Biography

Jeffrey L. Ponsky, M.D., FACS

Jeffrey L. Ponsky completed his surgical training at University Hospitals of Cleveland in 1976. He then joined the faculty of the Department of Surgery at University Hospitals of Cleveland where he was the Director of Surgical Endoscopy. In 1979 he became the Director of the Department of Surgery at The Mt. Sinai Medical Center in Cleveland where he remained through 1997. During that time Dr. Ponsky was Professor of Surgery at Case Western Reserve University School of Medicine and Vice Chairman of the Department of Surgery at Case. Dr. Ponsky then joined The Cleveland Clinic as the Director of Endoscopic Surgery and was the first Executive Director of the Minimally Invasive Surgery Center at The

Cleveland Clinic Foundation. He was also the Vice Chairman of the Division of Education and Director of Graduate Medical Education. He has served as a member of the Board of Governors at The Cleveland Clinic. In 2005 he assumed the Oliver H. Payne Professorship and Chair of the Department of Surgery at Case Western University School of Medicine and University Hospitals of Cleveland. Dr. Ponsky serves as Surgeon-in-Chief at University Hospitals Case Medical Center.

Dr. Ponsky is Past President of the Society of American Gastrointestinal Endoscopic Surgeons (SAGES), Past President of the Ohio Chapter of the American College of Surgeons, Past President of the Cleveland Surgical Society, and Past President of the American Society for Gastrointestinal Endoscopy (ASGE). He is a Fellow of the American College of Surgeons, and a member of numerous prominent surgical societies. He was recently the Chairman of the American Board of Surgery. He is currently the Vice President of the American Surgical Association, and The Society for Surgery of the Alimentary Tract.

Dr. Ponsky is a graduate of Case Western Reserve University School of Medicine and earned his Executive MBA from CWRU's Weatherhead School of Management in

1990. He received the distinguished Kaiser Teaching Excellence Award at CWRU School of Medicine in 1993; the Distinguished Service Award by the Society of American Gastrointestinal Endoscopic Surgeons in April 2000; and in 2002 he received ASGE's Rudolf Schindler Award, the highest recognition award for excellence in endoscopic research, teaching and service. In 2005 he received the Pioneer in Endoscopy Award from the Society of American Gastrointestinal Endoscopic Surgeons. In 2009 he received SAGES the George Berci Lifetime Achievement Award. Dr. Ponsky has been listed in The Best Doctors in America® each year since its inception. He has published over 200 original articles and book chapters, authored or edited five textbooks and serves on the editorial board of eight journals. He is the originator of the percutaneous endoscopic gastrostomy which provided a minimally invasive substitute for operative placement of feeding tubes.

His wife, Jackie, is a counselor and his four children include Lee who is a urologist at University Hospitals of Cleveland as is Todd who is a pediatric surgeon there; Zachary is a real estate investment manager; and Kimberly has a career in professional photography. Dr. Ponsky resides in Hunting Valley, Ohio.

The Development of PEG: How it was

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Abbreviations: PEG, percutaneous endoscopic gastrostomy

The room was dark, and a glow emanated from the abdomen of a tiny baby on the operating table. It was the spring of 1979 at Rainbow Babies and Children's Hospital in Cleveland, Ohio, and, as there were no pediatric gastroenterologists working at the institution, I was frequently performing upper endoscopy in small children. Dr. Michael Gauderer, an innovative and talented young pediatric surgeon was present, as most of these patient were his referrals. He was fascinated by the glow of light from the patient's abdomen and touched the abdomen where

the light shone (**Fig. 1**). Later that day Dr. Gauderer stopped me in the corridor and told me of his long standing thoughts about performing a minimally invasive gastrostomy. Together we planned a technique for performing an endoscopically guided percutaneous gastrostomy.

Dr. Gauderer had several infant patients scheduled for feeding gastrostomy because of severe neurological impairment. Each was to undergo laparotomy for the performance of the procedure. We spoke to the mothers of these infants and apprised them of our ideas for a minimally invasive approach and suggested we try this. Should we not be successful, standard gastrostomy would be performed. Each agreed. Although we held some trepidation regarding our innovative efforts, Dr. Gauderer and I both felt that the risk was small and our backup procedure (laparotomy)

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Figure 1. The light shone brightly through the infant's abdominal wall

Figure 2. The initial PEG tube was constructed from A 16French dePezzar catheter, a cross bar of amber drain, and an IV cannula

would provide a safety net. We designed the first percutaneous endoscopic gastrostomy (PEG) tube using available supplies. A 16 French DePezzar (mushroom tipped) catheter was utilized. To create a dilator at its end, a tapered intravenous catheter was used. A suture placed into the end of the catheter was guided through the IV cannula and would be used to pull the tube along (Fig. 2). In the first tubes produced we forcefully stuffed the aft end of the rubber catheter into the cannula. Later, we realized that by pulling on our silk suture and the head of the tube at the same time, the catheter would stretch, become narrower, and easily slide into the venous cannula.

In the first case, a tiny infant of several months age, after puncture of the stomach where the transillumination was brightest, a silk suture was passed into the stomach through the puncturing needle and grasped with a biopsy forceps. The suture proved a bit difficult to grasp and subsequent cases were performed using a snare to surround the puncturing needle and thus capture the suture.

After the first five cases were performed, all in small infants¹, I left University Hospitals for Mt Sinai Hospital of Cleveland. There I was able to perform the technique in adult patients, all neurologically impaired by stroke. The initial presentation of this method at a medical meeting occurred in May of 1980 at DDW in Salt Lake City. There was immediate interest in the procedure and I received numerous calls concerning construction of the PEG tube. Dr. Gauderer and I approached several companies

imploing them to manufacture the tube but each was reluctant owing to the presumably small number of cases which would be performed annually. Finally, a local company, American Endoscopy, whose president was Marlin Younker, agreed to produce the tube as we had originally constructed it. These efforts met with success and lead to subsequent improvements in catheter design.² Further modifications, adaptations, and production by other companies has occurred.

It is of note, that only after successful implementation of the procedure³, was PEG taken to the animal laboratory for careful assessment of tract formation and durability⁴. Such a progression would be unlikely to occur today.

The development of PEG was the result of need, vision, and ingenuity. Its simplicity was a critical factor in its eventual success and adaptation.

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