Low Anterior Rectosigmoid Resection With Double Stapling Technique For Colorectal Anastomosis



Step 1: Stapling of the Rectum Distal to the Tumor

Following mobilization of the future specimen, the rectum is stapled on the specimen side below the tumor and the anorectal canal is irrigated to clear it of debris and intraluminal tumor cells that might jeopardize the short- and long-term health of the anastomosis.



Part 2: Transection of the Specimen and Placement of the PURSTRING™

The rectum is then closed at the elected site of resection using the Roticulator[™] instrument that is easier to place, particularly deep in the male pelvis. The handles of the instrument are compressed and a double row of linear staples are placed. With the Roticulator[™] instrument in place, a right angle clamp is applied to the specimen side and the lower rectum is transected using the superior edge of the stapler as a

guide. The instrument is removed and the linear closure of the rectal stump is inspected. Proximally, the sigmoid colon can be prepared directly at the site of the elected resection with the Purstring[™] instrument and transected along the instrument edge above a distal clamp.



Step 3: Placement of the EEA[™] Stapler and Anvil

Since the caliber of the anastomosis depends on the diameter of the proximal colon, the luminal cross-section is measured to select the appropriate EEA[™] instrument. The anvil is separated from the instrument and inserted into the proximal colon. The purse-string suture is tied around the anvil shaft. Next, the cartridge-carrying instrument is inserted transanally and gently advanced against the linear rectal closure. A small incision at the midpoint of this closure aids the passage and advance of the center rod of the instrument.



Step 4: Joining of the EEA[™] Anvil and Anvil Retainer

The anvil shaft and center rod are joined. The anvil is closed against the cartridge, taking care to catch no extraneous tissue in this closure, while holding the bowel ends snug against the cartridge and anvil to prevent bunching or pleating of tissue within the anastomosis.



Step 5: Closure and Firing of the EEA[™] Stapler

The instrument is activated placing a double staggered circle of staples joining rectum to colon, while the circular blade cuts through the colon and stapled rectal stump creating the stoma.



Step 6: The Completed Anastomosis

Following instrument removal, the excised tissue "donuts" remaining within the instrument are examined to ensure that all tissue layers are present within the intact donuts. The anastomosis is checked for hemostasis and competency, with special emphasis on the crossings of circular and linear staple lines.