SPRING 2011

A Newsletter of the University of Rochester Medical Center Department of Surgery

SHARPINSIGHTS

A Message from the Chair

Surgery provides proving ground for Patient & Family Centered Care

"Patient & Family Centered Care" may sound like the latest catch phrase, but it is in fact a powerful philosophy that is transforming much of what we do within the Department of Surgery and the entire University of Rochester Medical Center.

For many clinicians, and particularly for surgeons, a special focus on patient centered care seems wholly unnecessary. In fact, there are many opportunities to focus our professional lives, schedules and interactions with a "patient centric" mindset in contrast to the all too easy trap of being hospital or "doctor centric". Busy schedules, fatigue, multitasking, challenging circumstances, complex illness, communication skills, and a myriad of other issues all lead to less than ideal patient care interactions. Patient & Family Centered Care (PFCC) brings the patient and their family members squarely into the process of providing excellent care. To paraphrase the words of Medical Center CEO Brad Berk, we are moving from simply caring for our patients to caring with them.

It starts with an attitude of collaboration, involving both patients and their family members in everything from care plans to discharge plans. This is in stark contrast to the longstanding approach of distancing families from patients and their care. Take for example the crumbling concept of "visiting hours". Families were once actively excluded from being at the patient's bedside, and virtually never engaged in discussions on rounds or other inpatient hospital activities. PFCC strives to involve family members in all aspects of care so they can know that their input is taken seriously and feel empowered to better care for their loved ones.

Other changes are happening behind the scenes. With eRecords, we are ensuring that every doctor has the same up-to-the-minute information on patients, enabling better care and greater efficiency. We are taking steps to ensure that surgical procedures happen on time and that when an unforeseen circumstance occurs that may delay the surgeon in the clinic ward or operating room, patentis and their families are alerted in order to lessen their anxiety.

PFCC represents an attitude change-and a culture change. The Department of Surgery is proud to provide surgical care that is a step ahead of state-of-the-art. Now, we look forward to being a step ahead in another realm: bringing patients and their family members wholly into the planning and execution of their care.

Jeffrey H. Peters, M.D., F.A.C.S.

Go Green

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In this issue

Burn and trauma service renamed to honor devoted benefactors

Starting today, all University of Rochester Medical Center's (URMC) regional burn and trauma services will be renamed in honor of two local restaurateurs who have raised millions of dollars to support them – and share a vision for further developing those services.

Dennis Kessler (left) and Laurence Kessler

Laurence Kessler and Dennis Kessler, founders and co-owners of the Kessler Group, Inc. & Kessler Family, LLC, which operates 21 Burger King and 48 Friendly's restaurants in the greater Rochester area, have given more than $3 million to URMC's burn and trauma services to-date. Their new commitment of $1 million will create an endowment to ensure future growth of burn and trauma programs, as well as supporting other University projects.

In recognition of their past and future generosity, URMC will rename the entire program as the Kessler Burn & Trauma Center. The Kessler Center name will now be used to reference all areas within URMC that provide emergent, inpatient, and outpatient care for patients with traumatic injuries and burns. Previously, only the Emergency Department's trauma unit and Burn/Trauma Intensive Care Unit bore the Kessler name.

"The Kesslers have raised the standard of care in our community through their unflagging support for the only Level One trauma program in our region," said University of Rochester President Joel Seligman. "Their generosity has enabled our staff to save many lives and eased the suffering of many more in the 17 counties we serve. We are pleased to recognize their extraordinary commitment."

"Rochester is our community and we are thrilled to be able to support the families in our region," said Laurence Kessler. "My brother Dennis and I were taught that it is our obligation to 'give back.' We're proud to be able to impact lives in such a critical way."

The Kessler Burn & Trauma Center treats more than 3,000 people each year with severe blunt and penetrating injuries and features the area's only dedicated burn service. It boasts an expert team of fellowship-trained specialists bolstered by the most advanced technologies for treating minor to severe injuries in modern facilities financed, in part, by the Kesslers.

"Year after year, the Kesslers have been the largest individual donors to Strong Memorial Hospital," said Bradford C. Berk, M.D., Ph.D., the Medical Center's chief executive officer. "Kessler donations have given us the area's best facilities for treating patients with traumatic injuries or burns. Their ongoing commitment to the Center's endowment will ensure that our program meets regional needs and sets the pace nationally among centers that treat burns and other traumatic injuries."

With a Kessler-funded endowment, the Center hopes to attract more specialists who can offer a wider array of treatment options. In addition, Jeffrey H. Peters, M.D., Seymour I. Schwartz Professor and Chair of Surgery at the Medical Center, said the Kessler Burn & Trauma Center will be able to expand clinical research, become a leading presence in regional and national professional societies, and continue to improve patient care and surgical training.

For some, laparoscopic technique not always better

open surgery reduces infection risk for some patients

Deep organ space infections are expensive to treat – to the tune of $50,000. And that figure doesn't begin to account for unrealized income (due to missed work) and other incalculable costs, like distress to families.

John R. T. Monson, M.D., F.A.C.S.

If skin is the body's fortress against germ invaders, shouldn't minimally invasive surgeries – operations guided by camera probes, conducted entirely within the abdomen – carry less risk for serious infection than procedures that slice the same cavity wide open?

New research published in the December *Annals of Surgery* is challenging that assumption – at least for a subset of patients. Researchers from the University of Rochester Medical Center (URMC) analyzed thousands of appendectomies (appendix removals) and found that, for a small group, the danger of deep abdominal infections was markedly less if the old-fashioned, open surgical approach was used.

"Our study corroborates a common theme in medicine: one size does not fit all," said study author John R. T. Monson, M.D., F.A.C.S., chief of the Division of Colorectal Surgery at URMC. "While the data suggest that the laparoscopic approach is still best for most patients, it might not be best for all."

U.S. surgeons perform more than a quarter million appendectomies annually, most of them laparoscopically.

"Since laparoscopy first came into vogue the early 90's, it's gone mainstream – mostly because its advantages are so obvious to the patient," Monson said. "The cuts through the skin are extremely small. There's less visible scarring and postoperative pain; patients have short hospital stays and return to work sooner."

But for a small group of patients undergoing appendix removal, the study found that these perks come with a cost – greater risk for serious infection. But why?

"We think it comes down to balance. It's not just about how much a procedure exposes the body to potential infection – it's also about how easily that procedure allows you to mitigate infection risk," Monson said. "Consider the open approach. Admittedly there's more chance of exposure to microbes – the wound is wide open. But there's also more opportunity to sterilize, since you can meticulously clean the operating space before closing it."

The laparoscopic approach, on the other hand, is done more gently.

"There's less exposure to the outside environment, but there's also less opportunity to disinfect the organ space," he said. "The philosophy is to be delicate as possible, perform the surgery, then get out."

If a deep infection takes root, it's expensive to treat – to the tune of $50,000, and that figure doesn't begin to account for unrealized income due to missed work (potentially three to six months) while hospitalized, not to mention incalculable costs like distress to families.

"Compare this to an uncomplicated laparoscopic appendectomy – after which patients return to work in a week and a half – you see how devastating a deep infection can be," Monson said.

Some earlier analyses have implicated a connection between laparoscopic surgery and risk for infection in the organ space, but even meta-analyses (studies of studies) had relatively small sample sizes – too small for surgeons to draw definitive recommendations.

"This larger study afforded us that opportunity," Monson said. "By tapping the National Surgical Quality Improvement Program database, we were able to analyze almost 40,000 appendectomies performed between 2005 and 2008."

The study also begins to show the type of patients who might fare better with an open procedure. The team noticed factors that might pre-dispose some patients to being at higher risk for a serious infection. For instance, presenting at the hospital with a high white blood cell count (which signals that the body is already fighting infection); being male (perhaps because men wait to go to the Emergency Department until their condition is more advanced); having diabetes; simply being older; or being a smoker (chemicals in cigarettes have a detrimental impact on wound healing).

"We found that, for a small group 'high-risk' patients – those who have several risk-elevating factors working against them at the same time – the risk of a deep infection is about 8.9 percent with an open surgery. But that risk jumped to 12.3 percent when the appendix was removed laparoscopically."

"I think the data is pretty clear: for a select cohort of folks needing their appendix removed, we would be wise to consider an open procedure," Monson said. "This is what good medicine is about – tailoring our approach based on the patient. It's about being willing to adapt."

In addition to Monson, paper co-authors from URMC's Division of Colorectal Surgery included Fergal Fleming, M.D.; Michael Kim, M.D.; Rabih Salloum, M.D.; together with Susan Messing and Doug Gunzler from the Department of Biostatistics and Computational Biology.

Helicopter transport increases survival for seriously injured patients

First national study show helicopters have positive impact

Severely injured patients transported by helicopter from the scene of an accident are more likely to survive than patients brought to trauma centers by ground ambulance, according to a new study published in *The Journal of Trauma: Injury, Infection, and Critical Care.* The study is the first to examine the role of helicopter transport on a national level and includes the largest number of helicopter-transport patients in a single analysis.

The finding that helicopter transport positively impacts patient survival comes amid an ongoing debate surrounding the role of helicopter transport in civilian trauma care in the United States, with advocates citing the benefits of fast transport times and critics pointing to safety, utilization and cost concerns.

The new national data shows that patients selected for helicopter transport to trauma centers are more severely injured, come from greater distances and require more hospital resources, including admission to the intensive care unit, the use of a ventilator to assist breathing and urgent surgery, compared to patients transported by ground ambulance. Despite this, helicopter-transport patients are more likely than ground-transport patients to survive and be sent home following treatment.

"On the national level, it appears as though helicopters are being used appropriately to transport injured patients to trauma centers," said Mark Gestring, M.D., lead study author and director of the Kessler Trauma Center at the University of Rochester Medical Center. "Air medical transport is a valuable resource which can make trauma center care more accessible to patients who would not otherwise be able to reach such centers."

Gestring serves as a volunteer board member for Mercy Flight Central Inc., a Canandaigua, New York-based air medical services company.

Previous studies on the use of helicopters to transport injured patients report mixed results, but are limited by small patient populations from single institutions or specific regions. Some smaller studies propose helicopters are overused, transporting patients with relatively minor injuries who would likely fare as well if transported by ground. However, the new national data does not reveal such a trend.

"The goal is always to get the sickest people to the trauma center as fast as possible, and our data suggest that's exactly what's happening. We're not seeing helicopters being used to transport trivial cases, which is undoubtedly a poor use of resources," noted Gestring.

The study included patients transported from the scene of an injury to a trauma center by helicopter or ground transportation in 2007. Gestring and his team used the National Trauma Databank to identify 258,387 patients

Mark Gestring, M.D.

– 16 percent were transported by helicopter and 84 percent were transported by ground.

The helicopter-transport patients were younger, more likely to be male and more likely to be victims of motor vehicle crashes or falls, compared to ground-transport patients. Overall, almost half of the helicopter-transport patients were admitted to the intensive care unit, 20 percent required assistance breathing for an average of one week and close to 20 percent needed an operation. Even though they arrived at the hospital in worse condition, they ultimately fared better than those transported by ground.

While the study shows that air transport does make a difference in patient outcomes, there is no data available to explain why patients transported by helicopter do better than those transported by ground. Study authors assume that speed of transport – helicopters are capable of higher speeds over longer distances regardless of terrain – and the ability of air-medical crews to provide therapies and utilize technologies that are not universally available to ground unit crews, are the main drivers of positive patient outcomes.

Helicopter transport has been an integral component of trauma care in the United States since the 1970's, due in large part to the military's experience transporting sick or injured soldiers during war time. The availability of helicopters in the civilian setting has been credited with improving trauma center access for a significant percentage of the population.

According to Gestring, the study has some limitations. It is not possible to evaluate the multitude of factors that drive the individual decisions to transport a patient by helicopter in each and every case. In addition, the general nature of the dataset limits specific conclusions that may be drawn or applied to any individual trauma system.

The Kessler Trauma Center at the University of Rochester is Western New York's largest trauma center, serving Rochester and the nearly 2 million people in the 17 counties which surround the Finger Lakes Region. The Center is a Level-1 trauma center, providing 24-hour access to comprehensive emergency services. Physicians treat more than 3,000 traumatic injury patients a year.

In addition to Gestring, Joshua Brown, B.A., Nicole Stassen, M.D., Paul Bankey, M.D., Ph.D., Ayodele Sangosanya, M.D., and Julius Cheng, M.D., M.P.H., participated in the research.

Honors & Awards

Ron Zarrella honored

Medical Center Board Chair Ron Zarrella presented the 2010 Excellence Awards to six individuals and four teams who consistently demonstrate an unwavering personal and professional dedication to integrity, compassion, accountability, respect and excellence. The awards are among the highest honors given to Strong Memorial Hospital employees.

Jenny Speranza receives Excellence Award

Surgeon Jenny Speranza received the Excellence Award in the physician category for providing compassionate care to patients and demonstrating a commitment to quality amongst her colleagues. She joined the Medical Center four years ago as an assistant professor of Surgery and is director of the Colorectal Physiology Center at Highland Hospital. A colleague pointed out that one day, after more than 15 hours of surgeries, Speranza visited an anxious patient and took a great deal of time to calm her worries, demonstrating that the human touch is key to recovery.

Nancy Metzler receives Excellence Award

Transplant administrator Nancy Metzler received the Excellence Award in the business/administrative category. Metzler is part of a complex multidisciplinary team working in one of the most challenging areas of medicine today – solid organ transplant. She is praised for her tireless pursuit of patient relations and her ability to communicate with patients and families make her stand out. She serves in a leadership capacity for several transplant-related organizations. She was recently appointed vice-chair of the United Network for Organ Sharing, Organ Procurement and Transplantation Network.

Innovative approach to laparoscopic adrenelectomy

A new surgical technique to remove benign adrenal tumors overturns a traditional approach.

Called posterior retroperitoneoscopic adrenalectomy, the procedure requires a patient to lay face-down while surgeons access the adrenal glands via three small incisions in the back. URMC is one of just a handful of U.S. medical institutions to offer the technique, joining prestigious centers such as Cleveland Clinic, Columbia University Medical Center, MD Anderson Cancer Center, and Brigham and Women's Hospital.

"Since the adrenal glands sit atop the kidneys, near the back of the body, a traditional laparoscopic approach through the front requires that other organs first be mobilized out of the way," said Jacob Moalem, M.D., assistant professor of Surgery at URMC. "But using this newer approach, the abdominal cavity does not even need to be entered. The adrenals can be approached much more directly, restricting the operation to the patient's retroperitoneum."

The technique offers fewer anatomical landmarks to guide the surgeon, which is the main reason it has been slow to catch on.

"Since the patient is lying face down, the anatomy is turned upside-down, making this operation unlike most other laparoscopic operations. A surgeon can feel like he's working through a rearview mirror," said Moalem. "But once learned, we think it's better medicine. Not only does the surgery take less time than an anterior adrenalectomy, but it's safer, since no abdominal organs need to be manipulated, less painful, and the patient's recovery is much more rapid."

Survey shows dogma not data can dictate decisions

An international survey asked endocrine surgeons how they decide whether or not to prescribe antibiotics in advance of removing all or part of the thyroid or parathyroid glands.

Typically, these glands are removed because of suspected cancer or because they overproduce their respective hormones, causing metabolic problems and irritability (thyroid) or kidney stones and bone loss (parathyroid).

"Since there's such great supply of blood to the neck area and these procedures don't involve parts of the body rife with bacteria, like the colon or airway, they're considered 'clean' cases – meaning that the risk for surgical site infections is very low," said lead author Jacob Moalem, M.D., FACS, an endocrine surgeon. "Given the very low risk, treating a patient with an antibiotic in advance isn't typically indicated. Even so, we wanted to learn what surgeons actually did in practice – and why."

Moalem's team found that most surgeons stick very closely to a set routine before performing thyroid and parathyroid operations; nearly 90 percent of respondents reported using antibiotics either "almost always" (26.2 percent) or "almost never" (62 percent).

"Only about 11 percent of surgeons said they varied their prescribing habits based on the unique health needs of their patients," he said.

Interestingly, Moalem noticed that neither their annual caseloads nor their past histories of having patients who developed surgical site infections or adverse reactions to antibiotics were linked to their unique prescribing habits. What was associated, however, was their environment: whether or not they worked in a hospital connected with a university and which continent they practiced on.

"We found that doctors in community hospitals were twice as likely to routinely prescribe antibiotics as their university hospital counterparts," Moalem said.

Jacob Moalem, M.D., F.A.C.S.

He also noticed that surgeons in Asia were far more likely (58.3 percent) to always give antibiotics in advance than were those in America (27.9 percent) or Europe (8.8 percent).

"I think this speaks to a universal reality in medicine: that, in the absence of hard data, there is a subset of things we'll continue to do simply because we've always done them that way," he said. "We do what we think is best based on what's seemed to work in the past, how we've been trained, or what our organization's culture suggests. If we only practiced medicine that was grounded in randomized and controlled clinical data, much of what we do would come to a grinding halt."

Collecting data that nails down exact rates of surgical site infections for thyroid/parathyroid operations is complicated. Not only does the definition of what constitutes such infections vary with each physician's own interpretation, but many infections are sometimes missed altogether.

Until hard data are available to gather the true incidence of surgical infections, as well as of adverse and allergic reactions to antibiotics, official recommendations can't be made and each surgeon should continue to employ his or her best judgment, Moalem said.

"Whatever their leaning, I would caution, however, that they remain flexible and be willing to modify their routines to best fit a patient's unique needs and risk factors," he said.

Gillespie to lead URMC Vascular Surgery division

Renowned surgeon David L. Gillespie, M.D., F.AC.S., R.V.T., D.M.C.C., has been appointed chief of the Division of Vascular Surgery at the University of Rochester Medical Center.

David L. Gillespie, M.D., F.A.C.S., R.V.T., D.M.C.C.

Since joining the Medical Center two years ago, Gillespie has served as Director for the Vascular Surgery Integrated Residency and Fellowship Program within the School of Medicine and Dentistry.

"Gillespie is a skilled clinician, an accomplished educator and a creative scientist who has rapidly earned the respect of his colleagues within the division and the overall Department of Surgery," said Jeffrey Peters, M.D., Seymour I. Schwartz Professor and Chair of the Department of Surgery. "He is a natural choice to lead the division at this time."

Previously Gillespie had a 23-year career with the U.S. Army as chief of Vascular Surgery, overseeing vascular procedures in Iraq. He led the vascular surgery program at Walter Reed Army Medical Center, Washington, D.C., and served as chief of Vascular Surgery at Uniformed Services University of the Health Sciences' F. Edward Hebert School of Medicine in Bethesda, Md. He was also a vascular surgery consultant with the Office of the Surgeon General.

In addition to his clinical expertise, Gillespie is a senior clinical and basic science researcher with interests centering on chronic venous disease, notably cellular and molecular functioning within chronic ulceration.

Gillespie earned his medical degree from the Uniformed Services University of the Health Sciences' F. Edward Hebert School of Medicine. He completed an internship at Letterman Army Medical Center in San Francisco; a surgical residency at Boston University Medical Center; and a fellowship at Boston University Medical Center where he served as the Reginald Smithwick Fellow in Vascular Surgery. His undergraduate work was done at Washington State University.

In memoriam

Robert M. McCormack, M.D.

Robert M. McCormack, M.D. (R '49), Professor Emeritus of Plastic Surgery and Chairman of the Division of Plastic Surgery from 1950–1983 died December 16 in Ocean View, NJ at age 92.

Dr. McCormack was born in Sheboygan, WI, son of a physician. He received his BA degree, with honors, from Swarthmore College, where he was an All American lacrosse player, and his MD degree from the University of Chicago. He came to the University of Rochester as a surgical intern in 1943. After further surgical training, he entered the U.S. Army Medical Corps in World War II and was assigned to the Hand Surgery Section at Beaumont Army Hospital, El Paso, TX. This was the spring board for his life long interest in hand surgery. Following military service, he returned to Rochester to complete his residency in Plastic Surgery in 1949.

After a year of private practice in Milwaukee, WI, he was asked to return to Rochester to assume the leadership of the Division of Plastic Surgery at the age of 34. He served as Chair for 33 years until his retirement in 1983, educating more than 50 plastic surgical residents and countless medical students. Dr. McCormack was appointed Professor of Plastic Surgery in 1957, Vice-Chairman of the Department of Surgery in 1968 and Director of the Burn Unit in 1975.

Dr. McCormack knew how to listen, delegate and give credit to others. These qualities lead to numerous national and international leadership positions. He served as President of the American Association of Plastic Surgeons, the American Society for Surgery of the Hand and the American Burn Association. Additionally, he was Chairman of the American Board of Plastic Surgery and a member of the Residency Review Committee for six years and received numerous honors and awards throughout his career. His membership in the Canadian Society of Plastic Surgeons, the British Association of Plastic Surgeons and the British Association for Surgery of the Hand reflect the breath and strength of his leadership skills.

He was predeceased by his wife of 61 years, Marjorie Carter McCormack. Surviving are three sons, Steven McCormack of Oakland, CA, Robert B. McCormack, of Cape Cod, MA , Carter J. McCormack, M.D. of Greenville, SC and four grandchildren.

For those who desire, memorial contributions may be sent to the Robert M. McCormack Fund, University of Rochester, Department of Surgery, PO Box 278996, Rochester, NY 14627.

UNIVERSITY of ROCHESTER MEDICAL CENTER

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Events

Saturday, September 11, 2010
Sixth Annual Seymour I. Schwartz, MD, Lecture:
Professor The Lord Darzi, KBE, Professor and Chair of Surgery
Imperial College, London, UK
Interests: Keyhole and cancer surgery, image-guided and robotic surgery, quality and safety in health care

Thursday, October 7, 2010
Third Annual Paul R. Schloerb, MD, Lecture:
John MacFie, MD, Professor of Surgery, University of Hull
Hull, UK
Interests: Colorectal issues including intestinal failure and inflammatory bowel disease, nutrition and metabolism, ethics and care of the critically ill

Thursday, March 3, 2011
Fourth Annual Charles Rob, MD, Lecture:
Hazim J. Safi, MD, Professor and Chair of Cardiothoracic and Vascular Surgery, University of Texas, Houston, TX
Interests: Cardiac Surgery, Aortic Surgery, Thoracoadbdominal Aortic Aneurysms, Vascular Surgery

Saturday, May 14, 2011
Sixth Annual James A. DeWeese, MD, Lecture:
Barbara Bass, MD, John F. and Carolyn Bookout Distinguished Endowed Chair, Department of Surgery, The Methodist Hospital, Houston, TX
Interests: Surgical oncology, including pancreatic, gastrointestinal, breast, and endocrine disorders

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Pediatric Surgery
Walter Pegoli, Jr., M.D.

Plastic Surgery
Howard Langstein, M.D.

Surgical Oncology
Kristin A. Skinner, M.D.

Thoracic/Foregut Surgery
Thomas J. Watson, M.D.

Vascular Surgery
David L. Gillespie, M.D.