5-1-2011

Thomas Dent Mütter: the humble narrative of a surgeon, teacher, and curious collector.

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Brief Reports

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In general, authors of case reports should use the Brief Report format.

The Setback Pulley Dermal Suture for Skin Defects

The proper selection of a suture placement method is of special importance when closing wounds under tension. The right choice is useful to minimize the scar and diminish the complications. Many methods for such wounds have been described, including the use of an assistant to support wound edge approximation manually while initial suture knots are secured, mattress sutures,[1] near-far-far-near suture,[2] and traditional or modified pulley suture.[3, 4]

However, the use of an assistant can be awkward or one may not be available. A major cosmetic drawback of a mattress suture is placement of a tension-supporting suture through the epidermis, which can lead to excessive scarring.[2] The concern for cosmesis is also noticed with the "near-far-far-near" technique because of the tension on the epidermis. Finally, the traditional buried pulley suture involving two suture loops can be difficult to place. A disadvantage of the modified pulley suture is that it may result in minimal vertical misalignment of the wound edge, because the side from which the suture ends may undergo a slight pull into the wound on knot tying.

Our setback pulley dermal suture, which is less awkward to place, offers similar resistance to the spread of wounds for wounds under tension without disturbing the approximation of the wound edges.

In the setback pulley dermal suture, the suture entry and exit points are both in the dermis, parallel to the skin surface, rather than in the incised wound edge(Figs. 1 and 2).

Step 1 consists of using absorbable suture, the wound edge is gently everted using either a skin hook or forceps. The needle is then inserted perpendicular to the dermis at a point 5 to 8 mm distant from the wound edge, depending on the thickness of the dermis. The first throw is then completed by following the curvature of the needle; the needle exits the underside of the dermis at a point 2 to 4 mm distant from the wound edge.

Step 2 consists of the needle piercing the primary entry of the dermis and the leading end of the suture

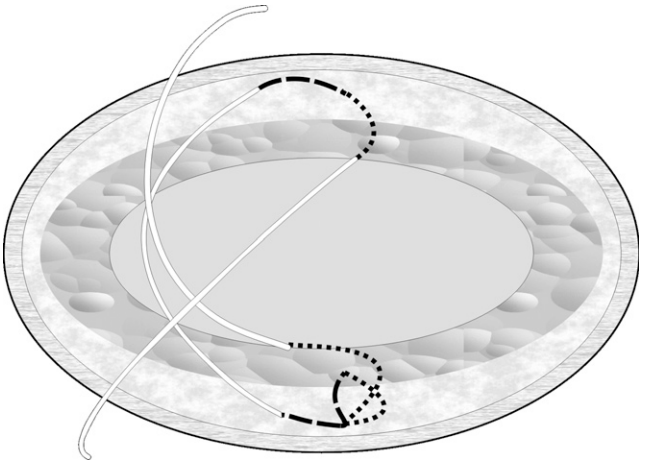

FIG. 1. Placement of the suture to complete the setback pulley dermal suture. Positive view.

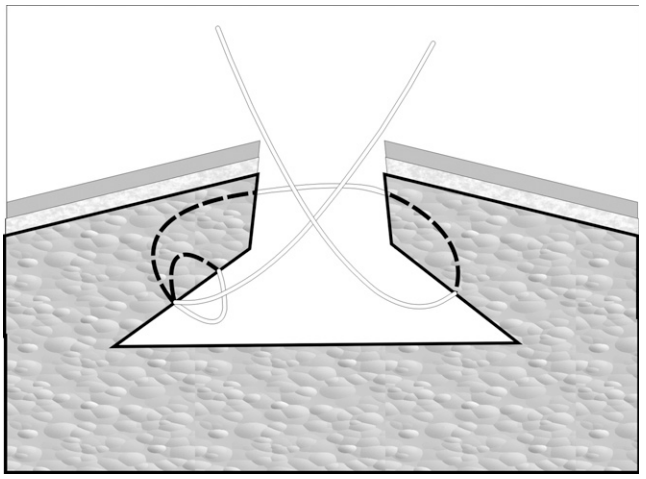

FIG. 2. Placement of the suture to complete the setback pulley dermal suture. Lateral view.

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placed through the dermis and then exiting in the deep reticular dermis.

Step 3 consists of the path of the suture on the opposite wound edge mirroring the second throw of the suture and the needle existing the base of the dermis. The knot can be completed in the normal fashion.

The modified setback pulley dermal suture technique offers both mechanical and cosmetic advantages. Mechanically, the pulley suture approximates the wound margins with two suture loops providing a 2:1 mechanical advantage over an interrupted suture. So the throws secure wounds under tension and resist wound. From a cosmetic viewpoint, the dermal nature of this technique allows the epidermis to be repaired with less tension and reduces the risk of excessive epidermal scarring, The advantages include the minimization of the epidermal widening and suture track marks, while maintaining wound strength after superficial cutaneous sutures have been removed. Additionally, the setback pulley placed away from the wound edges does not disturb the precise approximation of the wound edges compared with the modified dermal pulley suture.

It is noted that the skin with moderate thickness is preferred to place the suture appropriately. During the procedure, the path of the suture can be angled slightly horizontal to increase the amount of tissue in these bites.

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An Unusual Presentation of Acute Abdominal Pain: Perforation of Retroperitoneal Ewing Sarcoma

Ewing sarcomas (ESs) are most commonly located in bone, whereas extraskeletal involvement of the retroperitoneum is extremely rare. Most are malignant and frequently invade contiguous retroperitoneal organs.[1] We describe a case of acute abdominal pain resulting from perforation of retroperitoneal ES.

A 26-year-old man was admitted to the hospital with severe abdominal pain for 2 days. There was no history of peptic ulcer disease, inflammatory bowel disease, trauma, or previous abdominal surgery. On initial investigation, physical examination revealed tenderness and muscle defense in right and left lower quadrant of the abdomen. Laboratory tests were as follows: serum hemoglobin 10.3 g/dL, white blood cell count 13,800/mm^3; hematocrit 30 per cent (normal range, 37 to 52%), and platelet count 400.000/mm^3. Liver and renal function tests and urine analysis were normal. The abdominal ultrasound showed massive fluid in the abdomen. Thereafter, emergency surgery was performed because of the signs and symptoms of peritonitis. During laparotomy, hemorrhage and perforation of the pelvic mass were seen in the abdominal region. The mass could not be removed as a result of the close relation with the bladder so that hemorrhage was drained and biopsy was taken from the mass. Histopathological examinations of the resected specimens showed a small, solid, lobular pattern of striking uniform cells. Immunohistochemically, leukocyte common antigen, pancytokeratin, and desmin were negative. Vimentin and C99 stains were positive. The histologic and immunohistochemical findings were consistent with ES. After the surgery, a contrast-enhanced spiral CT of the abdomen showed a large mass behind the urinary bladder. Calcification or new bone formation was not observed within the tumor. Magnetic resonance examination confirmed a well-defined mass that was heterogeneous hypointense on T1- weighted and heterogeneously hyperintense on T2-weighted images (Fig. 1). At the seventh day of hospitalization, he was referred to the oncology department and chemotherapy treatment was started.

The extraosseous form of ES was first described in 1969.[2] The most frequently involved locations of extraskeletal ES are the paravertebral region, the chest wall, the retroperitoneum, and the lower extremities.[3] The location of the tumor is the most important imaging difference between extraskeletal and skeletal ES. Associated involvement of bone in extraskeletal ES is unusual. Bone tissue or new bone formation are not seen in extraskeletal ES.[4] Retroperitoneal ES does not have specific imaging features differentiating it from other soft tissue tumors. Despite the rarity of neurogenic tumors in the retroperitoneum, ES should be included in the diagnosis

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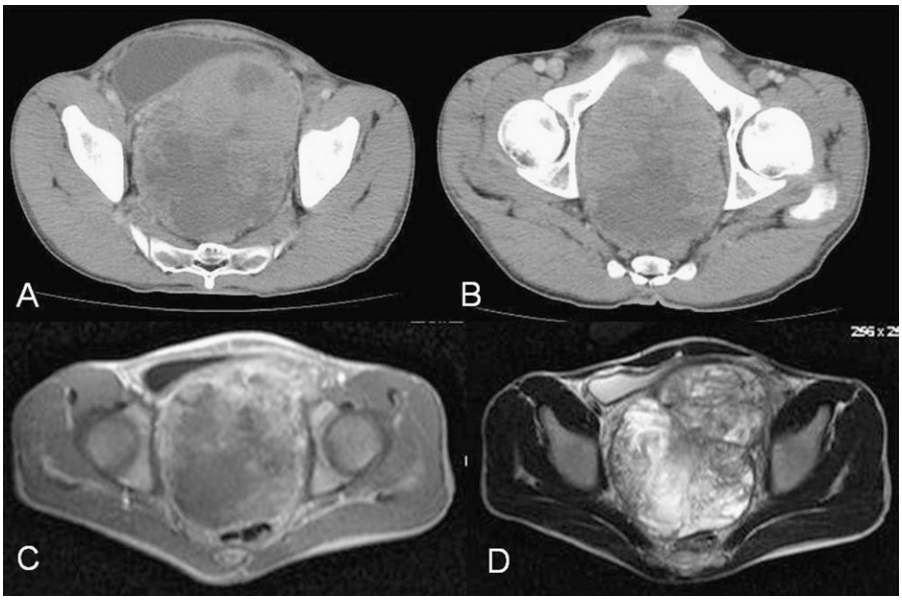

FIG. 1. Postcontrast CT images (*A–B*) demonstrates heterogeneous enhancement of solid component. T1-weighted axial MR image (*C*) shows the retroperitoneal mass, which is heterogeneous hypointense, and T2-weighted axial MR (*D*) image demonstrates showed a well-defined mass that shows heterogeneous hyperintensity of the mass.

of retroperitoneal soft tissue masses detected in adults.[1]

To our knowledge, this is the first case report of acute abdominal pain resulting from retroperitoneal ES. In conclusion, the clinicians should consider ES in the differential diagnosis of acute abdominal pain.

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William Williams Keen, MD: 'Marshall' of American Surgery and Pioneer of Neurosurgery

William Williams Keen was a Professor of the Principles of Surgery and Clinical Surgery and the fifth Co-chair of the Department of Surgery at Jefferson Medical College from 1889 to 1907. His stature in the surgical world was similar to that of Samuel D. Gross but in company with William Stewart Halsted and Harvey Cushing of Johns Hopkins. "The Emperor of American Surgery," Samuel D. Gross, was succeeded by three "Marshalls," namely Doctors Keen, Halsted, and Cushing.[1]

Keen was a descendant of Joran Kyn, an early Swedish settler in Chester, Pennsylvania. He was born in Philadelphia on January 19, 1837, the son of William W. and Susan Budd Keen. After preliminary education at Central High School and Saunders Academy in Philadelphia, he entered Brown University at the age of 18 years and graduated in 1859 as the Class Valedictorian. Keen entered Jefferson Medical College in September 1860, but after 10 months, his education was interrupted by the Civil War.

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He was selected as a surgeon for the Fifth Massachusetts Regiment. In July 1861, he was sent to a camp in Alexandria and within 2 weeks was at the First Battle of Bull Run. Shortly after the battle, his period of enlistment in the regiment expired and on being discharged, he returned to Jefferson where he graduated in 1862. Two months later, he was duly commissioned as Acting Assistant Surgeon in the U.S. Army (Fig. 1) and put in charge of Eckington General Hospital in Washington, DC. He quickly established a notable reputation by setting up and equipping a hospital within 5 days. In 1863, he served with Drs. S. Weir Mitchell (Jefferson, 1850) and George Morehouse (Jefferson, 1850) in the Turner's Lane Army Hospital, Philadelphia in an important study on the injuries of nerves. They documented their intensive study of 120 patients in an outstanding 164-page monograph, *Gunshot Wounds and Other Injuries of Nerves* (Lippincott, 1864), and described the concept of causalgia and reflex dystrophy.[2] This began Keen's interest in neurologic surgery.

Keen spent 2 years (1864 to 1866) in postgraduate study with Dr. Guillaume Duchenne of Paris and in Dr. Rudolf Virchow's laboratory in Berlin. On his return, he gave lectures on pathological anatomy in the "Summer Course" at Jefferson (1866 to 1867). In 1866, while already teaching at Jefferson, Keen became head of the Philadelphia School of Anatomy until its dissolution in 1875. He was then appointed Professor of Artistic Anatomy at the Pennsylvania Academy of the Fine Arts (PAFA), a post he held until 1890. Thomas Eakins (famous artist of the *Gross Clinic*) was his chief demonstrator of anatomy at the Academy from 1876 to 1880,[3] and Eakins was a PAFA faculty member for some years.

FIG. 1. William W. Keen (portrait), 1917, Thomas Jefferson University Archives, Philadelphia, PA, photo collection.

Keen is considered by many to be America's first brain surgeon. He was a general surgeon like the other pioneers who made great contributions in this field. Dr. Keen's most celebrated neurosurgical operation was the removal of an intracranial convexity meningioma from a patient on December 15, 1887, at St. Mary's Hospital in Philadelphia. It was the first brain tumor successfully removed in America, and the patient lived without recurrence for more than 30 years.[4] He was a prolific author with a bibliography of at least 405 items. Of these, 249 were papers on medical, surgical, and allied subjects. The largest group, more than 50, was written on diseases of the nervous system. He wrote on intracranial lesions, tapping and irrigating the lateral ventricles, cortical ablation for focal epilepsy using electrical stimulation, and craniectomy for microcephalus. He wrote, edited, or made neurosurgical contributions to many important textbooks.

In 1876, Keen was the first in Philadelphia to adopt Lister's principles of antisepsis at the St. Mary's Hospital and was closely followed by Samuel W. Gross and J. Ewing Mears in the first detached Jefferson Hospital of 1877. In 1884, he was appointed Professor of Surgery in the Woman's Medical College of Pennsylvania, a post he held until called to Jefferson in 1889 to succeed the younger Gross (Samuel W. Gross) as Chair of the Department of Surgery.

Dr. Edward L. Bauer noted that "William Williams Keen occupied the center of the surgical stage in America and indeed in the world for many years, even after the days of his professorship." Dr. John Fulton in his biography of Harvey Cushing identified Keen as "Cushing's principal predecessor in neurosurgery in this country." Dr. Edward Klopp in the 1936 Jefferson student yearbook remarked that Keen became America's first "brain surgeon" and was regarded as the foremost surgeon in the country.

Dr. Keen's clinics were crowded not only by students, but by visiting surgeons from throughout the United States and foreign countries (Fig. 2). According to Dr. John Chalmers DaCosta, who succeeded Dr. Keen as Chairman of the Department of Surgery at Jefferson: "He had that combination of earnestness and clearness that was absolutely convincing of his own beliefs." DaCosta's opinion of him as a master

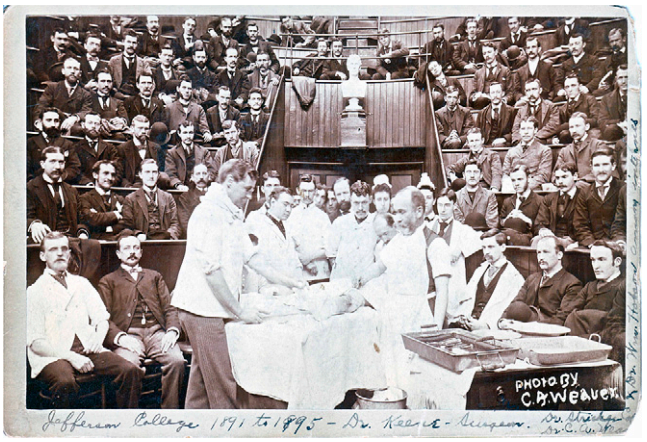

FIG. 2. Keen clinic in surgical amphitheater, Jefferson Medical College, 1890s, Thomas Jefferson University Archives, Philadelphia, PA, photo collection.

surgeon was: "He always showed best when the situation was worst. Dr. Keen was always, calmer, quieter, kinder, pleasanter, the worse the surgical situation was, and I never saw it get the best of him."

In July 1893, Keen was chosen to assist Dr. John D. Bryant in operating on President Grover Cleveland for a verrucous carcinoma of the roof of the mouth. Keen fashioned special instruments in preparation for the surgery. It was performed secretly on board a yacht (the Oneida) off New York Harbor and was a complete success.

As a prolific writer, Keen was in the ranks with Robley Dunglison and Samuel D. Gross. His contributions on anatomical subjects included: Keen's *Clinical Charts* (1870) and *Early History of Practical Anatomy* (1870) and, as editor, *Heath's Practical Anatomy* (1870), Flower's *Diagrams of the Nerves of the Human Body* (1872), *History of the Philadelphia School of Anatomy* (1874), Holden's *Medical and Surgical Landmarks* (1881), and *Gray's Anatomy* (1883) with a subsequent second edition (1887).

In 1893, with J. William White, Keen wrote the first compiled American *Text-Book of Surgery.* It was the forerunner of his eight-volume *Keen's System of Surgery*, which became the pre-eminent text for surgeons of the United States in the first decades of the 20th century (1906 to 1921). In 1904, Keen was 67 years old and thinking of retirement. For a successor, he approached Dr. Harvey Cushing at Hopkins, who declined the honor to be considered as a candidate for the position of Chair at Jefferson. Keen did retire in 1907 at the age of 70 years and was succeeded by John Chalmers DaCosta.

Keen was active in many societies and received many honorary degrees and awards. He was President of the American Surgical Association (1899), of the American Medical Association (1900), of the College of Physicians of Philadelphia (1900), of the International Congress of Surgery in Paris in 1920 (the first American to hold that office), of the Congress of American Physicians and Surgeons (1903), and of the American Philosophical Society (1907 to 1917). In 1913, he was the first surgeon in the United States to accept and have conferred on him an Honorary Fellowship in the American College of Surgeons.

From the Boston Surgical Society he was awarded the Bigelow Gold Medal and from Brown University the Colver-Rosenberger Medal of Honor. He received LL.D. degrees from Brown University (1891), Northwestern and Toronto (1903), Edinburgh (1905), Yale (1906), St. Andrews of Scotland (1911), and the University of Pennsylvania (1919). Jefferson awarded the Sc.D. degree in 1912, and Harvard honored him with the same degree in 1920. The University of Uppsala (Sweden) awarded him a Ph.D. degree in 1907, and in 1923, the University of Paris conferred on him a Doctor, honoris causa. Keen died in Philadelphia on June 7, 1932, at the age of 95 years. After cremation, his remains were buried in Woodlands Cemetery, Philadelphia, and marked by a modest tombstone.

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Intestinal Obstruction from End-to-Side or Side-to-Side Anastomosis Made by a Circular Stapling Device

The use of stapling instruments is an alternative to manual techniques of suturing. The introduction of these instruments has allowed bowel closure and anastomosis to be performed more quickly than the manual alternative. Whether stapled anastomotic techniques are safer than hand-sewn ones is still an open debate.[1] From 2002 to 2010, eight patients with intestinal obstruction result-

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ing from end-to-side or side-to-side anastomosis made by a circular stapling device have been met in our department of general surgery.

In total, eight patients with intestinal obstruction have been observed resulting from end-to-side or side-to-side anastomosis made by a circular stapling device; five cases of intestinal obstruction were diagnosed intraoperatively after the instruments have been fired and removed, and three cases were recognized early postoperatively.

Three cases were total gastrectomies undertaken for gastric cancer and Roux-en-Y end-to-side esophagojejunostomy were carried out with a circular stapling device. Anastomotic block was recognized immediately in these three cases because the nasogastric tube and index finger could not be introduced to the efferent loop. Thereafter, the anastomosis was resected and a new end-to-side hand-sutured esophagojejunostomy was constructed for each of these patients.

One patient underwent a side-to-side gastrojejunostomy (Roux-en-Y) with a circular stapling device because of advanced distal gastric cancer. Anastomotic block was recognized immediately in this case because the nasogastric tube and index finger could not be introduced to the efferent loop. Then the anastomotic stoma was cut and a new Roux-en-Y side-to-side sutured gastrojejunostomy was constructed.

One patient underwent right hemicolectomies with an end-to-side ileocolic anastomosis by a circular stapling device because of colonic cancer. Anastomotic block was recognized immediately in this case because the patency of the anastomosis was carefully assessed using ring forceps. Then the anastomotic stoma was cut and a new end-to-side ileocolostomy was constructed.

Two cases underwent right hemicolectomies and one case left hemicolectomy for colonic cancer and end-to-side ileocolic or colocolic anastomosis was carried out with a circular stapling device. All three cases demonstrated mechanical complete intestinal obstruction after operation, relaparotomies were undertaken, the diagnosis was clarified, and after resection of the anastomosis, a hand-sewn side-to-side anastomosis was performed.

In all eight cases, a 25-mm circular stapling device was used to achieve an acceptable anastomosis diameter.

The mechanisms of the intestinal obstruction made by the circular stapling device are as follows:

1. In the situation that the diameter of the circular stapling device is slightly greater in relation to the luminal diameter of the bowel in which the circular stapling device will and can just be inserted into, the mucosa and submucosa might be pushed forward or slip out of the proper place. Giant rugae of mucosal and submucosal

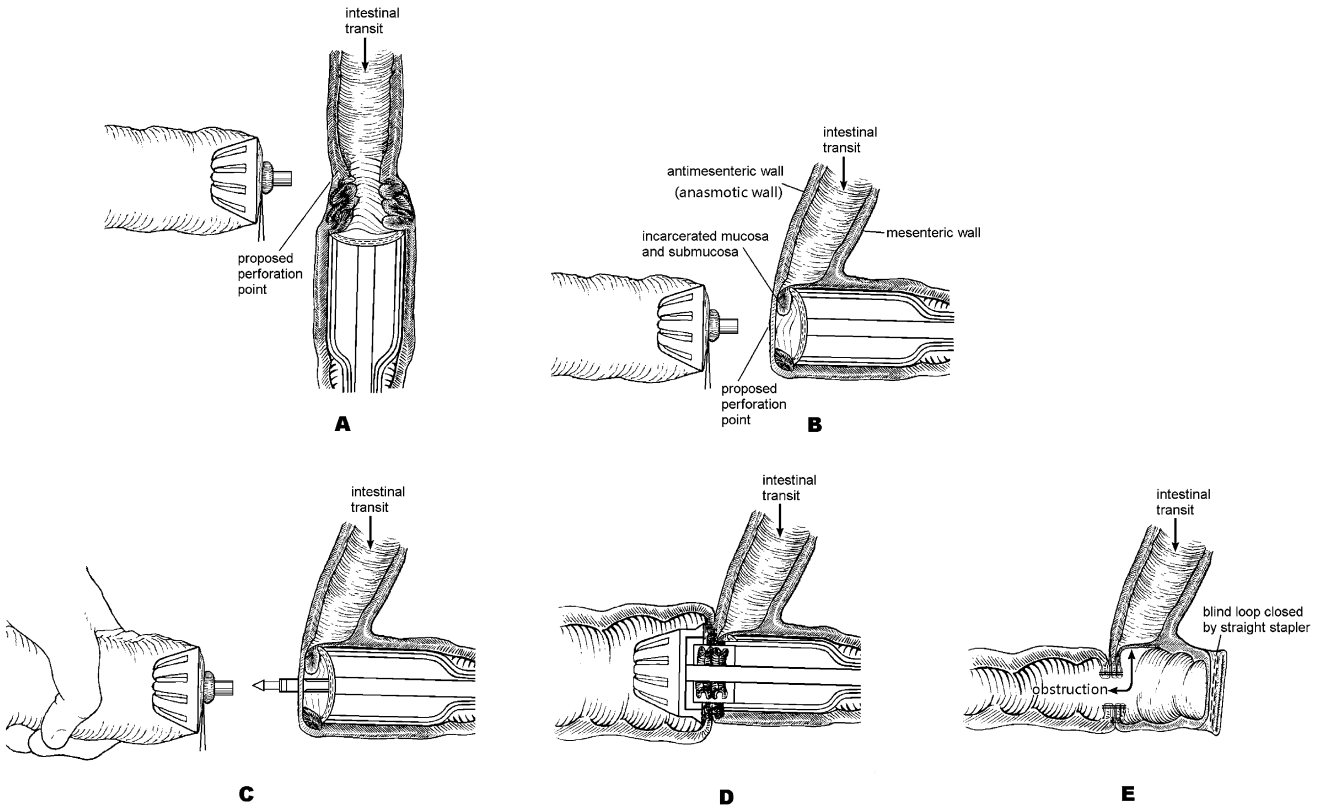

FIG. 1. The mechanisms of the intestinal obstruction resulting from end-to-side or side-to-side anastomosis made by a circular stapling device.

tissue are created in front of the shoulder of the stapling device (Fig. 1A).
2. While turning the cartridge holder 90° for end-to-side or side-to-side anastomosis, the rugal folds of mucosal and submucosal tissue of mesentery wall are pushed to the antimesentery wall (anastomotic wall) (Fig. 1B).
3. When the knob is rotated, it causes the anvil and cartridge segment to approximate and the rugal folds of mucosal and submucosal tissue of mesentery wall is incarcerated (Fig. 1C–D). After firing of the instrument to complete the anastomosis and closing the transversely bowel end, the rugal folds of mucosal and submucosal tissue of the mesentery wall are approximated to the antimesentery wall, and the bowel obstruction is formed (Fig. 1E).
4. If the obstruction is not complete, especially after esophagojejunostomy, the patients report dysphagia. In endoscopy, a mucosal mass might be recognized by the endoscopist, which is causing the relative obstruction. We have to be aware of this problem, especially in patients with a small diameter of the small bowel. In this case, the stapling device has to be pushed in the small bowel lumen with some tension; a mucosal mass might be created causing the described problem to a variable degree.

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Epiploic Appendagitis: A Rare, Often Missed Diagnosis

Epiploic appendagitis is an inflammation of the appendices epiploicae of the colon. It is considered by some to be a self-limiting condition that affects middle-aged men, although a wide age range has been reported.[1] It often presents as abdominal pain rarely accompanied by fever, nausea, or vomiting or any other abdominal symptom. Patients commonly have localized tenderness on examination. Often it is misdiagnosed because the more common diagnoses of abdominal pain like diverticulitis and appendicitis are considered.

The diagnosis of epiploic appendagitis is often by CT, but when unclear, an exploratory/diagnostic laparoscopy is done.

Treatment of this condition can be either conservative using nonsteroidal anti-inflammatory medication (NSAIDs) with close observation and monitoring or surgical by laparoscopy or exploratory laparotomy.

We report on three cases of epiploic appendagitis with different presentations.

First was a 38-year-old, previously healthy man with a 3-day history of left lower quadrant abdominal pain not accompanied by nausea, vomiting, or fever. On examination, he was afebrile with a soft, nondistended abdomen tender in the left lower quadrant and a leukocytosis of 11,600. Differential diagnoses considered were epiploic appendagitis *versus* diverticulitis. CT scan of the abdomen revealed a 3.5-cm inflammatory process in the fat adjacent to the descending and sigmoid junction and no evidence of diverticula. The patient was sent home and treated with NSAIDs with follow-up in the outpatient clinic. His symptoms had resolved and no abdominal signs were present.

The second case was a 23-year-old man with a 1-day history of left lower quadrant pain. He had no other symptoms. He had a similar episode the preceding week, which had resolved spontaneously. He was afebrile with a nondistended soft abdomen with marked point tenderness in the left lower quadrant but no signs of peritonitis. He had no leukocytosis. An abdominal CT showed periappendageal fat stranding along the descending colon (Fig. 1).

A diagnosis of epiploic appendagitis was made. He was initially treated conservatively with NSAIDs but his

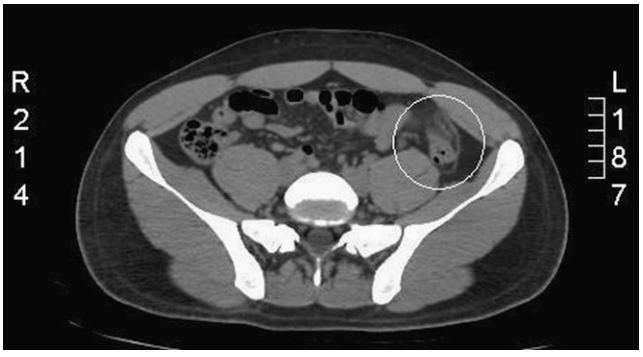

FIG. 1. CT scan of the abdomen showing periappendageal fat stranding along the descending colon.

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symptoms worsened and he subsequently had a diagnostic laparoscopy and a gangrenous and inflamed epiploic appendage of the descending colon was found adherent to the abdominal wall. No other gross abnormality was found. The appendage was ligated and excised with no complications. The patient's condition improved and he was discharged on the second postoperative day. He was followed up in the surgical clinic over the next month with no recurrence of pain.

Third was a case of a 32-year-old man with a 24-hour history of abdominal pain with nausea and vomiting but no changes in bowel movements. He was afebrile with a soft, distended abdomen and periumbilical and left lower quadrant tenderness. He had a leukocytosis of 15,300. An abdominal CT showed partial closed-loop bowel obstruction involving the proximal to mid-jejunum with trace free fluid in the paracolic gutters. A diagnosis of small bowel obstruction was made and he then had a diagnostic laparoscopy. During surgery, segmental dilatation of the small intestine was found with no obvious mechanical cause for obstruction, but there was an inflamed epiploic appendage at the sigmoid colon, which was excised. The patient improved and was discharged on the second postoperative day with no complications. The patient was followed up in the surgery clinic up to 1 month afterward and was symptom-free.

Appendices epiploicae are 50 to 100 small, fat-filled serosa covered sacs measuring 0.5 to 5 cm long. They are located on the three muscle bands and situated along the entire length of the colon attached to the external surface of the colon by vascular stalks made up of one or two end arteries and a venule.[2] Its limited blood supply and pedunculated shape and mobility make appendices epiploicae prone to torsion and ischemic or hemorrhagic infarct. Causes of epiploic appendagitis may be primary as a result of torsion of the epiploic appendages or venous thrombosis of the draining vein of an appendage with resulting inflammation or secondary to an inflammatory condition affecting the nearby colon, e.g., diverticulitis, appendicitis, acute cholecystitis, or pancreatitis. The sigmoid colon and the cecum are the predominant physiological sites of appendagitis with the sigmoid colon more frequently affected than the cecum.

Patients usually are afebrile with localized tenderness but no signs of peritonitis. A mild fever or leukocytosis with nausea and/or vomiting rarely may be present. These symptoms present usually during the acute phase of the illness. Diagnosis could be made by CT scan with typical findings of an oval fat density with a hypodense center along the colon with a thickened rim of peritoneum[3] (as is seen in Fig. 2). Pericolonic fat stranding is also a commonly seen feature, particularly prominent in Figure 2.

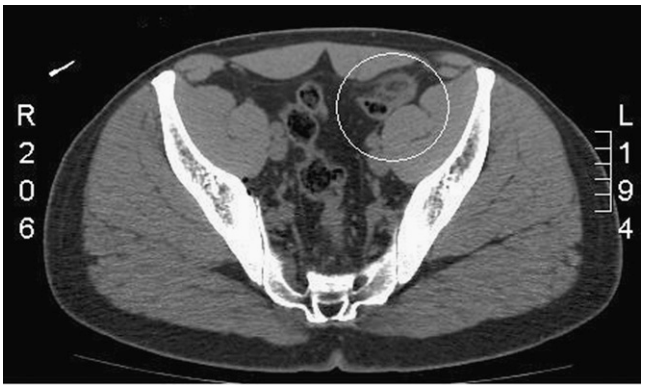

FIG. 2. CT scan of the abdomen showing a 3.5-cm inflammatory process in the fat adjacent to the descending and sigmoid junction.

Treatment is either conservative or surgical. With conservative management, complete resolution usually occurs within 3 to 14 days. In acute cases in which patients present with ischemia, necrosis, or torsion, emergency surgery with excision of the appendices through a laparoscopic or an open approach should be done and has been proven to provide a definite cure with no evidence in the literature indicating otherwise. Epiploic appendagitis can cause significant morbidity and even be fatal with four deaths previously reported in the literature.[4]

In our cases, we had one patient who presented atypically with bowel obstruction and two patients who presented with typical symptoms. In our first two cases, symptomatology was typical and the diagnosis was made on imaging; with the first patient, conservative management was successful. With the second case, conservative management failed and he had laparoscopic excision of the inflamed appendage. Operative management was decided for the last patient. The final outcome was favorable for the three patients, and they were consistent with the available literature with regard to presentation and management.

Epiploic appendagitis is often misdiagnosed in clinical practice because it is considered rare. It is important as a differential diagnosis of left or right lower quadrant abdominal pain. It should be looked for along the entire length of the colon, especially if all the other organs on diagnostic laparoscopy appear normal. Surgical treatment must be considered strongly because it provides a definite cure, especially in the acute phase with complete resolution of symptoms. Conservative management has a higher risk of recurrence with increased morbidity if the condition progresses.

Bringing to light the clinical and radiological features of epiploic appendagitis could help radiologists, surgeons, and primary care physicians avoid missing this early diagnosis and promptly implement early surgical treatment.

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John D. Stewart, M.D. (1903–1983), a Grandfather of Transplants

John Dunham Stewart (Fig. 1) deserves credit as one of the grandfathers of organ transplantation. Residents he trained paved the way for today's transplant surgeons. Research he fostered developed the understanding of the anatomy, physiology, and surgical techniques that led to the present phenomenal success in this field of surgery.

Dr. Stewart was Professor of Surgery at the University of Buffalo from 1941 until his retirement in 1965. He and Dr. John R. Paine of the Buffalo General Hospital alternated the chairmanship in 3-year terms. In 1962, Stewart was named Vice Chancellor for Medical Affairs at the university.

John Stewart was the acknowledged master of subtotal gastrectomy for the management of peptic ulcer disease, including acute bleeding ulcers. His other areas of expertise were shock, hemorrhage, fluid and electrolyte management, surgical nutrition, liver disease and portal hypertension, and abdominal trauma. Medical education and the training of surgical residents were his enduring accomplishments. His residents revered him, although they saw him as "patriarchal, strict and autocratic." He was definitely a gentleman of the old school.

Born in the southeast United States in Monroe, NC, on November 7, 1903, John was the son of Henry Dixon Stewart, M.D., a country physician and farmer who was a former teacher. The family valued education. Dr. John Stewart attended Monroe schools through high school and then entered "Mr. Jefferson's University," the University of Virginia (UVA) where he was inducted into Phi Beta Kappa in his third year. He began his surgical career operating on family livestock.

FIG. 1. John D. Stewart, M.D.

After UVA, Stewart matriculated at Harvard Medical School where his leadership skills were recognized. He was elected class president. He was chosen for Alpha Omega Alpha and graduated *cum laude*. A 2-year surgical internship at the Massachusetts General Hospital followed. Stewart then was accepted as a resident on the academic West Surgical Service under Dr. Edward D. Churchill who became his mentor. He completed his residency in 1934.

For the next several years he worked in the laboratory of Dr. James L. Gamble first as an Edward Hickling Bradley Fellow and later as a Geoffrey Richardson Fellow. These years launched his academic career.[1]

In 1941, Dr. Stewart was named Professor of Surgery and Chairman at the University of Buffalo School of Medicine. Professor Stewart was called to active duty with the Army of the United States in 1943. His former chief Colonel Churchill specifically requested his services as a surgical consultant for the North African Theater of Operations. Dr. Stewart was assigned the topics of shock, hemorrhage, and dehydration to study. In 1944, by then in Italy, he set up a truck-mounted mobile surgical laboratory to study patients in the field. Data he obtained helped "...to make it possible to break the log jam back in Washington and build up a blood transfusion service in the theater."

In 1945, he returned to Buffalo where he spent the remainder of his active clinical career as Chief of Surgery at the Edward J. Meyer Memorial Hospital (now the Erie County Medical Center). There he trained a generation of surgeons who went on to outstanding careers in academic surgery, education, clinical practice, and administration. The surgical research laboratory experience was a vibrant part of resident training. Although Dr. Stewart's primary interest was peptic ulcer disease and gastric surgery, residents in the laboratory pursued a wide range of topics, including the techniques of heart and lung transplantation and the biochemistry

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anatomy and physiology of the liver.[2] Long-term survival of transplanted lungs in related dogs was reported in the 1950s.[3] Translation into clinical surgery awaited the development of effective immunosuppression. This work in the laboratory ultimately contributed to successful human organ transplants.

The mobile surgical laboratory resurfaced. Dr. Stewart had a farm in the South where he raised beef cattle. In an attempt to increase production, he cross-bred a Brahma bull with Black Angus cows. One day he got an urgent message from his farm manager reporting that gravid cows were dying in labor from craniopelvic disproportion. Dr. Stewart directed the laboratory residents to load as much portable equipment as they could carry and drive to the farm. There they spent a day doing cesarean deliveries on the cattle. Afterward, they held a morbidity and mortality conference at which liquid refreshments were served at the end of the day and critiqued their outcomes. The results in the treatment group (cesarean delivery) and the control group (spontaneous delivery) were the same. The series was never published. The residents were sworn to secrecy and returned to Buffalo.

A later resident approached the Professor about a career in academic surgery but had not yet defined an area of interest. There were no immediate faculty positions open but Dr. Stewart envisioned starting a transplant program. He encouraged John C. McDonald to become the Buswell Research Fellow in Immunology at the university. Dr. McDonald became a pioneer in organ transplantation. He performed his first kidney transplant in Buffalo as the Buswell Fellow. McDonald and another Stewart resident, Theodore Drapanas, performed the first human liver transplant in Louisiana where Drapanas was Chairman of Surgery at Tulane. John McDonald then brought organ transplantation to Shreveport and northern Louisiana. He performed more than 2000 transplants and he became a leader in national transplant organizations. Dr. McDonald recently (January 2009) retired as Chancellor of Louisiana State University Shreveport and dean of the medical school after a long and distinguished surgical career. He recognized Dr. Stewart as the influence that directed him to transplant surgery as a career.[4]

John D. Stewart rose to the top rung in American surgery. He held many national positions, including Chairman of the American Board of Surgery and President of the American Surgical Association. He retired in 1965 to Boca Raton. In retirement, he mentored a young academic surgeon at Miami named Hiram Polk.

Dr. Stewart's first paper was published in 1932 while he was a resident. He remained interested and involved in surgical scholarship into retirement.

The enduring legacy of John Stewart is the sense of scientific curiosity and commitment to the craft of surgery that he engendered in his residents and students. The careers of some of them have made organ transplantation today almost as common as surgery for peptic ulcer disease was in Stewart's day.

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Acknowledgments

I thank Elizabeth Tona for her assistance with the preparation of the manuscript and Linda Lohr, History of Medical Collection, Health Sciences Library, State University of New York at Buffalo.

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A Supraclavicular Approach to Thyroidectomy

Cosmetic surgery has become a research focusing on thyroid surgery such as the completely endoscopic thyroid surgery, laparoscopic-assisted small-incision thyroid surgery, and nonendoscopic minimally invasive thyroid surgery. The advantages of beauty and minimally invasion are further recognized. However, these surgical procedures generally apply to cases of small thyroid nodule. According to reports, the indication is limited to cases that are 9.7 to 16.0 per cent.[1, 2] Furthermore, the application of these surgical procedures has been controversial for thyroid cancer and inflammation of the thyroid.[3] Therefore, most patients still need conventional incision surgery.

There will be postoperative scar left in the middle of the neck, which affects the cosmetic results, after conventional thyroid surgery. So we make some

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TABLE 1. *Comparison of Three Surgical Methods*

Methods	Trauma	Special Requirements	Costs	Indication	Recovery	Cosmetic Results	Neck Scar
Supraclavicular	Small	No	Low	Wide	Moderate	Better	Yes but hidden
Conventional	Moderate	No	Low	Very wide	Moderate	Bad	Yes
Endoscopic or minimally invasive	Larger	Endoscope scalpel	High	Limited	Fast	Best	No

improvement on the conventional incision that is moving conventional incision to one side of supraclaviculars. A supraclavicular incision with 4 to 6 cm paralleling to clavicle is made at the outer edge of the sternocleidomastoid on the affected side (if both sides have masses, take the side with the larger tumor). Cut the skin, subcutaneous tissue, platysma, the upper and lower flap (the range between above and below the same as conventional surgery), and then open the neck in front of the sternocleidomastoid longitudinally cut and strap the muscles and retractor to both sides, thereby exposing below the outer side the thyroid. Pull the sternocleidomastoid muscle to the opposite side, and cut and ligate the middle thyroid vein. Reveal the ipsilateral thyroid lobe, free the thyroid upper and lower arteriovenous separately, and then perform subtotal thyroidectomy. If the tumor was single, the mass could be removed alone. Find and protect the recurrent laryngeal nerve in the tracheoesophageal groove. If the exposure of bilateral subtotal thyroidectomy is unsatisfactory, transect part of the anterior muscle. Place a rubber drainage tube in the wound cavity from the incision through the outer edge of the sternocleidomastoid muscle and lead to the rear.

The supraclavicular pathway in the outer edge of the sternocleidomastoid muscle can be covered by the collar and neck-free incision with excellent cosmetic results. This approach has no special requirements on the operative instruments, whereas it can reduce surgical trauma and costs and deal with unilateral or bilateral benign tumors compared with endoscopic surgery. There is no significant difference on operation time, blood loss, complications, hospital stay, or hospital costs compared with conventional surgery (Table 1). This approach is accepted by majority of patients and to easier to promote.

We have improved the conventional surgery that is moving the incision to one side of supraclaviculars, and also we find that patients feel more satisfied with the cosmetic results compared with traditional incisions, because the incision can be well hidden by neck ornaments or a collar. Meanwhile, the approach without ligating the anterior vein and transection cervical muscles and using the method of intradermal sutures reduces venous return disorder and the possibility of the formation of skin scars. Furthermore, the surgical incision is designed well when the patient is sitting, ensuring the incision's completely natural state that guarantees good cosmetic results after surgery.

Surgical indications are greatly improved compared with minimally invasive surgery. The indications are: 1) it applies to most of the conventional approaches of benign thyroid lesion. It is the best indication for unilateral lesion diameter of less than 5 cm, bilateral lesions in the one side less than 5 cm, the other side less than 2 cm and is the first choice for those who have a unilateral lesion for the second surgery; however, it is a relative contraindication for bilateral thyroid masses obviously swelling, for example, both sides greater than 5 cm; 2) thyroid cancer with nonaggressive behavior, tumor size less than 2 cm, and no need for extensive neck dissection; and 3) the thyroid with inflammation and the use of the same incision history of surgery should not be a contraindication for this surgery. Following this standard, the vast majority of thyroid surgery can be completed through this approach compared with endoscopic or minimally invasive surgery.

We have been using this approach in our department for many years since 1999. Between September 1999 and January 2010, we have performed this approach on 505 patients and find that patients who undergo this surgery have better cosmetic results compared with conventional surgery. Surgical complications that could occur from this type of surgery also include hemorrhage, symptomatic hypocalcemia, and laryngeal nerve damage. Three patients (0.59%) had hemorrhage, three patients (0.59%) had temporary symptomatic hypocalcemia, and five patients (0.99%) had transient laryngeal recurrent nerve palsy. The complication rates are consistent with that reported in conventional surgery.[4] A potential disadvantage of a supraclavicular approach to thyroidectomy may be the slightly longer operating time compared with conventional surgery, because the supraclavicular approach gives a narrower surgical view. Hence, surgeons must be familiar with the anatomy of the neck by this approach.

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Sir William Ernest Miles

William Ernest Miles was born in the town of Uppingham, U.K., in 1869.[1–3] Shortly after his birth, he moved to Port of Spain, Trinidad, where his father became headmaster of Queens Royal College.[1–3] In Trinidad, Miles began his early education.[1, 3] Later, Miles would move back to England to attend medical school at St. Bartholomew's Hospital in London. He qualified as a member of the Royal College of Surgeons and Licentiate of the Royal College of Physicians in 1891.[1–3] Three years later at the young age of 25 years, he became a Fellow of the Royal College of Surgeons of England.[1–3] He held many positions in his early career: demonstrator in anatomy at St. Bartholomew's Hospital, house surgeon at St. Mark's Hospital, and house surgeon at the Metropolitan Hospital, all in London, U.K.[1, 3]

While working at St. Mark's and Metropolitan Hospital, Miles became associated with the famous David Goodsall, M.D., a senior surgeon at these institutions at the time.[1, 3] They collaborated on writing the textbook *Diseases of the Rectum and Anus,* its first volume published in 1900.[1] In 1906, Miles devised his famous abdominoperineal operation (Fig. 1) for cancer of the rectum and first performed the operation in January of 1907.[1, 3] He was not the first to perform the combined procedure, but he was the first surgeon with the intent to improve rates of recurrence.[1, 3] Dissatisfied with the rates of recurrence with his perineal excisions (95% early recurrence in 57 patients from 1899 to 1906), he carefully examined the lymphatic drainage of the rectum through anatomic study, distinguishing three separate pathways of spread: upward, laterally, and downward.[1, 3, 4] From these results, he developed an operation for cancer of the rectum that removed not only the rectum itself, but also much of the associated lymphatics along these three defined pathways.[1, 3, 4] Interestingly, he was very close to being cheated of the recognition.[1] In 1908, he had been performing the operation for approximately 2 years and was in no hurry to report it in the medical literature. It was not until Miles heard that a colleague, who had seen him work, was planning to report the operation using his own name that he sprung into action.[1] Miles reportedly wrote the comprehensive report and description of the operation immediately on hearing the news.[1] On finishing, he walked out in the middle of the night to mail it in time for the next issue of *The Lancet*.[1] In 1923, he reported a recurrence rate of 29.5 per cent with the new procedure.[1, 3, 4]

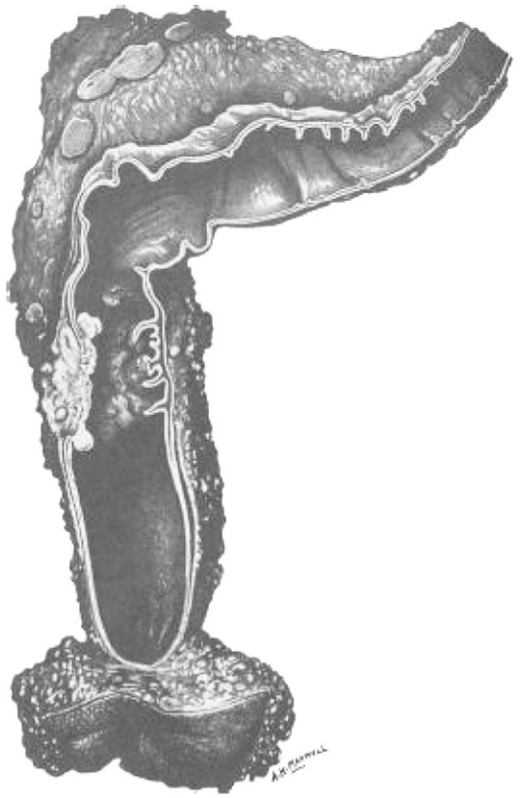

FIG. 1. Specimen after Miles' abdominoperineal resection. Figure originally shown in Miles' Lettsomian lecture on cancer of the rectum in 1923.

Miles' interest and research was not limited to oncology. He was viewed as an expert in hemorrhoid and anorectal fistulae and actively pursued research in both.[1] One of his most famous studies came during the World War I.[1] Miles went overseas with the British Expeditionary Force where he rose to the rank of Lieutenant Colonel and commanded various military hospitals in France and Belgium.[1] In France, he noticed an inordinately large number of men who serendipitously reported acute hemorrhoid exacerbations becoming unfit for duty.[1] He infamously collected 200 of

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these malingerers and operated on them.[1] Postoperatively, they convalesced in two large tents when a bomb from a German plane landed midway between the two tents and exploded killing all but a handful of patients giving this series of hemorrhoidectomies the highest mortality rate ever recorded![1]

In 1930, Miles was the defendant in a legal action for alleged negligence.[1] A hemostat was found in the abdomen of a patient that he had operated on.[1] Instead of avoiding going to court based on the legal technicality of being 6 years removed from the operation, he conducted his own defense.[1] He proved his innocence and cleared his name by reporting that the hemostat, of French manufacture, had been overlooked during a previous surgery undergone in Paris.[1]

Beyond his rectal cancer achievements, Miles was described as a great general surgeon whose hands moved with unhurried speed and efficiency.[1] He could reportedly complete an abdominoperineal resection in 30 minutes![1] Outside of the hospital, Miles was an exercise enthusiast with a proud physique developed through rowing, swimming, tennis, and golf.[1] One of his lifelong loves was horse racing.[1] It is said that if he did not turn up at the hospital, it was only necessary to look up the racing calendar to find out where he was located.[1] As a person, he was described as irascible and uncompromising in that he had little patience with fools and was never afraid to stand up for what he thought was right.[1] Self-effacing, he never sought out publicity, having personal contempt for what some of his contemporaries would do to advance their reputations.[1]

At the age of 78 years, in a conversation with one of his former students visiting him, Miles (Fig. 2) asked "What do the Americans think of my operation now?"[1] His student replied that it was still the standard procedure for cancers of the lower rectum, but some surgeons were trying to conserve the anus when the growth was in the upper rectum or rectosigmoid.[1] He replied, "They are wrong. There is no place for conservatism in the treatment of malignant disease."[1] Dr. Miles died later that year in 1947, but his "Miles procedure" continues on as the foundation of all procedures for curing rectal cancer.

FIG. 2. Sir William Ernest Miles, MD.

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Gastric Heterotopia in the Rectum: A Rare Cause of Rectal Bleeding

The presence of ectopic gastric mucosa has been reported in all levels of the gastrointestinal tract; however, its finding in the rectum is really exceptional, with only 41 cases reported in the medical literature. The precise etiology remains unknown and diagnosis is based on clinicopathological arguments. We describe a 22-year-old man who presented with rectal bleeding. Histological examination of a rectal biopsy revealed heterotopic gastric mucosa. The prime goal of this work was to call the specialist's attention to the necessity of a penetrating diagnosis of nonspecific rectal bleeding. Awareness of the disease is important, particularly in the differential diagnosis of spontaneous rectal bleeding, anal pain, and ulcers of unknown origin presenting in young adults. Clinical diagnostic

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features of this unusual entity as well as the main diagnostic and therapeutic approaches suggested in the literature are commented on here.

A 22-year-old man with no medical history consulted us with 4-month recurrent rectal bleeding not related with stool. The patient denied prior symptoms of the disease and had no history of pain, colitis, infection, or trauma.

Rectal examination was unremarkable except for a soft mass on the anterior wall of the anal canal.

Laboratory studies were within normal limits. Flexible sigmoidoscopy showed a sessile erythematous polyp with raised margins and not ulcerated measuring 7 mm in diameter located anterior at the dentate line (Fig. 1A). The remainder of the sigmoidoscopy showed normal results.

Biopsies of the lesion were obtained and histopathological examination revealed body-type gastric mucosa.

A 99m-technetium–pertechnetate scan showed focal increased uptake in the rectum with no other areas of ectopic gastric tissue.

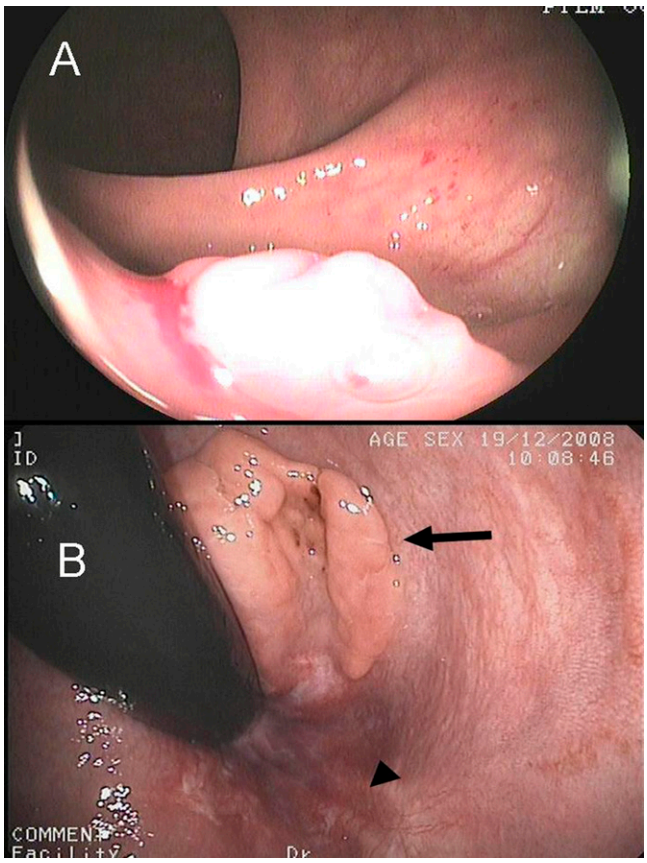

FIG. 1. (*A*) Endoscopic image of the lesion showing a sessile erythematous polyp with raised margins, not ulcerated, measuring 7 mm in diameter located anteriorly at the dentate line. (*B*) Endoscopic control of the lesion showing a new area of ectopic gastric mucosa on the lateral wall of anal canal (arrow) and complete healing of the previous lesion (arrowhead).

On surgery, a nodular mass measuring 7 mm in diameter was found under the dentate line. Complete transanal surgical excision of the mass was performed.

Two years later, the patient remained asymptomatic. However, a new area of ectopic gastric mucosa was found on endoscopic control of the lesion, this time on the lateral wall of the anal canal. Complete healing of the previous lesion was also demonstrated (Fig. 1B). The histological results were consistent with ectopic gastric mucosa. Endoscopic mucosectomy of the lesion was carried out with argon plasma coagulation. Follow-up examination after 1 year revealed complete healing of both areas and the patient remains asymptomatic.

Histologic examination of the specimen demonstrated normal body-type gastric mucosa constituting the totality of the polyp closed to normal rectal mucosa (Fig. 2). The presence of *Helicobacter pylori* was not found in the heterotopic gastric tissue in the rectum.

Described for the first time by Ewel and Jackson in 1939,[1] heterotopic gastric mucosa of the rectum is a truly strange clinical finding even for a very experienced specialist in colorectal surgery with only 41 previous cases reported in the medical literature. It appears with a male predominance (ratio 26:15) and, although usually affects the young and middle-aged, it may present at any age.[2]

Heterotopia is defined as the presence of tissue in an unusual site as the result of alleged "primary displacement" or as a developmental abnormality.[3]

Different theories have attempted to explain the pathogenesis of heterotopic gastric mucosa.[3] It is likely that a combination of these applies to each individual case:

1. During the embryologic development of the stomach between the fourth and seventh weeks of gestational life, the stomach descends through 10 segments as the cephalic end grows forward and the esophagus lengthens. Gastric heterotopia is the result of developmental errors of positioning from failure of descent, most frequently in the esophagus.
2. As sites distal to the foregut, congenital gastric heterotopia may be ascribed to the fact that the cells lining the whole primitive intestinal canal are morphologically identical and are pluripotent.
3. As an acquired condition resulting from metaplasia, following an abnormal regenerative process after mucosal destruction.

The most commonly presenting symptoms are painless rectal bleeding, tenesmus, rectal or perineal ulceration, anal or abdominal pain, or incidentally discovered on colonoscopy.[2–4] It may be associated with congenital anomalies such as rectal duplication and other system abnormalities, including vertebral, digital, and other heterotopia.[2, 3]

The endoscopic appearance used to be a polypoid mass; it has also been described as ulcers, diverticula,

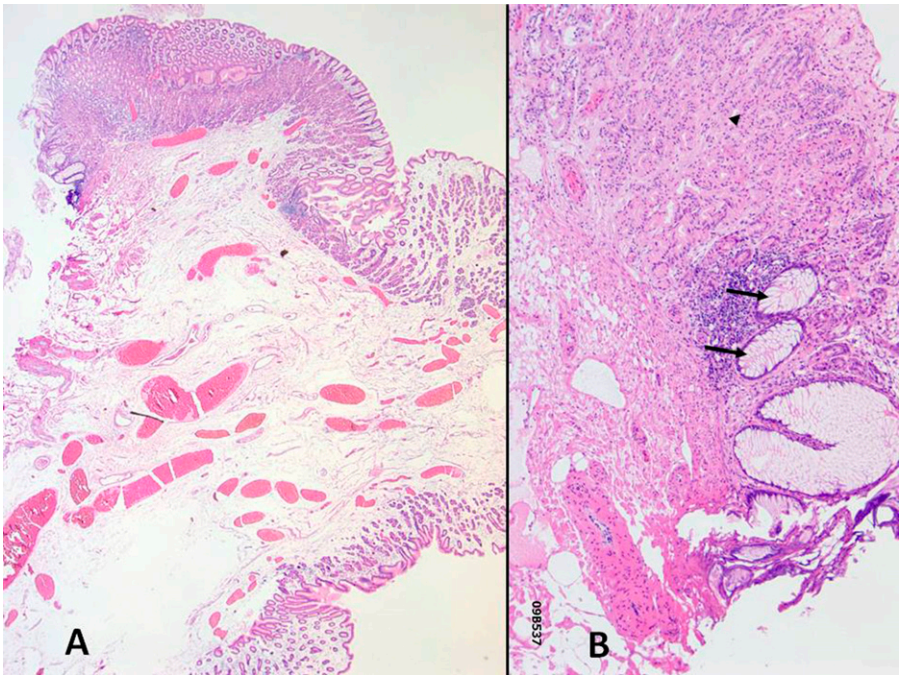

FIG. 2. (*A*) Low-power view of the polypoid lesion showing the mucosa lying on a congestive, vascularized, and edematous pedicle (hematoxylin & eosin, original magnification ×12.5). (*B*) Histological appearance showing colonic glands (arrows) closed to normal gastric body-type mucosa (arrowhead) (hematoxylin & eosin, original magnification ×50).

reddish mucosal plaques, fold, or flaps.[4] Heterotopic gastric mucosa may develop at all levels and in all quadrants of the rectum.[4]

The most reported type of gastric mucosa is fundic or gastric body type followed by a mixture of gastric mucosa.[4] There is only one case reported of pure pyloric type, which was associated with malignancy.[2] The presence of *H. pylori* has been noted in some patients with rectal gastric heterotopic mucosa.[3]

Determination of the rectal pH may be helpful for the diagnosis, with a value of less than 4 being indicative of gastric heterotopy. Noninvasive investigative methods such as serum markers, ultrasonic or technetium scan, and nuclear MRI have not proved sufficiently specific to have found a place in routine diagnosis. Ultrasonography is useful for demonstrating the solid nature of the lesion and the nuclear MRI and the CT scan are helpful to assess the extension of the illness. 99m-technetium-pernechnetate scanning may provide further information, showing increased uptake in the heterotopic tissue of the rectum, which is best observed on a lateral view to prevent obstruction by the bladder. Definitive diagnosis is confirmed by a biopsy, showing the usual morphological features of gastric mucosa.[4]

Conservative medical treatment can attempt to relief of the symptoms with histamine 2 receptor blockers or alkaline enemas, but the symptoms often reappear when the patient stops taking the medication. From our point of view, the most appropriate treatment is the complete excision, either surgical or endoscopic.[3, 4]

Follow-up of the lesions is recommended to avoid possible complications and, like in our case, to rule out residual lesions, recurrence, or malignant degeneration.[3]

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Thomas Dent Mütter: The Humble Narrative of a Surgeon, Teacher, and Curious Collector

Thomas Dent Mütter, a beloved teacher, respected colleague, devoted husband, surgical pioneer, and legendary collector, emerged from a tragic childhood as an ambitious young physician who would leave a permanent imprint on medical education (Fig. 1). Dr. Mütter is best known in the Philadelphia area for the museum of medical curiosities, which bears his name. Overflowing with various medical memorabilia, anatomical and pathological specimens, casts, models, watercolors, and historical instruments, the Mütter Museum often overshadows the numerous other contributions Dr. Mütter made during his shortened life.[1] A quote from Henry Brooks Adams is quite apropos, "A teacher affects eternity; he can never tell where his influence stops."

Thomas Dent Mütter was born on March 9, 1811, in Richmond, VA, to John Mütter (a commission merchant) and Lucinda Gillies Mütter.[1, 2] Misfortune struck in 1813 with the death of his mother, leaving Thomas devoid of siblings.[1, 2] John Mütter contracted tuberculosis in 1817 and sought recovery abroad in Europe, only to die of the disease in 1819 while in Naples. These sad events left Thomas orphaned by the age of 8 years.[1, 2] Robert Carter, a distant maternal relative by marriage, took guardianship of young Thomas.[1, 2]

T. D. Mütter's story, like many of those that have the privilege of being recorded throughout history, moved past its tragic roots and became a tale of inspiration. Thomas was well educated under the guardianship of Mr. Carter, and in 1824, he enrolled at Hampden Sydney College of Virginia.[1, 2] After graduation, his pursuit of medicine began under the tutelage of a Dr. Simms of Alexandria, VA.[1, 2] His journey next brought him to the University of Pennsylvania, where he earned his M.D. degree in 1831 at the age of 20 years.[1, 2] Poor health plagued Thomas Mütter during his time in medical school, prodding a departure from the country immediately after receiving his M.D. degree. This move was made for the dual benefits of a change in climate and novel educational opportunities. He was bound for Europe as the resident surgeon on the English corvette "Kensington."[1, 2]

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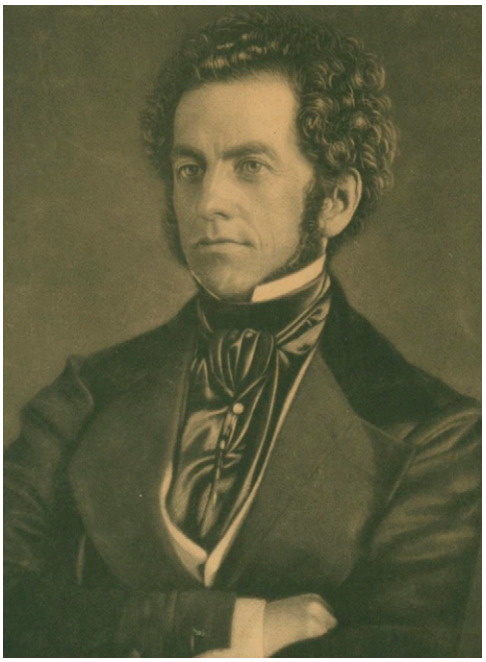

FIG. 1. Photograph AM-096, Archives & Special Collections, Thomas Jefferson University, Philadelphia, PA.

His adventures traversing the ocean led Dr. Mütter to begin his professional development in the epicenter of medicine at the time: Paris.[1, 2] We know few details of the time he spent in "The City of Light," but his experiences there were obviously influential, because his love for all things French was noted by many in the years that followed. Mütter studied under the famed French surgeon Guillaume Dupuytren during his relatively short period abroad (1831).[3] He spent a shorter period of time studying under the similarly famed surgeons of London before returning to the United States in 1832.[1, 2] Dr. Mütter was later known to "name-drop" his acquaintances Guillaume Dupuytren, Pierre Charles Alexandre Louis, and Robert Liston during lectures, deeply impressing his pupils.[1]

Dr. Mütter immediately began the slow and laborious process of establishing a new practice in Philadelphia.[2] Although Dr. Mütter had been teaching informally since 1832, the start of his teaching career did not truly begin until Dr. Thomas Harris invited him to be an Assistant Teacher of Surgery in 1835 at a summer school of medicine—the Philadelphia Institute.[1, 2, 4] He quickly earned the distinction of being elected a Fellow of the College of Physicians in 1836.[3] Dr. Mütter's reputation as an enthusiastic and mesmerizing orator, along with his growing notoriety as a skilled surgeon, led to his appointment as Professor of Surgery at Jefferson Medical College in 1841.[1–3] The reorganization of the Jefferson Surgery Department that year resulted in the "Famous Faculty of '41": Robley Dunglison, Joseph

Pancoast, Charles D. Meigs, John K. Mitchell, Robert M. Huston, Franklin Bache, and Thomas D. Mütter.[3]

Dr. T. D. Mütter relished the opportunity to treat the most difficult cases and "rescue a patient from present suffering or impending danger."[2] He was best known for his talents in the field of reconstructive surgery, most notably: cleft palate and lip, clubfoot, strabismus, rhinoplasty, and deformities caused by contractures.[3, 4] His innovative surgical techniques proved truly heroic for his patients who were enduring the social consequences of aberrance in the Victorian era. These creative approaches amounted to quite an impressive record of operative outcomes (Fig. 2).[1] However, credit must also be given to his close adherence to aseptic technique at a time preceding Pasteur's "Germ Theory."[1]

The aforementioned accomplishments might not have ensured a place in history, but fortunately, Dr. Mütter also pioneered the use of general anesthesia in Philadelphia. Crawford Williamson Long is now recognized as the first to anesthetize a patient in 1842, but his methodical collection of other cases delayed any public knowledge of this medical milestone.[1] William T. G. Morton of Boston, on the other hand, made a dramatic public announcement concerning his use of ethyl ether anesthesia on a patient in October 1846.[1, 3] Within 1 month, Dr. Mütter became the first to use ether in a case in Philadelphia.[1, 3]

Dr. T. D. Mütter was perhaps best known among his contemporaries (including Joseph Pancoast and Samuel D. Gross) as an immensely popular teacher.[1, 2, 4] His abilities as an educator were complimented by the tangible teaching aides he provided for students at Jefferson—his famous collection of medical oddities and catalog of disease states.[1]

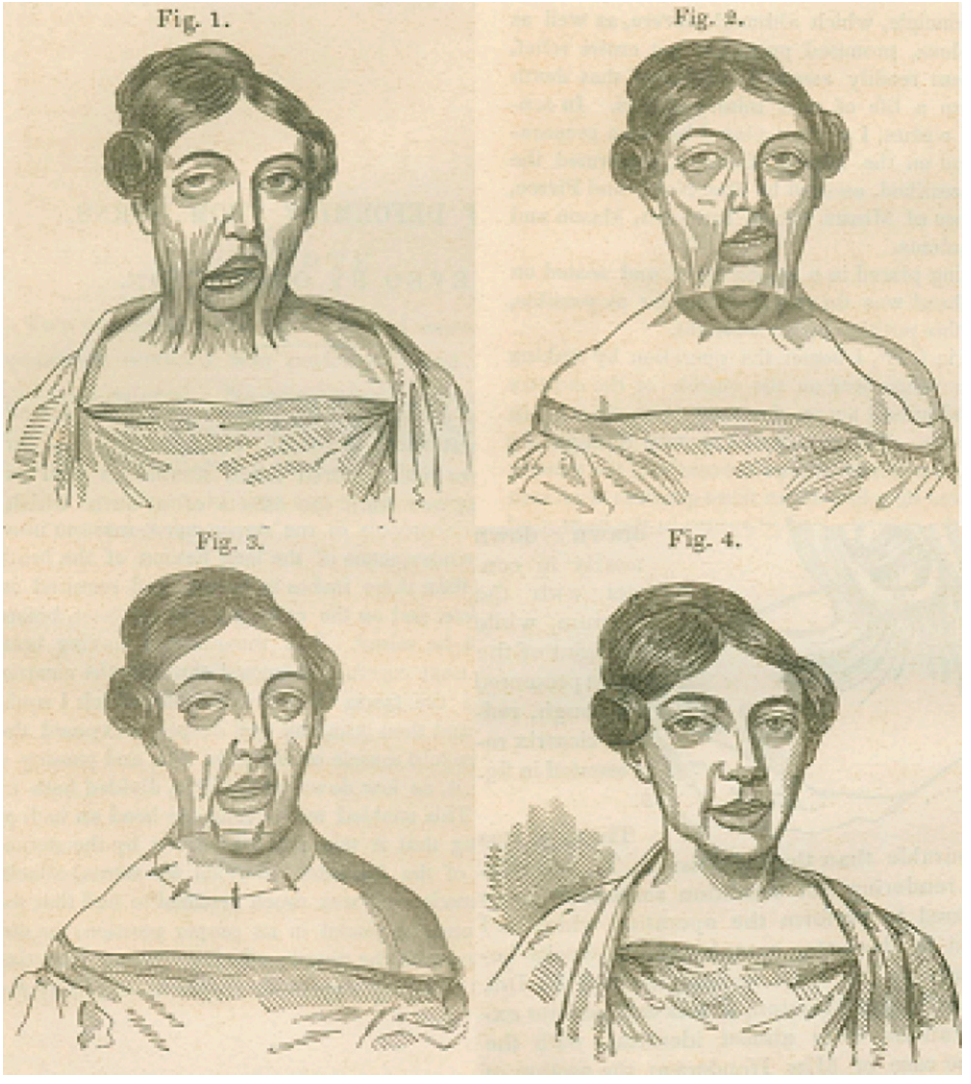

FIG. 2. Mütter TD. *Cases of Deformity from Burns, Successfully Treated by Plastic Operations*. Philadelphia: Merrihew & Thompson; 1843.

Dr. Mütter developed chronic gout and tuberculosis-related pulmonary hemorrhages, which forced his retirement in 1856, thus making him the first to leave the iconic Jefferson faculty, which had lasted 15 years.[2, 3] Jefferson's appreciation for his contributions was made clear when Dr. Mütter was unanimously elected Professor Emeritus in 1857.

Dr. Mütter returned to France in October 1856 in hopes that the European climate might restore his health (an ending ominously foreshadowed by his father).[2] Unfortunately, his health also continued to decline and in 1858, he relocated to sunny Charlestown, SC.[2] The remedy was insufficient and Dr. Mütter eventually succumbed to the unglamorous, yet fittingly realistic nemesis of poor health. He died of consumption on March 19, 1859, at the age of 48 years.[2, 3] Dr. Mütter was survived by his wife, Mary Alsop Mütter, who buried him in Middletown, CT, and erected a church in memoriam.[3, 4]

It was not until December 1858, 3 months before his death, that Dr. T. D. Mütter agreed to bequeath his collection of over 1700 items to the College of Physicians of Philadelphia along with $30,000 for maintenance and the establishment of a namesake lectureship.[1, 3, 4]

The Mütter Museum is now a snapshot in the timeline of medical history as a self-proclaimed, "pre-bacteriological, pre-genetic conception of disease and pathology."[3] It demands notice with such prizes as: the extensive Joseph Hyrtl skull collection, the adipocerous "Soap lady," Lincoln assassination memorabilia, and the conjoined liver of the original Siamese twins, Chang and Eng Bunker.[3] The museum is also home to the tumor removed from the left maxilla of President Grover Cleveland by later Jefferson surgeon, Dr. W. W. Keen.[3]

Dr. Thomas Dent Mütter's life was just another example of the "American Dream" ethos—rising from tragedy to ambitiously carve his place in history. To pay our proper respects to the hero of this narrative, by all means, we encourage a trip to his museum. However, we hope that while visiting, you also dwell on Dr. T. D. Mütter's worthy pioneering efforts in the fields of reconstructive surgery, anesthesia, and medical education.

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