
2015

Acute Care Study Explores Link Between Tracheostomy and Long-Term Outcomes of Critically Ill Patients

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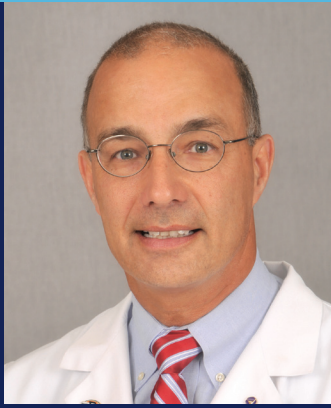
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Overview



Charles J. Yeo, MD, FACS
Samuel D. Gross Professor and Chair
Department of Surgery

A Reflection on a Decade

On October 1, 2015, I celebrated a decade as the Gross Professor of Surgery at Jefferson. I am enormously proud of the accomplishments of our Department. The faculty has doubled in size, our clinical and operative volumes have risen, our complex case numbers have nearly tripled, philanthropy is up twenty-fold, we provide surgical services on a contractual basis at three new hospitals and our residents are outstanding. Our five vice chairs excel in their domains: clinical affairs, research, quality, education and Methodist Hospital. Jefferson is well represented on the national stage, at meetings, in journals, with NIH funding and with authorship of texts and monographs. Just last month, Jefferson and Philadelphia had a real chance to shine – first we hosted the Halsted Society and one week later, Pope Francis!

After five years of planning, the 89th Annual Meeting of the Halsted Society was hosted on campus on September 17th. The weather was perfect and our faculty shone brightly with an enormously successful local program in the Hamilton Building. Drs. Beekley, Tichansky, Chojnacki, Brody, Isenberg, Lavu, Doria, Tsangaris, Winter, DiMuzio, Frank, Greaney, Merli and Rosato all were superb in their topics, and delivered poised presentations. The attendees were treated to a visit to the Philadelphia Museum of Art to view the Eakins' works – "The Gross Clinic" and "The Agnew Clinic", as well as an evening at the Mütter Museum with guest speaker and Mütter biographer, Ms. Cristin O'Keefe Aptowicz. We received dozens of most favorable comments.



The Halsted Society in Lubert Plaza at Jefferson

Meet Our Surgical Interns



Adam Olszewski, MD, Geoffrey Kozak, MD, Stephen Gadomski, MD, Mohammad Khoshevisan, MD, Zachary Callahan, MD, Richard Zheng, MD, Courtney Devin, MD, Ellen Caparosa, MD, May Jean Counsilman, MD (not pictured)

Clinical Integration

Acute Care Study Explores Link Between Tracheostomy and Long-Term Outcomes of Critically Ill Patients



Pankaj H. Patel, MD, FACS

Tracheostomy – placement of a tube through an incision in the trachea, or windpipe – is routinely performed on a variety of patients in Medical Intensive Care Units (MICUs) and Surgical Intensive Care Units (SICUs). "Trach" patients may include those who will be spending a long time on a ventilator, as well as individuals who are neurologically impaired or need relief from a breathing obstruction.

Pankaj H. Patel, MD, FACS, Jefferson trauma surgeon and Assistant Professor, Sidney Kimmel Medical College at Thomas Jefferson University, recently co-authored an article in the Herald Scholarly Open Access (HSOA) Journal of Emergency Medicine, Trauma and Surgical Care. The article shared the findings of a first-of-its-kind study exploring the long-term outcomes of tracheostomy in critically ill patients. Dr. Patel conducted the study in collaboration with Bharat K. Awsare, MD, and Michael Baram, MD, and Fellows Ricardo Restrepo, MD, and Daron Kahn, MD, in the Department of Medicine, Division of Pulmonary and Critical Care, at Jefferson.

As Dr. Patel explains, prior studies have described the benefits of tracheostomy in terms of short-term results, such as Intensive Care Unit (ICU) length of stay, hospital-acquired pneumonia and duration of mechanical ventilation. However, most of those studies simply examined 30-day mortality. This new study was designed to determine longer-term survival of those who received a tracheostomy after a critical illness.

"We wanted to understand how many patients survive at least a year after receiving a tracheostomy following respiratory failure," he says.

The team performed a retrospective analysis of 430 Jefferson patients who had undergone tracheostomies. With strict adherence to HIPAA privacy rules, they gathered one-year death data by cross-matching Social Security numbers with the death master file

of the National Technical Information Service. That enabled the study team to identify deaths no matter where they occurred geographically.

They found that only about three-quarters (74 percent) of patients survived to be discharged from the hospital, with none of the deaths attributable to the procedure itself. At one year, the overall survival rate was 53 percent – with variations among patients from the MICU (46 percent), the Neurologic Intensive Care Unit (NICU; 59 percent) and the SICU (63 percent).

Dr. Patel says the study's findings suggest that tracheostomy is a marker for patients who may not survive a year – and that the need for the procedure should perhaps prompt patients and their families to think carefully about long-term goals.

"An example could be an elderly patient with a high cervical spinal-cord injury who is at high risk of mortality from infection," he notes. "Does that person want to be paralyzed and permanently dependent on a ventilator? Similarly, patients in the MICU who have multiple organ dysfunction syndrome may want to consider carefully whether or not to undergo a tracheostomy."

"These findings suggest they may be better off opting for palliative measures over more aggressive procedures," he says.

Further investigation may focus on identifying a subset of patients at highest risk of early mortality. The results would arm physicians with more hard data to share with patients and their family members to enable well-informed decisions about treatment plans.

The Department has welcomed an impressive new group of categorical interns including one graduate of Sidney Kimmel Medical College. The interns were selected from over one thousand applicants to our program. These doctors, who recently matched with Jefferson, started on June 20, 2015. Please welcome:

- Zachary Callahan, MD** University of Cincinnati College of Medicine
- Ellen Caparosa, MD** University of Pittsburgh School of Medicine
- Courtney Devin, MD** Tulane University School of Medicine
- Stephen Gadomski, MD** Vanderbilt University School of Medicine
- Geoffrey Kozak, MD** Sidney Kimmel Medical College at Thomas Jefferson University
- Richard Zheng, MD** Stony Brook University School of Medicine

We are also pleased to welcome back the following Sidney Kimmel Medical College 2015 graduates as preliminary interns in general surgery: **May Jean (MJ) Counsilman, MD, Mohammad (Mo) Khoshevisan, MD, and Adam Olszewski, MD.**