

COLON AND RECTAL SURGICAL ASSOCIATES

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Colon and Rectal Surgery

New in 2007

Colon and Rectal cancer mortality on the decline... Good News!

It appears that early detection and removal of pre-malignant polyps, or frank malignancies, has resulted in an overall decreased death rate from cancers of the colon and rectum. From 1990 to 2003, the endpoint of the study period, the death rate attributable to colon and rectal cancer in men decreased 2.1% annually. From 1984 through 2003, the decrease was 1.9% annually for women. These numbers are statistically significant and can be attributed to increased public awareness of colonic diseases, coupled with earlier and more regular colon screening. Pre-malignant polyps and malignancies of the colon and rectum are being discovered while in earlier stages of the disease.⁽¹⁾

Increased Risk of Rectal Cancer After Prostate Radiation... Worrisome Reports

A retrospective study from the University of Minnesota revealed a disturbing increase in the rate of rectal cancer in men treated with prostatic radiation for prostatic cancer.⁽²⁾ The study evaluated 85,815 men with prostate cancer from 1973 to 1994. One group of patients received only radiation therapy, and the other group underwent surgery without radiation. During nine years of follow up, the rate of rectal cancer in the radiated group was 10 per 1,000 compared to 5.1 per 1,000 treated with surgery alone. There were no differences in cancer rates in non-irradiated colonic tissue. The authors of this study

did not suggest making changes to the prostate cancer radiation regimen. However, they did suggest that irradiated prostate cancer patients should be followed closely with endoscopic surveillance beginning five years after radiation. Additionally, the authors speculated that all patients who have received pelvic irradiation for any pelvic malignancy might be at increased risk for the development of rectal cancer.

Preoperative Radiation for all Rectal Carcinomas... More Good News!

A large prospective, randomized trial involving 1,350 patients demonstrated that preoperative radiation is beneficial for all stages of rectal cancer located less than 15 cm from the anal verge.⁽³⁾ Preoperative radiation decreased the local recurrence rate and improved the frequency of disease-free survival at three years after treatment. This difference was even more pronounced after five years. Until this confirmatory study, there was no conclusive data to substantiate a benefit in irradiating T1 or T2 tumors. This study also demonstrated that all tumor stages benefited from preoperative radiotherapy. Even favorably staged tumors showed improved survival statistics. The beneficial effect may result from "sterilizing" the operative field, shrinking the primary tumor, or sealing the efferent lymphatic channels. In the United States, there is now a developing trend toward treating all rectal cancers with preoperative radiation.

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SECCA Procedure for Fecal Incontinence

Fecal incontinence, in which there is uncontrolled leakage of gas, stool, or mucus, can be a socially and psychologically debilitating condition. Treatment may involve biofeedback, perineal exercises, medication, diet modification or operative intervention to repair an anatomic sphincter defect. The results are variable and inconsistent with each form of treatment. A new and novel treatment, the Secca procedure, was approved in 2002 by the U.S. Food and Drug Administration. The Secca procedure was developed in an attempt to treat incontinence nonsurgically in an outpatient setting. The Secca system consists of a clear anoscopic hand piece with 4 curved nickel-titanium needles. The hand piece is placed into the anal canal while the patient is under mild sedation. The needles are then deployed into the internal anal sphincter and radio-frequency energy is delivered through the needles. The radio-frequency energy creates microscopic scarring and fibrosis. The scarring in turn tightens the anal sphincter. The Secca anoscope is sequentially rotated to treat all four quadrants of the anal canal.

Studies to date have demonstrated that the Secca system is safe and significantly improves continence and quality of life. Although still awaiting long-term studies, Secca is presently being added to the armamentarium of treatments for fecal incontinence.

PPH (Procedure For Prolapse and Hemorrhoids)... Once new, now traditional.

PPH is no longer considered to be a new procedure. In fact, it is the procedure of choice when treating patients with grade III hemorrhoids and in selected patients with symptomatic grade II or grade IV hemorrhoids. PPH has proven to be safe and curative and associated with a very low complication or recurrence rate. As it can be a technically demanding procedure, special credentialing is required by all surgical departments. Results of short and long term studies have been excellent and have corroborated that patients undergoing a PPH return to the activities of daily life quicker and with much less discomfort than do patients who have undergone a traditional, excisional hemorrhoidectomy.

STARR

An interesting and relatively new variation in the use of the PPH stapler is now being evaluated. It is called Stapled Transanal Rectal Resection, or STARR. The procedure is used to treat patients with Obstructive Defecation Syndrome, or ODS.

ODS is a form of chronic constipation primarily affecting women. The symptoms of ODS include prolonged straining in order to have a bowel movement and incomplete elimination. Those suffering from ODS often require routine use of laxatives or enemas, multiple trips to the bathroom, or other assistance, such as inserting fingers into the vagina or anus to help pass the stool. Etiologies include multiple or difficult childbirths or anatomic abnormalities.

Using the PPH stapler, STARR is performed through the anus, requires no external incisions, and leaves no visible scars. The procedure removes the excess rectal tissue, thus removing the anatomical defects that cause ODS. When performed by experienced surgeons, the procedure allows for a relief of symptoms and shorter recovery time when compared with traditional surgical procedures.

A recent pilot study of the STARR procedure in 43 women with ODS yielded encouraging results. This study represents the first long-term experience with STARR.⁽⁴⁾

A United States study demonstrated that STARR significantly reduced ODS symptoms and significantly improved the quality of life for ODS patients. Furthermore, researchers documented that the benefits of the STARR procedure were sustained at the one-year follow-up.⁽⁵⁾ European investigators have also reported benefits in patients treated with Stapled Transanal Rectal Resection.

Natural Orifice Transluminal Endoscopic Surgery (N.O.T.E.S.) and Endoluminal Surgery... Scarless surgery of tomorrow may be just around the corner.

Natural Orifice Transluminal Endoscopic Surgery (N.O.T.E.S.) and endoluminal surgery are both novel and controversial extensions of minimally invasive laparoscopic or endoscopic surgery. However, in Natural Orifice Transluminal Endoscopic Surgery and in endoluminal surgery, the body's natural orifices, such as the stomach or colon respectively, are used to gain entry into the abdominal cavity. Supporters of these techniques tout advantages such as a lack of postoperative pain, and fewer intraabdominal adhesions and therefore a lower frequency of postoperative bowel obstructions.

Numerous challenges stand between the technology of today and the "scarless abdominal surgery" of tomorrow. The clinical application of these techniques is still on the distant, but visible horizon.

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