular surgeon you would like to reach. Physicians can also contact the Referring Physician Concierge Service by phone at 866-742-4811 or fax referrals to 650-320-9443.

“We help patients learn to live with kidney disease, not suffer from kidney disease.”

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**Studies on improving outcomes for transplant patients.**

Preserving kidney function is one of the hallmarks of the Stanford program. Helping patients forestall dialysis and transplant with comprehensive, detail-oriented medical care helps patients enormously, Chertow explains. For patients with advanced kidney disease, Stanford nephrologists care for them until they undergo transplantation, when the multidisciplinary transplant team takes the lead. “Most people have to wait for years, unless they have a living donor,” he says. “Helping our patients stay healthy while waiting increases their chances of a successful transplant.”

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**Drs. Nisha Arora, Alan Pao, Wolfgang Winkelmayer, Vivek Bhalla, Glenn Chertow and Richard Lafayette**
Robotic Surgery
offers minimally invasive option for bladder and kidney cancer surgeries

Just 10 short years ago, robotic surgery revolutionized the removal of the prostate for patients with prostate cancer. Today, that same minimally invasive procedure is being used for more complex urologic cancers with the same result – tiny surgical incisions, less pain and quicker recovery for patients.

Stanford moved to the forefront in robotic surgery for urologic cancers in June of 2009 when it brought on Mark Gonzalgo, MD, PhD, from The Johns Hopkins Brady Urological Institute. Dr. Gonzalgo, who is now Program Director of the Robotic-Assisted Urologic Cancer Surgery Program at Stanford, is one of the few surgeons in the country to have substantial experience in robotic cystectomy for bladder cancer. Rounding out the robotic surgical team at Stanford are Benjamin Chung, MD, Harcharan Gill, MD, John Leppert, MD, and Joseph Liao, MD.

“Robotic surgery achieved its momentum with prostate cancer,” says Gonzalgo, “Now it is being used for more complex surgeries such as partial nephrectomies and bladder cystectomies. It is also being increasingly utilized in other fields such as gynecology and cardiology.”

Treating the most complex urologic cancers with robotics ...

Robotic/laparoscopic partial/radical nephrectomy – Using the DaVinci robot, surgeons can remove sections of the kidney or the entire kidney, with only a few small incisions in the abdomen. In contrast, the traditional “open” procedure requires an incision that is several inches long and typically results in significant post-operative pain and a large surgical scar. Many patients with kidney tumors may be candidates for a partial nephrectomy, says Gonzalgo. The goal of the Stanford robotic surgical team is to preserve as much of the kidney as possible, while offering patients the same curative rate as open surgery.
Robotic cystectomy with urinary diversion for bladder cancer – This is the newest, most complex application for robotic urological surgery, according to Gonzalgo, who is among only a handful of surgeons in the United States to routinely offer patients with bladder cancer this minimally invasive option. Using the enhanced control and precision offered by the robotic device, Gonzalgo can remove a patient’s tumor and reconstruct the bladder with less morbidity than traditional open surgery. There is less blood loss for patients and a quicker recovery from surgery using this minimally invasive method. This technique can be used for the majority of patients with invasive bladder cancer.

Nerve-sparing robotic radical prostatectomy for prostate cancer – The robotic prostatectomy, or removal of the prostate, offers less post-operative pain and a shorter recovery period for patients. Today, more than 65% of prostates are removed via robotic-assisted devices.

ADVANTAGES OF ROBOTIC SURGERY
– Decreased blood loss
– Decreased need for blood transfusion
– Shorter hospital stay
– Less post-operative pain
– Shorter recovery

“Robotic surgery gives patients an option they previously did not have,” says Gonzalgo. Using robotics, patients can have their cancer treated as effectively as with open surgery, but recover more quickly. “Regardless of whether the surgeon is using a robotic tool or conducting an open surgery, the goal is the same,” says Gonzalgo, “to achieve a cure with the lowest impact on a patient’s quality of life.”

Robots give surgeons added precision
“The DaVinci robot gives surgeons a level of dexterity and pinpoint precision not available with laparoscopic techniques,” explains Gonzalgo. “The robotic hand mimics the wrist motion of the surgeon, allowing him to tie sutures, remove tumors, cut and sew”, he adds. Surgeons performing robotic surgery are able to remove the cancer while preserving surrounding nerves and tissues allowing patients to maintain a high quality of life after surgery.

Working with referring providers
For patients with complex urologic cancers, Stanford has a multidisciplinary team of surgeons, radiation oncologists, and medical oncologists who can provide post-operative treatment. However, most patients return to their referring physicians for follow-up care in their own community. After surgery, Stanford surgeons communicate with referring physicians to determine what type of follow-up care is needed depending on the complexity of the patient’s condition. Together, the referring physician, patient, and surgeon determine where the patient will receive continued treatment if necessary.

For more information on Robotic-Assisted Urologic Cancer Surgery at Stanford, please visit http://stanfordhospital.org/roboticsurgery

To refer a patient to Stanford for evaluation as a candidate for minimally invasive robotic surgery, call the Stanford Physician Concierge Service at 866-742-4811 or fax referrals to 650-320-9443.
Millions of Americans have been diagnosed with ankle arthritis, a major cause of disability, pain, dysfunction, muscle de-conditioning, and limb deformity. The effects of ankle arthritis can be physically and mentally disabling for patients.

Advances in our understanding of ankle biomechanics, disease pathogenesis, and implant materials have led to improved treatment options and clinical outcomes. Early stages of ankle arthritis can often be successfully treated with diligent adherence to physical therapy protocols and intra-articular injections with corticosteroids and/or hyaluronic acid. When non-operative measures fail to improve conditions, the following surgical options are available:

**Total ankle replacement (TAR)** – Made popular in the 1970s, the majority of the early implants were unsuccessful, leading to early failures and many salvage procedures. In recent years, improvements in TAR implant design, material, and instrumentation have led to improved surgical outcomes. TAR can result in a greater functional outcome than fusion because motion is preserved in the ankle and the adjacent joints in the foot. The ideal candidate for TAR is a non-obese, non-smoking patient who is older than 50 years and who does not engage in hard impact activities. Early results of currently available TAR implants are promising and long term results are continuously under investigation.

**Ankle fusion** – A highly successful procedure that can produce long-lasting pain relief and help restore ankle function. This procedure is for patients who are not candidates for TAR. In suitable patients, high union rates are achieved using an arthroscopic-assisted method which reduces soft tissue stripping and post-operative pain. For patients requiring ankle fusion in the presence of an associated infection or compromised soft tissues, ring fixators have resulted in successful ankle fusion with the added benefit of early weight bearing.

**Ankle realignment procedure** – An alternative treatment for younger, more active patients with whom fusion or TAR is not ideal. Tibial realignment osteotomies produce good clinical results with return to full activity in the majority of patients. Fusion or TAR can be successfully postponed with realignment surgery in patients with ankle malalignment and arthritis.

Ankle arthritis is a common and potentially debilitating problem. While ankle fusion is the current standard definitive surgical treatment in most patients, we are finding very good early success with total ankle replacement in appropriately selected patients. Long term results of the latest generation of implants are highly anticipated. Our ultimate goal is allow patients relief from pain and disability with an optimal return to desired employment and recreational activities.

Dr. Kenneth J. Hunt has recently joined Stanford as Assistant Professor of Orthopaedic Surgery. His areas of clinical specialty include: sports injuries of the foot and ankle, foot/ankle trauma (fractures), foot and ankle arthritis, deformity correction, and tendon disorders. To contact Dr. Hunt about speaking engagements, please send an email to kjhunt@stanford.edu. For patient referrals, contact the Referring Physician Concierge Service by phone at 866-742-4811, via fax at 650-320-9443, or send an email to referral@stanfordmed.org.
Welcoming New Physicians

James N. Lau, MD, FACS
General Surgery – Minimally Invasive and Bariatric Surgery

Faculty Appointment: Clinical Associate Professor
Specialization/Clinical Interests: Weight loss, single incision laparoscopic, foregut, and minimally invasive general surgery
Research Interests: Morbid obesity, single incision surgery, and surgical skills education
Medical Degree: Loyola University Chicago, Stritch School of Medicine
Available for Talks on: Surgical treatments of morbid obesity; single site surgery

Robert T. Chang, MD
Ophthalmology – Glaucoma and Cataract Surgery

Faculty Appointment: Assistant Professor
Specialization/Clinical Interests: Ophthalmology, glaucoma, and cataract surgery
Research Interests: Diagnostic imaging; glaucoma surgical devices
Medical Degree: University of Missouri Kansas City School of Medicine
Available for talks on: General ophthalmology; cataracts; glaucoma
Email address: rchang3@stanford.edu

George A. Poultsides, MD
General Surgery – Surgical Oncology

Faculty Appointment: Assistant Professor
Specialization/Clinical Interests: Tumors and diseases of the pancreas, liver, bile ducts, adrenal glands, stomach, and retroperitoneum
Research Interests: Outcomes analysis following multidisciplinary treatment of hepatic, pancreatic, and gastrointestinal malignancies
Medical Degree: National University of Athens
Available for Talks on: Pancreatic cystic neoplasms; cholangiocarcinoma; gallbladder cancer; colorectal liver metastasis

Jayakar V. Nayak, MD, PhD
Otolaryngology-Head and Neck Surgery, Rhinology/Endoscopic Sinus and Skull Base Surgery

Faculty Appointment: Assistant Professor
Specialization/Clinical Interests: Infectious and inflammatory disorders of the nasal cavity; medical and surgical management of patients with chronic sinusitis and benign and malignant intranasal lesions; endoscopic approaches to the pituitary gland, orbit and cranial base in ‘team surgery’ with colleagues from neurosurgery and ophthalmology
Research Interests: Sinonasal immune system in health and disease; intranasal vaccine delivery and development; nasal mucosal stem cells and mucosal regeneration
Medical Degree: University of Pittsburgh
Available for Talk on: Surgical approaches to the extended skull base; problems and solutions in modern rhinology; sinonasal tumors; fungal diseases of the paranasal sinuses

NEED AN EDUCATIONAL SPEAKER?
The Continuing Medical Education Department at Stanford accepts educational requests! Through our extensive faculty resources, we can match your staff’s educational need to a Stanford speaker who will present at your hospital or clinic. We have placed speakers at hospitals all over Northern California and would be happy to discuss outreach opportunities for your facility. Whether you already have topics in mind or would prefer to see a list of available speakers and talk titles, please contact Barbara Pannoni in the CME office at 650-724-7166, or bpannoni@stanfordmed.org

Stanford Medicine H1N1 and Seasonal Flu Update Website for Patients Now Available

For videos, articles, and links to government web sites, and discussions on avoiding the flu, caring for someone with the flu, and precautions for children and pregnant women, go to http://www.stanfordmedicine.org/flu/
UPCOMING EVENTS

Stanford Advancements in Clinical Care
San Jose

Tuesday, January 12, 2010
Dinner Event 6:30-8:30pm
Three Flames Restaurant
1547 Meridian Ave, San Jose, CA 95125

No CME credits. RSVP by Friday, January 8, 2010
rmukaled@stanfordmed.org or call 650-721-2216.

New Advancements in PET/CT Imaging

Thursday, February 25, 2010
Cocktails & Appetizers 6:00-6:30pm
Presentations 6:30 to 7:30pm
Stanford Medicine Imaging Center
451 Sherman Ave., Palo Alto, CA 94305

Topics:
- PET/CT and the Future of Molecular Imaging
- Clinical Utility of PET/CT in Lung Cancer
- Imaging Tumor, Epilepsy, and Alzheimer’s with Brain PET

No CME credits. Cocktails & appetizers will be served.
RSVP by Thursday, February 18th, 2010
sgaluppo@stanfordmed.org or call 650-862-2199

UPCOMING CME COURSES

4th Annual
Cardiology for the Primary Care Practitioner
January 19, 2010
Stanford, CA

23rd Annual
Anesthesia Update
February 14-19, 2010
Big Sky, Montana

16th Annual
Stanford Symposium on Emergency Medicine
April 6-10, 2010
Kauai, Hawaii

For more information, call 650-497-8554, send an email to
Lindsay_hovakimian@stanford.edu, or visit
www.cme.stanfordhospital.com