Overview



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A Retreat Suggestion Comes to Fruition

Within this issue of Surgical Solutions, a great story unfolds. A little over one year ago, in March 2015, we held the first Department of Surgery retreat in some years. Several great ideas "bubbled up" out of that retreat, some dealing with clinical matters, some with education, and some with fostering research. One of the intriguing ideas that came out of the retreat was the hope that the Department of Surgery could provide pilot or startup funds to help faculty bring their research ideas to fruition. I want to thank those members of the Department who pushed hard on this idea, and additionally thank our Director of Surgical Research, Jonathan Brody, PhD, for making this suggestion a reality.

We have initiated a departmental mechanism that supports these grants. We call it Support of Surgery Research Activities (SSRA). In essence these are pilot grants. Several applications have been submitted to date. In this issue, you will read about the first grant, awarded to Dr. Michael Pucci, which was submitted, critiqued, approved, funded, and now been brought to fruition. With the help of many of our residents and surgical faculty, Dr. Pucci was able to focus on a very important element of general surgery...that is: safe laparoscopic cholecystectomy. This project was completed in near record time, presented at the Society of Gastrointestinal and Endoscopic Surgeons (SAGES) Annual Meeting on March 18th in Boston, and a manuscript has been submitted. The title of the manuscript is "Increasing Resident Utilization and Recognition of the Critical View of Safety During Laparoscopic Cholecystectomy: A Pilot Study from an Academic Medical Center".

It is wonderful to see Departmental funds dispersed for such worthwhile projects, have those projects brought to fruition, have the work accepted at a national meeting and submitted for publication. This is exactly what we had hoped.

It goes without saying that we would like to support more and more of these pilot SSRAs. We have been fortunate to be able to use dollars donated through philanthropy to help support this research mission. We need to step up our philanthropic efforts, and to call upon our grateful patients who have so generously given to help support research in the Department. These are exciting times. Hopefully more exciting times to come!



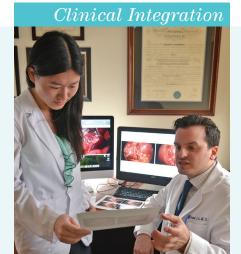
Critical View of Safety: First SSRA Study Educates Residents on Safer Cholecystectomy

Cholecystectomy – removal of the gallbladder – is among the most common surgical procedures, with an estimated 750,000 performed annually in the U.S. For more than two decades, laparoscopic cholecystectomy has been the standard of care. Generally speaking, the laparoscopic approach is associated with faster recovery times and less scarring for patients. However, the rate of major bile duct injury - a complication that can require additional surgery and even lead to death - has actually quadrupled from 0.1% with open cholecystectomy to 0.4% with laparoscopy

In the first study funded by a Department of Surgery Support of Surgery Research Activities (SSRA) Grant, Michael Pucci, MD, FACS, explored how a better understanding of the problem and application of a longstanding method can help solve it. Known as the Critical View of Safety (CVS), the method helps surgeons correctly identify the cystic duct and cystic artery during laparoscopic cholecystectomy.

"Major bile duct injury typically occurs when surgeons misinterpret what they are seeing. They believe they're dissecting around the cystic duct, which connects to the gallbladder, when in fact it's the bile duct," explains Dr. Pucci, who was assisted by Crystal Chen, a second-year Sidney Kimmel Medical College student. "This can cause surgeons to accidently remove a section of the bile duct, which can have very dire consequences for the patient."

For the study, which ran from May to September 2015, Dr. Pucci and Chen recorded videos of about 50 laparoscopic cholecystectomy cases being performed by attending surgeons and residents. They paid particular attention to the moment just before



Second year medical student Crystal Chen reviews OR photographs of laparoscopic cholecystectomies with Michael Pucci, MD, FACS.

each surgeon clipped the duct, scoring whether or not the surgeon achieved the CVS. The study revealed that surgeons were not achieving the CVS very often. Out of six possible points (two for each of the three criteria of the CVS), the average score was just 2.3.

From there, Dr. Pucci and Chen initiated a series of interventions. They spent a day talking with residents, emphasizing the importance of the CVS and its role within safe cholecystectomy. They asked faculty to allow residents to continue the dissection in order to achieve the CVS. Additionally, the surgeons and OR nurses performed a "time-out" prior to placing clips on the cystic duct to ensure the CVS had been achieved and documented with a photograph.

After those interventions, they studied photos from 50 new cases, and the resulting scores – averaging 4.3 out of 6 – were much improved. In addition, Dr. Pucci and Chen gave residents questionnaires before and after the interventions. There was a clear improvement in their understanding of the CVS and the concept of safe cholecystectomy.

"Our SSRA grant enabled us to do this important work in training our residents and helping improve patient safety," Dr. Pucci says. "We will continue to study this – on a bigger scale, we hope – and continue working to find better ways of training our residents to be safe for the sake of our patients."

In the Spotlight

Dr. Angela A. Ramirez-Irizarry

While in San Juan last February for the American College of Surgeons' 66th Annual Puerto Rico Chapter Meeting, Jefferson colorectal surgeon Gerald A. Isenberg, MD, FACS, met someone who made history at Jefferson: Angela A. Ramirez-Irizarry, MD, FACS, FACPS, DABPS. Dr. Ramirez introduced herself following Dr. Isenberg's presentation on diverticular disease and shared her fond memories of Jefferson.

In 1961, Dr. Ramirez was accepted as the hospital's first female resident in General Surgery. (It was the same year that Jefferson Medical College first accepted women.) Dr. Ramirez later became the first woman in Puerto Rico to be board certified in Plastic, Reconstructive and Hand Surgery. Since then, she's founded and co-chaired a cleft palate clinic with her colleagues

from Dentistry and served as founder and first president of the Caribbean Society for Surgery of the Hand among multiple other achievements. For years she also taught as an Associate Professor of Surgery at the Ponce School of Medicine.

Now 80, Dr. Ramirez still practices. She believes that as long as a surgeon has her mind and health, there's no reason to quit: "You should keep on being a surgeon – emulating the principles of ethics and compassion and the good practice of surgery that we were taught at Jefferson," she says. "We owe it to ourselves, to our patients and to our mentors."

For more about Dr. Ramirez's experiences at Jefferson, please read the full-length story at **Jefferson.edu/AngelaRamirez**.