FORUM

Surrogate end points in clinical research: hazardous to your health.
Grimes DA, Schulz KF
Obstet Gynecol 2005 May;105(5):1114-8.
Surrogate end points in clinical research pose real danger. A surrogate end point is an outcome measure, commonly a laboratory test, that substitutes for a clinical event of true importance. Resistance to activated protein C, for example, has been used as a surrogate for venous thrombosis in women using oral contraceptives. Other examples of inappropriate surrogate end points in contraception include the postcoital test instead of pregnancy to evaluate new spermicides, breakage and slippage instead of pregnancy to evaluate condoms, and bone mineral density instead of fracture to assess the safety of depo-medroxyprogesterone acetate. None of these markers captures the effect of the treatment on the true outcome. A valid surrogate end point must both correlate with and accurately predict the outcome of interest. Although many surrogate markers correlate with an outcome, few have been shown to capture the effect of a treatment (for example, oral contraceptives) on the outcome (venous thrombosis). As a result, thousands of useless and misleading reports on surrogate end points litter the medical literature. New drugs have been shown to benefit a surrogate marker, but, paradoxically, triple the risk of death. Thousands of patients have died needlessly because of reliance on invalid surrogate markers. Researchers should avoid surrogate end points unless they have been validated; that requires at least one well done trial using both the surrogate and true outcome. The clinical maxim that "a difference to be a difference must make a difference" applies to research as well. Clinical research should focus on outcomes that matter.

A new colonialism?--Conducting clinical trials in India.
Nundy S, Gulhati CM
N Engl J Med 2005 Apr 21;352(16):1633-6.

Evidence-based Medicine in Surgical Decision Making.
Lacaine F
World J Surg 2005 Apr 14;.
There are now five classic steps for analysis of diagnostic and therapeutic medical decision-making policies: (1) formulate a clear clinical question based on a particular patient's problem; (2) search the literature for relevant clinical articles; (3) evaluate the evidence for its validity and usefulness; (4) implement useful findings into clinical practice; (5) audit the validity of the process. The clinician must have the necessary skills to appraise critically the information retrieved. Rather than focusing on the discussion and conclusion sections of articles, the reader should concentrate on the review of the methods and results sections to formulate an opinion regarding the strength of evidence presented in the paper. The process is intellectually demanding and difficult to achieve. This particular step in the validation of evidence implies that each clinician must be methodologically and statistically sound, an "expert," capable of analyzing the method used in that particular publication to achieve the published result.

How To Analyze an Article.
Urschel JD
World J Surg 2005 Apr 21;.
In clinical research investigators generalize from study samples to populations, and in evidence-based medicine practitioners apply population-level evidence to individual patients. The validity of these processes is assessed through critical appraisal of published articles. Critical appraisal is therefore a core component of evidence-based medicine (EBM). The purpose of critical appraisal is not one of criticizing for criticism's sake. Instead, it is an exercise in assigning a value to an article. A checklist approach to article appraisal is outlined, and common pitfalls of analysis are highlighted. Relevant questions are posed for each section of an article (introduction, methods, results, discussion). The approach is applicable to most clinical surgical research articles, even those of a nonrandomized nature. Issues specific to evidence-based surgical practice, in contrast to evidence-based medicine, are introduced.

How to Appraise a Diagnostic Test.
Bhandari M, Guyatt GH
World J Surg 2005 Apr 14;.
Clinicians frequently confront challenges when using diagnostic tests to help them decide whether the patient before them suffers from a particular target condition or diagnosis. The primary issues to consider when determining the validity of a diagnostic test study are how the authors assembled the patients and whether they used an appropriate reference standard in all patients to determine whether the patients did or

did not have the target condition. Surgeons should be interested in the characteristics of the test that indicates the direction and magnitude of change in the probability of the target condition associated with a particular test result. The likelihood ratio best captures the link between the pretest probability of the target condition and the probability after the test results are obtained (also called the posttest probability). Many studies, however, present the properties of diagnostic tests in less clinically useful terms: sensitivity and specificity. Sensitivity denotes the proportion of people with the disorder in whom the test result is positive. Specificity denotes the proportion of people without the disorder in whom the test result is negative. Application of the guides presented in this article can allow surgeons to assess critically studies regarding a diagnostic test.

1 – THE PELVIC FLOOR

Lower urinary tract symptoms and pelvic floor muscle exercise adherence after 15 years.

Bo K, Kvarstein B, Nygaard I

Obstet Gynecol 2005 May;105(5):999-1005.

OBJECTIVE: Pelvic floor muscle training effectively treats female stress urinary incontinence. However, data on long-term efficacy and adherence are sparse. Our aims were to assess current lower urinary tract symptoms and exercise adherence 15 years after ending organized training. METHODS: Originally, 52 women with urodynamic stress urinary incontinence were randomly assigned to home or intensive exercise. After 6 months, 60% in the intensive group were almost or completely continent, compared with 17% in the home group. Fifteen years later, all original study subjects were invited to complete a postal questionnaire assessing urinary symptoms (using validated outcome tools) and current pelvic floor muscle training. RESULTS: Response rate was 90.4%. There were no differences in any urinary outcomes or satisfaction between the 2 study groups as a whole or when restricted to those without intervening stress urinary incontinence surgery. One half of both groups had stress urinary incontinence surgery during the 15-year follow-up period. Twenty-eight percent performed pelvic floor muscle training at least weekly; this rate did not differ by original group assignment or operated status. More operated women reported severe incontinence (P = .03) and leakage that interfered with daily life (P = .04) than did nonoperated women. There were no other differences between operated and nonoperated women. CONCLUSION: The marked benefit of intensive pelvic floor muscle training seen short-term was not maintained 15 years later. Long-term adherence to training is low. Urinary symptoms were equally common in both operated and nonoperated women. Further studies are needed to understand factors associated with long-term effectiveness of stress urinary incontinence treatments. LEVEL OF EVIDENCE: I.

2 – FUNCTIONAL ANATOMY

Visualization of the endopelvic fascia by transrectal three-dimensional ultrasound.

Reisinger E, Stummvoll W

Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 14;.

The aim of our pilot study was to explore the feasibility of visualizing the endopelvic fascia by transrectal three-dimensional (3D) ultrasound. Transrectal 3D ultrasound was performed in 12 nulliparous women and 11 women with a history of vaginal delivery. A 6-10 MHz volume probe was used to examine the suburethral anterior vaginal wall. In all women, an echogenic layer was identified at an average of 3-5 mm from the vaginal surface. This echogenic layer was found to be contiguous to the lateral pelvic sidewall and uninterrupted in 10 of 12 nulliparous women, whereas gaps in this layer were identified in all 11 parous women. We hypothesize that this echogenic layer may represent the suburethral component of the endopelvic fascia. Depending on the number and localization of the interruptions in this echogenic layer, the mechanical support of the pelvic floor seems to be weakened corresponding to a higher incidence of descensus of the anterior vaginal wall, which frequently was associated with urinary incontinence.

[Physiology of the anal and urinary sphincter apparatus for continence]

Leroi AM, Le Normand L

Prog Urol 2005 Feb;15(1):123-48.

This report of the 27th congress of the Societe Internationale Francophone d'Urodynamique (SIFUD) describes the mechanisms which allow the anal and urethral sphincter apparatus to ensure faecal and urinary continence. It successively described sphincter anatomy, the structure and ultrastructure of its muscle components, its innervation, neurotransmission and functioning regimens at rest, on effort and on straining. This study illustrates the differences but also the similarities of functioning of these two sphincter apparatuses. This can explain the high frequency of associated urinary and anal incontinence.

The puborectalis muscle.

Azpiroz F, Fernandez-Fraga X, Merletti R, Enck P
Neurogastroenterol Motil 2005 Jun;17 Suppl 1:68-72.
Abstract The role of the levator ani and puborectalis muscle in preserving continence has been underestimated in the past, due predominantly to technical difficulties to investigate its proper function in healthy subjects, and its dysfunction as in patients with incontinence problems. This has recently been overcome by applying new investigational procedures such as a perineal dynamometer which measures the traction exerted by the levator ani on an intrarectal balloon catheter, or by multi-electrode arrays recording the generation of motor unit action potentials from various parts of the puborectalis muscle sling via intrarectal surface electrodes. Both techniques have the potential to provide new insights into the physiology of defecation and the pathophysiology of incontinence and constipation.

The external anal sphincter and the role of surface electromyography.
Enck P, Hinninghofen H, Merletti R, Azpiroz F
Neurogastroenterol Motil 2005 Jun;17 Suppl 1:60-7.
Abstract Assessment of the neuronal control of the external anal sphincter (EAS) has long been restricted to investigating patients with defecation disorders by invasive tools such as needle electromyography (EMG), while less invasive techniques have been regarded as non-suitable for diagnostic purposes. Multichannel surface EMG by means of electrode arrays applied to anal sphincter muscle records and identifies individual motor unit action potentials, their place of origin along the circumference, their repetitive firing frequency, and their progression along the muscle fibres at different levels within the anal canal. These data shed doubts on conventional knowledge about the anatomy of the EAS muscle, and confirms new concepts of anatomical differences between gender. This may eventually be transferred to a new understanding of the role of symmetry and asymmetry of pelvic floor innervation and its role in the pathogenesis of fecal incontinence.

The internal anal sphincter: regulation of smooth muscle tone and relaxation.
Rattan S
Neurogastroenterol Motil 2005 Jun;17 Suppl 1:50-9.
Abstract Basal tone in the internal anal sphincter (IAS) is primarily myogenic. Neurohumoral substances like angiotensin II may partially provide external signal for the basal tone in the IAS. The sphincteric relaxation on the contrary is neurogenic by activation of non-adrenergic non-cholinergic (NANC) nerves that release nitric oxide (NO), vasoactive intestinal polypeptide (VIP) and perhaps carbon monoxide. Because of the presence of spontaneous tone, the IAS offers an excellent model to investigate the nature of the inhibitory neurotransmission for NANC relaxation. Work from different laboratories in different species concludes that NO is the major contributor in the NANC relaxation. This may invoke the role of other inhibitory neurotransmitters such as VIP, working partly via NO. An understanding of the basic regulation of basal tone in the IAS and nature of inhibitory neurotransmission are critical in the pathophysiology and therapeutic potentials in the anorectal motility disorders.

The ileocolonic sphincter.
Malbert CH
Neurogastroenterol Motil 2005 Jun;17 Suppl 1:41-9.
Abstract The human ileocolonic sphincter (ICS) develops a sustained tone mainly due to propagated and not propagated phasic motor activity. The ileocaecocolonic segment is also able to behave, yet uncommonly, as a synchronized segment involving propagated contractions originating from the ileum and migrating to the proximal colon. The ICS motor activity alone has a limited role towards forward flow. On the contrary, the functional entity corresponding to the distal ileum and the ICS provides a clearance mechanism for reflux of colonic contents into the small intestine. The presence of short chain fatty acids (SCFA) in the distal ileum, sensed either by endocrine cells or chemo-sensitive vagal afferents, is an important actor in triggering this clearance mechanism. The ICS tone is in part myogenic but a neuronal nitrergic component is also involved. Reflex excitatory and inhibitory responses of the ICS originating from ileal or colonic distension involve primarily spinal nitrergic and adrenergic pathways.

Gastrointestinal sphincters: up and down and ups and downs.
Diamant NE
Neurogastroenterol Motil 2005 Jun;17 Suppl 1:1-2.

Innervation of the female human urethral sphincter: 3D reconstruction of immunohistochemical studies in the fetus.
Karam I, Droupy S, Abd-Alsamad I, Uhl JF, Benoit G, Delmas V
Eur Urol 2005 May;47(5):627-33; discussion 634. Epub 2005 Jan 19.
OBJECTIVES: The precise location, origin and nature of nerve fibers innervating the urethral sphincter have

not been clearly established. Classical anatomical studies based on cadaver dissections have provided conflicting results concerning the location of pudendal and autonomic nerve fibers. This study was designed to identify nerve fibers innervating the urethral sphincter and to provide a three-dimensional representation of their tissue relations in the female human fetus. MATERIALS AND METHODS: Histology and immunohistochemistry (Masson's Trichromic, Luxol Fast Blue, Protein S 100 immunostaining and smooth fiber actin immunostaining) were performed on the external urethral sphincter of ten female fetuses with a crown-rump length of 112 to 340mm. Three-dimensional reconstructions of the urethral structure and innervation were obtained from serial sections using Surf Driver 3.5.3 software (David Moody and Scott Lozanoff). RESULTS: Three-dimensional reconstructions of the same sections with different stains demonstrated the precise structure of the muscle layers (smooth and striated muscle fibers) and nerve fibers (myelinated and unmyelinated) and their relations with the urethra and vaginal wall. The proximal third consisted of a circular smooth muscle sphincter, the middle third consisted of two circular layers of smooth and striated muscle fibers and the distal third consisted of a circular layer of smooth muscle fibers surrounded by an omega-shaped layer of striated muscle fibers. In the proximal third of the urethral sphincter, myelinated fibers were identified running with unmyelinated fibers from the pelvic plexus. These fibers were closely related to the lateral and anterior aspects of the vagina. Unmyelinated fibers entered the smooth muscle part of the sphincter at 4 o'clock and at 8 o'clock. Most myelinated fibers entered the sphincter at 3 o'clock and at 9 o'clock. CONCLUSION: Histological and immunohistochemical three-dimensional reconstruction of the anatomical structures of the urethral sphincter provides a better understanding of the origin and nature of the Innervation participating in urinary continence. It provides a very informative view of the three-dimensional arrangement of sphincter muscle layers.

Distinct Roles of Nitric Oxide Synthases and Interstitial Cells of Cajal in Rectoanal Relaxation.
Terauchi A, Kobayashi D, Mashimo H
Am J Physiol Gastrointest Liver Physiol 2005 Apr 21;.
Nitric oxide (NO) relaxes the internal anal sphincter (IAS), but its enzymatic source(s) remains unknown; neuronal (nNOS) and endothelial (eNOS) isoforms could be involved. Also, interstitial cells of Cajal (ICC) may be involved in IAS relaxation. We studied the relative roles of nNOS, eNOS and c-Kit-expressing ICC for IAS relaxation using genetic murine models. The basal IAS tone and the rectoanal inhibitory reflex (RAIR) were assessed in vivo by a purpose-built solid state manometric probe, and by using wild-type, nNOS-deficient (nNOS(-/-)), eNOS-deficient (eNOS(-/-)) and W/W(V) mice (lacking certain c-Kit-expressing ICC) with or without L-arginine or N(omega)-nitro-L-arginine methyl ester treatment. Moreover, the basal tone and response to electrical field stimulation (EFS) were studied in organ bath using wild-type and mutant IAS. In vivo, the basal tone of eNOS(-/-) was higher and W/W(V) was lower than wild-type and nNOS(-/-) mice. L-arginine administered rectally, but not IV, decreased the basal tone in wild-type, nNOS(-/-) and W/W(V) mice. However, neither L-arginine nor L-NAME affected basal tone in eNOS(-/-) mice. In vitro, L-arginine decreased basal tone in wild-type and nNOS(-/-) IAS, but not in eNOS(-/-) or wild-type IAS without mucosa. The in vivo RAIR was intact in wild-type, eNOS(-/-) and W/W(V) mice, but absent in all nNOS(-/-) mice. EFS-induced IAS relaxation was also reduced in nNOS(-/-) IAS. Thus, the basal IAS tone is largely controlled by eNOS in the mucosa, while the RAIR is controlled by nNOS. c-Kit-expressing ICC may not be essential for the RAIR.

The Development of a Validated Instrument to Evaluate Bowel Function After Sphincter-Preserving Surgery for Rectal Cancer.
Temple LK, Bacik J, Savatta SG, Gottesman L, Paty PB, Weiser MR, Guillem JG, Minsky BD, Kalman M, Thaler HT, Schrag D, Wong WD
Dis Colon Rectum 2005 Apr 14;.
PURPOSE: Sphincter-preserving surgery is technically feasible for many rectal cancers, but functional results are not well understood. Therefore, the purpose of this study was to develop an instrument to evaluate bowel function after sphincter-preserving surgery. METHODS: A 41-item bowel function survey was developed from a literature review, expert opinions, and 59 patient interviews. An additional 184 patients who underwent sphincter-preserving surgery between 1997 and 2001 were asked to complete the survey and quality-of-life instruments (Fecal Incontinence Quality of Life, European Organization for Research and Treatment of Cancer QLQ 30/Colorectal Cancer 38). A factor analysis of variance was performed. Test-retest reliability was evaluated, with 20 patients completing two surveys within a mean of 11 days. Validity testing was done with clinical variables (gender, age, radiation, length of time from surgery), surgical variables (procedure: local excision, low anterior resection, coloanal anastomosis), reconstruction (J-pouch, straight), anastomosis (handsewn, stapled), and quality-of-life instruments. RESULTS: The survey response rate was 70.1 percent (129/184). Among the 127 patients with usable data, 67 percent were male, the median age was 64 (range, 38-87) years, and the mean time for restoration of bowel continuity after sphincter-preserving surgery was 22.9 months. Patients had a median of 3.5 stools/day (range, 0-30), and

37 percent were dissatisfied with their bowel function. Patients experienced a median of 22 symptoms (range, 7-32), with 27 percent reported as severe, 37 percent as moderate, and 36 percent as mild. The five most common symptoms were incomplete evacuation (96.8 percent), clustering (94.4 percent), food affecting frequency (93.2 percent), unformed stool (92.8 percent), and gas incontinence (91.8 percent). The factor analysis identified 14 items that collapsed into three subscales: FREQUENCY (alpha = 0.75), DIETARY (alpha = 0.78), and SOILAGE (alpha = 0.79), with acceptable test-retest reliability for the three subscales and total score (0.62-0.87). The instrument detected differences between patients with preoperative radiation (n = 67) vs. postoperative radiation (n = 15) vs. no radiation (n = 45) (P = 0.02); local excision (n = 10) vs. low anterior resection (n = 55) vs. coloanal anastomosis (n = 62) (P = 0.002); and handsewn (n = 18) vs. stapled anastomosis (n = 99) (P = 0.006). The total score correlated with 4 of 4 Fecal Incontinence Quality of Life (P < 0.01) and 9 of 17 European Organization for Research and Treatment of Cancer subscales (all P < 0.01). CONCLUSIONS: Patients undergoing sphincter-preserving surgery for rectal cancer have impaired bowel function, and those treated with radiation, coloanal anastomoses, or handsewn anastomoses have significantly worse function. This reliable and valid instrument should be used to prospectively evaluate bowel function after sphincter-preserving surgery in patients undergoing rectal cancer therapy.

3 – DIAGNOSTICS

Triphasic MRI of pelvic organ descent: sources of measurement error.

Morren GL, Balasingam AG, Wells JE, Hunter AM, Coates RH, Perry RE
Eur J Radiol 2005 May;54(2):276-83.

PURPOSE:: To identify sources of error when measuring pelvic organ displacement during straining using triphasic dynamic magnetic resonance imaging (MRI). MATERIALS AND METHODS:: Ten healthy nulliparous woman underwent triphasic dynamic 1.5T pelvic MRI twice with 1 week between studies. The bladder was filled with 200ml of a saline solution, the vagina and rectum were opacified with ultrasound gel. T2 weighted images in the sagittal plane were analysed twice by each of the two observers in a blinded fashion. Horizontal and vertical displacement of the bladder neck, bladder base, introitus vaginae, posterior fornix, cul-de sac, pouch of Douglas, anterior rectal wall, anorectal junction and change of the vaginal axis were measured eight times in each volunteer (two images, each read twice by two observers). Variance components were calculated for subject, observer, week, interactions of these three factors, and pure error. An overall standard error of measurement was calculated for a single observation by one observer on a film from one woman at one visit. RESULTS:: For the majority of anatomical reference points, the range of displacements measured was wide and the overall measurement error was large. Intra-observer error and week-to-week variation within a subject were important sources of measurement error. CONCLUSION:: Important sources of measurement error when using triphasic dynamic MRI to measure pelvic organ displacement during straining were identified. Recommendations to minimize those errors are made.

The role of video capsule endoscopy for evaluating obscure gastrointestinal bleeding: usefulness of early use.

Bresci G, Parisi G, Bertoni M, Tumino E, Capria A
J Gastroenterol 2005 Mar;40(3):256-9.

BACKGROUND: We report our preliminary experience with the use of video capsule endoscopy (VCE) in 64 patients with obscure gastrointestinal bleeding (OGIB) and suspected small intestine disease. METHODS: To be eligible for VCE, patients had to have undergone upper endoscopy, small bowel series, and colonscopy without discovering any source of bleeding. To find the best timing to perform VCE, the patients were retrospectively divided in two groups of 32 cases each: group 1 with patients who had been submitted to VCE within 15 days from OGIB diagnosis, and group 2 with patients who had been submitted to VCE at least 15 days after OGIB diagnosis. RESULTS: Lesions were found by VCE in 29 (91%) in group 1: angioectasia-like lesions of the small bowel in 12, some erosions of the ileum without signs of bleeding in 14, a polyp with erosions in 1, and a bleeding site where the surgery showed a tumor of the ileum in 2 patients. In 2 cases, VCE missed showing two small tumors that were revealed by laparoscopy in 1 case and by push enteroscopy in the other. In group 2, lesions were found by VCE in 11 (34%): angioectasia-like lesions of the small bowel in 6, some erosions in 3, a short segmental stenosis in 1, and two polyps in 1. In 1 case, VCE missed showing a small polyp in the jejunum that was revealed by push enteroscopy. In none of these cases was a bleeding site identified. VCE was well tolerated and able to acquire good images in patients with OGIB. It showed lesions in 91% of the patients in group 1 and 34% of cases in group 2. CONCLUSIONS: Our data suggest that the optimal timing to perform VCE is within a few days after the occurrence of bleeding, possibly within 2 weeks.

Meta-analysis: computed tomographic colonography.

Mulhall BP, Veerappan GR, Jackson JL
Ann Intern Med 2005 Apr 19;142(8):635-50.

BACKGROUND: Computed tomographic (CT) colonography, also called virtual colonoscopy, is an evolving technology under evaluation as a new method of screening for colorectal cancer. However, its performance as a test has varied widely across studies, and the reasons for these discrepancies are poorly defined. PURPOSE: To systematically review the test performance of CT colonography compared to colonoscopy or surgery and to assess variables that may affect test performance. DATA SOURCES: The PubMed, MEDLINE, and EMBASE databases and the Cochrane Controlled Trials Register were searched for English-language articles published between January 1975 and February 2005. STUDY SELECTION: Prospective studies of adults undergoing CT colonography after full bowel preparation, with colonoscopy or surgery as the gold standard, were selected. Studies had to have used state-of-the-art technology, including at least a single-detector CT scanner with supine and prone positioning, insufflation of the colon with air or carbon dioxide, collimation smaller than 5 mm, and both 2-dimensional and 3-dimensional views during scan interpretation. The evaluators of the colonogram had to be unaware of the findings from use of the gold standard test. Data on sensitivity and specificity overall and for detection of polyps less than 6 mm, 6 to 9 mm, and greater than 9 mm in size were abstracted. Sensitivities and specificities weighted by sample size were calculated, and heterogeneity was explored by using stratified analyses and meta-regression. DATA SYNTHESIS: 33 studies provided data on 6393 patients. The sensitivity of CT colonography was heterogeneous but improved as polyp size increased (48% [95% CI, 25% to 70%] for detection of polyps <6 mm, 70% [CI, 55% to 84%] for polyps 6 to 9 mm, and 85% [CI, 79% to 91%] for polyps >9 mm). Characteristics of the CT colonography scanner, including width of collimation, type of detector, and mode of imaging, explained some of this heterogeneity. In contrast, specificity was homogenous (92% [CI, 89% to 96%] for detection of polyps <6 mm, 93% [CI, 91% to 95%] for polyps 6 to 9 mm, and 97% [CI, 96% to 97%] for polyps >9 mm). LIMITATIONS: The studies differed widely, and the extractable variables explained only a small amount of the heterogeneity. In addition, only a few studies examined the newest CT colonography technology. CONCLUSIONS: Computed tomographic colonography is highly specific, but the range of reported sensitivities is wide. Patient or scanner characteristics do not fully account for this variability, but collimation, type of scanner, and mode of imaging explain some of the discrepancy. This heterogeneity raises concerns about consistency of performance and about technical variability. These issues must be resolved before CT colonography can be advocated for generalized screening for colorectal cancer.

Clinical utility and cost-effectiveness of routine preoperative computed tomography scanning in patients with colon cancer.
Mauchley DC, Lynge DC, Langdale LA, Stelzner MG, Mock CN, Billingsley KG
Am J Surg 2005 May;189(5):512-7.
BACKGROUND: The aims of this study were to assess the clinical utility of the practice of routine preoperative CT scanning and to determine its cost-effectiveness in colon cancer patients. METHODS: A 6-year database of colon cancer patients treated at a veterans affairs medical was reviewed to determine the influence of preoperative CT scanning on clinical management. Cost analysis involved comparison of the institutional cost of CT scanning with the cost savings provided by avoiding nontherapeutic operations. RESULTS: CT scans were obtained in 130 consecutive patients. CT scans provided information that was used in treatment planning in 43 (33%) patients and definitively altered the mode of treatment in 21 (16%) patients. The practice saved the institution $24,018 over 6 years. CONCLUSION: Routine preoperative CT scanning definitively alters treatment in a small number of cases and is cost-effective.

4 – PROLAPSES

The inhibition of neutrophil antibacterial activity by ultra-high molecular weight polyethylene particles.
Bernard L, Vaudaux P, Merle C, Stern R, Huggler E, Lew D, Hoffmeyer P
Biomaterials 2005 Sep;26(27):5552-7.
Following infection, bacterial killing by polymorphonuclear leukocytes (neutrophils) is the main host defense against bacteria. Our hypothesis is that particles of ultra-high molecular weight polyethylene (UHMWP) may impair local neutrophil function and consequently reduce neutrophil bacterial killing. To determine how the in vitro phagocytic-bactericidal activity of neutrophils was affected by exposure to wear particles, tests were run comparing the effects of different particle composition, and different concentrations and sizes of UHMWP particles. There was a significant correlation between the number of particles and the decrease in neutrophil bactericidal activity ($p<0.01$), and the greatest effect was obtained with a concentration of 10(7)UHMWP/ml. There was a significant decrease in neutrophil bactericidal activity by incubation with particles of 0.1-5mum ($p<0.01$), but not with larger size. The results suggest that neutrophil functional defects triggered by the presence of UHMWP particles may potentially contribute to the susceptibility of loose implants to bacterial infections.

Site-Specific Rectocele Repair Compared With Standard Posterior Colporrhaphy.
Abramov Y, Gnadhi S, Goldberg RP, Botros SM, Kwon C, Sand PK
Obstet Gynecol Surv 2005 May;60(5):297-298.
The authors conducted a review of the medical charts of all patients between July 1998 and June 2002 who had undergone repair of advanced posterior vaginal prolapse and had at least 1 year of follow up. They identified 124 consecutive patients who had undergone site-specific rectocele repair and 183 consecutive patients who had standard posterior colporrhaphy without levator ani plication. This paper presents a comparison of patient outcomes from each of these procedures.A standard method was used for posterior colporrhaphy with no plication of the levator ani. In the site-specific procedure, the dissection to the rectovaginal septum was extended laterally to the arcus tendineus levator ani muscles and inferiorly to the perineal body, leaving an avascular plane of endopelvic connective tissue on the rectum. At this point, specific defects in the Denonvilliers' fascia were identified with the surgeon's finger in the patient's rectum. Using Allis clamps, connective tissues were pulled together over the defect and sutured using interrupted 0 polygalactin 910 sutures.There were no significant differences in patient characteristics or operative data between the 2 groups, but there were significant differences in rates of recurrence. Recurrence of posterior vaginal prolapse beyond the midvaginal plane (33% vs. 14%, P = .001) or recurrence beyond the hymenal ring (11% vs. 4%, P = .02), and recurrence of a symptomatic bulge (11% vs. 4%, P = .02) were significantly more common among the patients who underwent site-specific repair compared with those who had posterior colporrhaphy. Also, the mean postoperative Bp point was significantly higher in the site-specific group (-2.2 vs. -2.7, P = .001).The percentage of patients with dyspareunia before and after surgery for vaginal prolapse increased significantly (8% vs. 17%, P = .001). Postoperative reports of constipation, diarrhea, abdominal pain, fecal incontinence, and flatus incontinence remained essentially unchanged from preoperative rates. There were no significant differences in pre- and postoperative symptoms, including dyspareunia, between the 2 groups. Rates of de novo occurrence and improvement of symptoms were similar in both groups.

Sacrocolpopexy for vault prolapse and rectocele: do concomitant Burch colposuspension and perineal mesh detachment affect the outcome?
Baessler K, Stanton SL
Am J Obstet Gynecol 2005 Apr;192(4):1067-72.
OBJECTIVE: This study compares the effect of abdominal sacrocolpopexy with posterior Teflon mesh interposition with and without concomitant Burch colposuspension on the posterior compartment. STUDY DESIGN: This retrospective review includes 49 consecutive women who underwent sacrocolpopexy for vault or uterine prolapse stage 2 or higher and rectocele; 25 of them had a concomitant Burch colposuspension for urodynamic stress incontinence. Postoperative bladder, bowel and sexual function and recurrent pelvic organ prolapse was assessed at > or =12 months. RESULTS: There was no recurrent vault prolapse. Rectoceles (stage 2) recurred in 5 women (21%) without and in 8 women (36%) with Burch colposuspension (P > .05). The mesh became detached by >2 cm from its perineal position in 30% of the cases, which was associated with excessive defecation straining (P = .04). Rectocele stages significantly correlated with mesh detachment (P > .001) but not with obstructed defecation (P > .05). CONCLUSION: Sacrocolpopexy was effective if the mesh did not become detached from its perineal position. Concomitant Burch colposuspension did not seem to affect the posterior compartment adversely in this small case series.

Vaginal Thickness, Cross-Sectional Area, and Perimeter in Women With and Those Without Prolapse.
Hsu Y, Chen L, Delancey JO, Ashton-Miller JA
Obstet Gynecol 2005 May;105(5):1012-1017.
OBJECTIVE: Use axial magnetic resonance imaging to test the null hypothesis that no difference exists in apparent vaginal thickness between women with and those without prolapse. METHODS: Magnetic resonance imaging studies of 24 patients with prolapse at least 2 cm beyond the introitus were selected from an ongoing study comparing women with prolapse with normal control subjects. The magnetic resonance scans of 24 women with prolapse (cases) and 24 women without prolapse (controls) were selected from those of women of similar age, race, and parity. The magnetic resonance files were imported into an experimental modeling program, and 3-dimensional models of each vagina were created. The minimum transverse plane cross-sectional area, mid-sagittal plane diameter, and transverse plane perimeter of each vaginal model were calculated. RESULTS: Neither the mean age (cases 58.6 years +/- standard deviation [SD] 14.4 versus controls 59.4 years +/- SD 13.2) nor the mean body mass index (cases 24.1 kg/m(2)+/- SD 3.3, controls 25.7 kg/m(2)+/- SD 3.7) differed significantly between groups. Minimum mid-sagittal vaginal diameters did not differ between groups. Patients with prolapse had larger minimum vaginal cross-sectional areas than controls (5.71 cm(2)+/- standard error of the mean [SEM] 0.25 versus 4.76 cm(2)+/- SEM 0.20, respectively; P = .005). The perimeter of the vagina was also larger in the prolapse group (11.10 cm +/- SEM 0.24) compared with controls (9.96 cm +/- SEM 0.22) P = .001. Subgroup analysis of patients with

endogenous or exogenous estrogen showed prolapse patients had larger vaginal cross-sectional area (P = .030); in patients without estrogen group differences were not significant (P = .099). CONCLUSION: Vaginal thickness is similar in women with and those without pelvic organ prolapse. The vaginal perimeter and cross-sectional areas are 11% and 20% larger in prolapse patients, respectively. Estrogen status did not affect differences found between groups.

Surgical management of posterior vaginal wall prolapse: an evidence-based literature review.
Maher C, Baessler K
Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 19;.
The aim of this review is to summarize the available literature on gynecological management of posterior vaginal wall prolapse. A MEDLINE search and a hand search of conference proceedings of the International Continence Society and International Urogynecological Association was performed. Two randomized trials demonstrated that the transvaginal approach to rectocele is superior to the transanal repair in terms of recurrent prolapse. The traditional posterior colporrhaphy with levator ani plication was largely superceded by fascial repairs with similar anatomic success rates but favorable functional outcome. The midline fascial plication may offer a superior anatomic and functional outcome compared to the discrete site-specific fascial repair. Controlled studies are necessary to evaluate whether a sacrocolpopexy combined with posterior mesh interposition is an effective alternative to the transvaginal repair. There is currently no evidence to recommend the routine use of any graft and complications such as mesh erosion, infection, and rejection have to be considered.

Uterosacral ligament in postmenopausal women with or without pelvic organ prolapse.
Gabriel B, Denschlag D, Gobel H, Fittkow C, Werner M, Gitsch G, Watermann D
Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 22;.
The uterosacral ligaments are thought to contribute to pelvic support. The objective of this study was to compare the structural components of these ligaments in women with and without pelvic organ prolapse (POP). We characterized uterosacral ligaments of 25 postmenopausal women with POP and 16 controls histomorphologically and immunohistochemically by quantifying their content of collagen I, III, and smooth muscle using a computerized image analysis. In 84% the uterosacral ligaments were composed of more than 20% of smooth muscle cells. There was no difference in collagen I expression and smooth muscle cell amount between women with POP and those without. In contrast, the collagen III expression was significantly related to the presence of POP ($p<0.001$) rather than age or parity. Our findings suggest that the higher collagen III expression might be a typical characteristic of POP patients' connective tissue. The considerable amount of smooth muscle cells in uterosacral ligaments may provide pelvic support.

Predictive value of prolapse symptoms: a large database study.
Tan JS, Lukacz ES, Menefee SA, Powell CR, Nager CW
Int Urogynecol J Pelvic Floor Dysfunct 2005 May-Jun;16(3):203-9. Epub 2004 Oct 23.
We sought to describe the relationship between patient symptoms and pelvic organ prolapse (POP) and report the sensitivity, specificity, and positive and negative predictive value of these POP symptoms. Two urologists and four urogynecologists developed a standardized pelvic floor questionnaire based on face validation for use at three female pelvic floor disorder clinics. Specific questions related to prolapse included questions on urinary splinting, digital assistance for defecation, and a bulge per vagina. Prolapse was assessed with the standardized Pelvic Organ Prolapse Quantitative (POP-Q) terminology. The analysis included 1912 women. Urinary splinting was uncommon (<10%) when Ba <0, but ranged between 23 and 36% for stage III and IV Ba prolapse. Digital assistance was equally common in stage II Bp prolapse (21-38%) and stage III-IV Bp prolapse (26-29%). Only 6-11% of women with stage 0 or I POP reported symptoms of bulge, but with stage II it increased to 77%. Urinary splinting is 97% specific for anterior prolapse. The report of a bulge has an 81% positive predictive value and a 76% negative predictive value. Very few patients without anterior prolapse will report urinary splinting. Digital assistance for fecal evacuation is no more common with massive posterior prolapse than with moderate posterior prolapse. Patient report of a bulge is a valuable screening tool for POP and should prompt a careful exam.

Effectiveness of the McCall culdeplasty in maintaining support after vaginal hysterectomy.
Montella JM, Morrill MY
Int Urogynecol J Pelvic Floor Dysfunct 2005 May-Jun;16(3):226-9. Epub 2004 Oct 28.
The aim of this study was to evaluate the effectiveness of a McCall culdeplasty in maintaining support of the post-hysterectomy vaginal cuff in women undergoing surgery for uterine prolapse. A retrospective chart review was performed on all patients who had a vaginal hysterectomy and McCall culdeplasty for uterine prolapse without prolapse of the posterior vaginal fornix. Patients were examined pre- and postoperatively

using the International Continence Society (ICS) staging system. Data were analyzed using repeated measures analysis of variance (ANOVA) for correlation between preoperative point D and the two postoperative point C measurements. Of the 43 patients studied, 39 (90%) had stage 0 prolapse and 3 (7%) had stage I prolapse of the vaginal cuff 1 year postoperatively. In patients who have hysterectomies for uterine prolapse with good support of the posterior vaginal fornix, the McCall culdeplasty is a highly successful procedure in maintaining proper anatomic support of the vaginal cuff.

Surgical reinforcement of support for the vagina in pelvic organ prolapse: concurrent iliococcygeus fascia colpopexy (Inmon technique).
Koyama M, Yoshida S, Koyama S, Ogita K, Kimura T, Shimoya K, Murata Y, Nagata I
Int Urogynecol J Pelvic Floor Dysfunct 2005 May-Jun;16(3):197-202. Epub 2004 Oct 23.
To reinforce the support of the vagina, concurrent use of iliococcygeus fascia colpopexy with the McCall culdeplasty was scheduled for primary uterine prolapse. Forty-five women with primary uterine prolapse without stress urinary incontinence were treated by McCall culdeplasty alone or McCall culdeplasty plus iliococcygeus fascia colpopexy for suspension of the upper portion of the vagina. Recurrence of vaginal support defects were carefully followed for 15-50 months. Additional iliococcygeus fascia colpopexy did not change with the axis of the vagina obtained by McCall culdeplasty, although it prolonged total operation time by 32 min and increased blood loss by 94 ml. Two cases (8.3%) had postoperative vaginal defects in the group undergoing combined procedures and seven recurrent cases (33.3%) were observed in the group undergoing McCall culdeplasty alone. The durability of the combined procedures was superior to that of the modified McCall culdeplasty alone by Kaplan-Meier analysis. These results suggest that iliococcygeus fascia colpopexy is reasonably safe and strengthens not only the attachment of the upper part of the vagina but also that of the anterolateral vaginal wall.

P-QOL: a validated questionnaire to assess the symptoms and quality of life of women with urogenital prolapse.
Digesu GA, Khullar V, Cardozo L, Robinson D, Salvatore S
Int Urogynecol J Pelvic Floor Dysfunct 2005 Jun;16(3):176-181. Epub 2004 Oct 21.
To develop a simple, valid, reliable questionnaire to assess the severity of symptoms and their impact on the quality of life in women with urogenital prolapse. Women recruited from gynaecology outpatient clinics were asked to complete a prolapse quality of life questionnaire (P-QOL) before their hospital visit. At the time of the visit, they were examined supine using the International Continence Society (ICS) prolapse score (POP-Q). A second P-QOL was posted and completed by patients 2 weeks later. The validity was assessed by measuring levels of missing data, comparing symptom scores between affected and asymptomatic women and comparing symptom scores with objective prolapse stages. The internal reliability was assessed by measuring the Cronbach alpha coefficient; 155 symptomatic and 80 asymptomatic women were studied. Severity according to P-QOL strongly correlated with the vaginal examination findings ($p<0.01$, $rho>0.5$). The total scores for each P-QOL domain were significantly different between symptomatic and asymptomatic women ($p<0.001$). All items achieved a Cronbach alpha greater than 0.80 showing good inter-rater reliability. The test-retest reliability confirmed a highly significant correlation between the total scores for each domain. A P-QOL questionnaire for English-speaking patients has been developed which is reliable and valid.

Epidemiology of prolapse and incontinence questionnaire: validation of a new epidemiologic survey.
Lukacz ES, Lawrence JM, Buckwalter JG, Burchette RJ, Nager CW, Luber KM
Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 26;.
The epidemiology of prolapse and incontinence questionnaire (EPIQ) was developed to screen for female pelvic floor disorders (PFD). Content and face validity, reliability, internal consistency and criterion validity of the EPIQ to detect the presence of pelvic organ prolapse (POP), stress urinary incontinence (SUI), overactive bladder (OAB) and anal incontinence (AI) is presented. Cronbach's alpha; Spearman's, kappa, intraclass correlations, factor analysis and Chi-Squared tests were used for analysis. Questions related to PFD proved internally consistent (alpha = 0.91) and reproducible (correlations >0.70) for all but three items on the EPIQ. Positive and negative predictive values of the EPIQ to detect PFD were: POP = 76% and 97%, SUI = 88% and 87%, OAB = 77% and 90% and AI = 61% and 91% respectively. EPIQ is a psychometrically validated screening instrument that may identify women at high risk of having pelvic floor disorders in large undiagnosed populations.

Does pelvic organ prolapse quantification exam predict urethral mobility in stages 0 and I prolapse?
Noblett K, Lane FL, Driskill CS
Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 26;.
Objective: To determine if women with anterior support stages 0 or I by pelvic organ prolapse quantification (POP-Q) system require Q-tip testing to assess urethral mobility. Methods: A prospective study of 134

women presenting for urogynecologic evaluation were examined and assigned stages of anterior wall support according to the POP-Q system. A Q-tip test was performed and urethral hypermobility was defined as a straining angle >/=30 degrees . The Spearman correlation coefficient was used to assess degree of correlation between POP-Q point Aa position and Q-tip values. Results: The correlation coefficient between point Aa position and Q-tip angle was r=0.787 (P<0.001). Urethral hypermobility was noted in 91% of stage I and 100% of stage II-IV patients. The positive predictive value of Q-tip angle >/=30 degrees in stage I-IV prolapse was 99%. Conclusion: The POP-Q system is highly predictive of straining urethral angle in all stages of prolapse.

JAMA patient page. Uterine prolapse.
Ringold S, Lynm C, Glass RM
JAMA 2005 Apr 27;293(16):2054.

An 80-year-old woman with vaginal prolapse.
Cundiff GW
JAMA 2005 Apr 27;293(16):2018-27.

The effect of pudendal block on voiding after hemorrhoidectomy.
Kim J, Lee DS, Jang SM, Shim MC, Jee DL
Dis Colon Rectum 2005 Mar;48(3):518-23.
PURPOSE: Urinary retention in common benign anal surgery is a burden to ambulatory surgery. A pudendal nerve block was used in hemorrhoid surgery to reduce voiding complications. METHODS: The effects of a pudendal nerve block in anal surgery were compared with those of spinal anesthesia. In this prospective study, 163 consecutive patients who underwent elective hemorrhoids surgery by a single surgeon were randomized to receive pudendal nerve block (pudendal group) with 0.5 percent bupivacaine (n = 81) with 1:20,000 epinephrine or spinal anesthesia (spinal group) with 0.5 percentbupivacaine (n = 82). RESULTS: There were no statistically significant differences in the patient demographics, total amount of fluid administered, time to the onset of anesthesia, or intraoperative pain. All patients had a successful block during surgery. However, puborectalis muscle relaxation was not complete in the pudendal group. The time from the injection of the anesthetics to the first sensation of pain was longer in the pudendal group (9.1 vs. 3.1 hours; P < 0.001). Urinary catheterization was required in only 6 patients in the pudendal group compared with 57 patients in the spinal group (P < 0.001). The degree of pain was significantly lower in the pudendal group (2.7 vs. 5.2, Visual Analog Scale; P < 0.001). The amount of analgesics injected was significantly lower in the pudendal group (16/81 vs. 45/82; P < 0.001). CONCLUSIONS: A pudendal nerve block with bupivacaine results in fewer postoperative voiding complications and less pain compared with the traditional spinal anesthesia in a hemorrhoidectomy.

Anterolateral rectopexy for correction of rectoceles leads to good anatomical but poor functional results.
Vermeulen J, Lange JF, Sikkenk AC, van der Harst E
Tech Coloproctol 2005 Apr;9(1):35-41.
BACKGROUND : Several different surgical repair procedures for symptomatic rectocele have been described with variable results. In our clinic, a modified anterolateral rectopexy is used. In this article we evaluate our results, with emphasis on patient satisfaction. METHODS : From 2001 until 2003, twenty patients with a symptomatic rectocele were treated by anterolateral rectopexy. The preoperative dynamic defecogram and anorectal complaints were analyzed and compared to postoperative outcome via a standardized questionnaire. RESULTS : After surgery, all rectoceles were restored as shown by postoperative defecogram. Anorectal symptoms (incomplete evacuation, continuous urge, prolapse, digital evacuation) were improved in 40%. As new-onset symptoms, dyspareunia (50%), digital support (55%) and incomplete evacuation (75%) were mentioned frequently. Most of the patients with larger rectoceles (>3.5 cm) had increased anorectal complaints after surgery. CONCLUSIONS : Anterolateral rectopexy for treatment of rectocele give limited improvement of anorectal complaints. Besides, many patients developed new complaints postoperatively and hence overall satisfaction was low.

Haemorrhoidectomy as a one-day surgical procedure: modified Ferguson technique.
Kosorok P, Mlakar B
Tech Coloproctol 2005 Apr;9(1):57-9.
Modification of Ferguson haemorrhoidectomy had been started because it was easier to ligate the haemorrhoidal pedicle with a rubber band instead of using the stitch. There is no need to use a retractor for such a procedure as it would cause discomfort to the patient when only infiltrative anaesthesia for one or two haemorrhoidal complexes was given. In the period from 1994 to 1999, we performed 398

haemorrhoidectomies as a one-day surgical procedure under local infiltrative anaesthesia. The examination follow-ups of the patients were performed and medical charts were reviewed. Early postoperative complications were rare: haemorrhage occurred in 1.8%, urine retention in 0.5%, high temperature in 1.3% and temporary incontinence in 0.3%. Overall, 28 patients (7%) had additional treatment for residual haemorrhoid problems 5-10 years after the primary haemorrhoidectomy was performed. We believe that our modified technique is a welcome alternative to the one-day surgical practice.

Transanal repair of rectocele and full rectal mucosectomy with one circular stapler: a novel surgical technique.
Regadas FS, Regadas SM, Rodrigues LV, Misici R, Silva FR, Regadas Filho FS
Tech Coloproctol 2005 Apr;9(1):63-6.
We present a new surgical stapling technique for treatment of rectocele when associated with internal mucosal prolapse or haemorrhoids using only one circular mechanical stapler. Eight female patients, mean age 53 years (range, 42-70), complaining of obstructed defecation with vaginal digitation because of rectocele associated with internal mucosal prolapse underwent transanal repair of rectocele and rectal mucosectomy using one circular stapler between April and July 2004. A running horizontal mattress suture was placed through the base of the rectocele including mucosa, submucosa and the muscle layer of the whole anterior anorectal junction wall. The prolapsed mucosa and the muscular layer were then excised with an electrical scapel. Acontinuous pursestring rectal mucosa suture was placed 0.5 cm before the previous anterior mucosa and muscle layers resected wound, including the anorectal junction wall which was kept separate from the posterior vaginal wall by a Babcock forceps. Posteriorly, the pursestring suture included only mucosal and submucosal layers. The stapled suture was positioned between normal anterior rectal wall and the anal canal, 0.5 cm above the pectinate line. The stapler was then closed, fired and withdrawn. One patient complained of a perianal hematoma on the seventh postoperative day, requiring surgical excision. Postoperative defecography showed correction of the rectocele and outlet obstruction disappeared in all patients. This novel combined manual-stapled technique for rectocele and rectal internal mucosal prolapse seems to be a safe procedure and the preliminary results are encouraging. Further investigations have to be performed to assess long-term outcome in a larger number of patients.

Pneumoretroperitoneum, pneumomediastinum and subcutaneous emphysema of the neck after stapled hemorrhoidopexy.
Filingeri V, Gravante G
Tech Coloproctol 2005 Apr;9(1):86.

Functional and Anatomic Outcome After Transvaginal Rectocele Repair Using Collagen Mesh: A Prospective Study.
Altman D, Zetterstrom J, Lopez A, Anzen B, Falconer C, Hjern F, Mellgren A
Dis Colon Rectum 2005 Apr 14;.
PURPOSE: This study was designed to evaluate rectocele repair using collagen mesh. METHODS: 32 female patients underwent surgical repair using collagen mesh. Outcome was assessed in 29 patients and preoperative assessment included standardized questionnaire, clinical examination, and defecography. At the six-month follow-up, patients answered a standardized questionnaire and underwent clinical examination. At the 12-month follow-up, patients answered a standardized questionnaire, underwent clinical examination, and defecography. RESULTS: Preoperatively, 26 patients had a Stage II and 3 patients had a Stage III rectocele. At the 6-month follow-up, five patients had rectocele >/= Stage II ($P < 0.001$) and at the 12-month follow-up, seven patients had rectocele >/= Stage II ($P < 0.001$) at clinical examination. At the preoperative defecography, all patients presented a rectocele. At the 12-month defecography, 14 patients had no rectocele ($P < 0.001$) and 15 had a rectocele. At the six-month follow-up, there was a significant decrease in rectal emptying difficulties, need of digital support of the posterior vaginal wall at defecation, and defecation frequency. At the 12-month follow-up, symptom improvement remained, but was less pronounced. CONCLUSIONS: Rectocele repair using collagen mesh improved anatomic support, but there is a substantial risk for recurrence with unsatisfactory anatomic and functional outcome one year after surgery. Rectocele repair using mesh was not associated with an increased risk of dyspareunia. Rectocele repair using biomaterial mesh reinforcement needs further evaluation before adopted into clinical practice.

Long-term outcomes of transanal rectocele repair.
Roman H, Michot F
Dis Colon Rectum 2005 Mar;48(3):510-7.
PURPOSE: This study was designed to assess the risk of rectocele recurrence after transanal repair and identify its predictive factors. METHODS: A series of 71 females who had undergone transanal repair of low isolated rectocele was retrospectively reviewed. The functional outcome was assessed by a standard

questionnaire. The follow-up varied from 30 to 128 (mean, 74 +/- 30) months. Recurrences were evaluated by survival-analysis methods, and Cox's proportional hazar model was used to determine the optimal predictive factor for recurrence. RESULTS: Twenty-nine of 71 patients had isolated low rectocele recurrence, and 6 had a rectocele recurrence associated to an enterocele occurrence. The optimal predictive factor for rectocele recurrence was the persistence of symptoms two months after surgery. Although correlated to recurrences, preoperative manual pressure during defecation was not an independent predictive factor for recurrences. Preoperative defecographic parameters do not seem to influence clinical outcome of surgery, and preoperative manometric values did not determine which females could develop anal incontinence several years after surgery. CONCLUSIONS: The results of the transanal rectocele repair might progressively be worse during the length of the follow-up with a high recurrence rate (50 percent). Preoperative clinic, defecographic, or manometric parameters are not useful to identify females at risk for recurrence.

Rectal prolapse following posterior sagittal anorectoplasty for anorectal malformations.
Belizon A, Levitt M, Shoshany G, Rodriguez G, Pena A
J Pediatr Surg 2005 Jan;40(1):192-6; discussion 196.
PURPOSE: Rectal prolapse is a known postoperative problem in children with anorectal malformations. The aims of this study were to determine the incidence of significant rectal prolapse (>5 mm), to objectively quantify its predisposing factors, and to offer recommendations as to its prevention and surgical treatment. METHODS: The authors reviewed their series of 1619 patients with anorectal malformations; 1169 underwent primary posterior sagittal anorectoplasty (PSARP) at their institution between 1980 and 2002, and complete records were available for 833. The series was analyzed for incidence of prolapse, type of anorectal malformation, status of the sacrum, muscle quality, associated vertebral and spinal anomalies, and postoperative constipation. A specific technique for prolapse repair was used. RESULTS: Of 833 patients, 45 developed significant rectal prolapse (3.8%). The mean age at the time of PSARP was 0.73 years (range, 0.19-5 years). The average time to recognition of prolapse following PSARP was 13.1 months. Of these 45 patients, 32 required surgical repair and of those, 3 required a second surgical repair. The incidence of prolapse varied by complexity of anorectal defect: cloaca (6.2%), rectobladder neck fistula (6.8%), rectourethral fistula (5.4%), rectovestibular fistula (1.2%), rectal atresia (0%), and rectoperineal fistula (0%). There was a significantly increased incidence of prolapse in patients with a low muscle quality score and in patients with vertebral anomalies (20% vs 3.2%). The presence of a tethered cord and an abnormal sacral ratio did not correlate with an increased incidence of prolapse. Twenty-two patients developed prolapse following colostomy closure, and of these, 12 (55%) suffered from constipation. CONCLUSIONS: The overall incidence of significant rectal prolapse following PSARP is low. Prevention of prolapse with the PSARP technique may be because of key technical steps. Patients with higher anorectal malformations, poorer muscle quality, and vertebral anomalies had a greater risk of developing postoperative rectal prolapse. The presence of tethered cord and quality of the sacrum were not predictive of postoperative prolapse. Constipation seems to be a factor in the development of prolapse.

Complications of stapled hemorrhoidectomy: a French multicentric study.
Oughriss M, Yver R, Faucheron JL
Gastroenterol Clin Biol 2005 Apr;29(4):429-33.
OBJECTIVES: The aim of this retrospective multicentric study was to assess the complications of the Longo technique for the treatment of haemorrhoidal disease.METHODS: From March 1999 to April 2003, 550 patients underwent a stapled hemorrhoidectomy following Longo's technique in 12 surgical units in the Rhone-Alpes Region. The operative indications were the same as for conventional hemorrhoidectomy. Complications were divided into early or late complications depending on whether they occurred before or after the 7th day. For each patient, the most serious complication was retained for analysis.RESULTS: One hundred and five patients (19%), mean age 51 years, experienced complications. The early complications were bleeding (1.8%), severe anal pain (2.3%), urinary retention (0.9%) and sepsis (0.5%). Late complications were chronic anal pain (1.6%), suture dehiscence (1.6%), anal stricture (1.6%), anal fissure (0.9%), external thrombosis (0.9%), fistulae and intramural abscesses (0.9%), anal incontinence (0.3%), haemorrhoidal disease symptoms persistence or recurrence (3.2%). Strictures were successfully dilated, fissures were treated by sphincterotomy, external thromboses were excised and fistulae were laid open. Most of the recurrences were treated with the Milligan-Morgan hemorroidectomy technique.CONCLUSION: Complications may occur after stapled hemorrhoidopexy, some are particularly serious, especially bleeding and sepsis.

5 – RETENTIONS

Prevention of chronic urinary retention in orthotopic bladder replacement in the female.

Puppo P, Introini C, Calvi P, Naselli A
Eur Urol 2005 May;47(5):674-8; discussion 678. Epub 2005 Jan 4.
OBJECTIVE: Chronic urinary retention is a frequent complication after orthotopic bladder replacement. Herein a new technical modification to avoid voiding dysfunction is described. METHODS: Between January 1995 and January 2004, 62 women had orthotopic bladder replacement after radical cystectomy. From November 1998 on, 35 patients were operated using a new technical modification, consisting in the fixation of a large and thick flap of peritoneal and extraperitoneal tissue deriving from the posterior wall of the vagina to the edges of endopelvic fascia to create a resistant hammock under the reservoir. RESULTS: 25 women have a follow-up longer than 12 months, range 12-56, and are considered in this study. Only one, out of 25 patients, still has occasionally stress incontinence but she did not need to use pads. Two patients are incontinent at night. None of 25 patients has a residual urine volume greater than 100 ml or needed intermittent catheterization. Median bladder capacity is 350 ml, range 280-430 ml. Median creatinine level is 1.1 mg/dl, range 0.7-1.2 mg/dl. CONCLUSION: The creation of a posterior support to the neobladder, by harvesting a thick flap, has, in our series, completely avoided the occurrence of chronic urinary retention, which is the most common long-term complication of bladder replacement in the female. Our series is sufficiently large to exclude serendipity and to be compared with other series in the literature.

Chronic constipation and food intolerance: a model of proctitis causing constipation.
Carroccio A, Scalici C, Maresi E, Di Prima L, Cavataio F, Noto D, Porcasi R, Averna MR, Iacono G
Scand J Gastroenterol 2005 Jan;40(1):33-42.
OBJECTIVE: Chronic constipation in children can be linked to cow's milk intolerance (CMI) but the existence of a food intolerance-dependent proctitis is still debated. The aim of this study was to evaluate the histologic data in patients with food intolerance-related constipation. MATERIAL AND METHODS: Fifty-two consecutive patients (22 M, median age 4 years) with chronic constipation unresponsive to common treatment were enrolled. All patients were put on a cow's milk-free diet for 4 weeks and those uncured on this diet underwent a subsequent 4-week period of oligoantigenic diet. In the patients cured on elimination diet, a subsequent double-blind food challenge was performed to confirm the diagnosis of food intolerance. At entry to the study, routine hemato-chemical and immunologic assays, rectoscopy, and histologic study of the rectal mucosa were performed. In the patients cured on elimination diet, rectal histology was repeated when they were cured. RESULTS: Twenty-four patients were found to be suffering from CMI and 6 from multiple food intolerance. These patients had a normal stool frequency on elimination diet, while constipation reappeared on food challenge. The condition of the remaining 22 patients did not improve on elimination diet. The patients with food intolerance showed a significantly higher frequency of erosions of the mucosa, number of intraepithelial lymphocytes and eosinophils, and number of eosinophils in the lamina propria. Study of the rectal mucus gel layer showed that the food-intolerant patients had a significantly lower thickness than the other subjects studied. In the food intolerant patients, histologic abnormalities disappeared on elimination diet, when the patients were well. CONCLUSIONS: Food intolerance-related constipation is characterized by proctitis with eosinophil infiltrate of the rectal mucosa. A reduced mucus gel layer can be considered a contributory factor in the pathogenesis of the constipation.

Responses of anal constipation to biofeedback treatment.
Fernandez-Fraga X, Azpiroz F, Casaus M, Aparici A, Malagelada JR
Scand J Gastroenterol 2005 Jan;40(1):20-7.
OBJECTIVE: Biofeedback is considered an effective treatment for anal constipation, but a substantial proportion of patients fail to improve. Our aim was to identify the key predictors of outcome using a comprehensive standardized evaluation of anorectal function. MATERIAL AND METHODS: We retrospectively analysed the clinical and physiological data of 148 patients consecutively treated for constipation due to functional outlet obstruction by biofeedback. Clinical evaluation was performed by means of a structured questionnaire. Anorectal evaluation included anal pressure, neural reflexes, defecatory dynamics, rectal compliance, rectal sensitivity and balloon expulsion test. Biofeedback treatment was performed using a manometric technique. The clinical response to biofeedback treatment was evaluated as good (improvement of constipation) or poor (no improvement or worsening). RESULTS: Of the 148 patients included, 112 (86 F, 26 M; age range 8-67 years) were followed-up for between 1 and 44 months, and 66% had a good response to treatment. The response depended on the severity of the defecatory dysfunction. Thus, lack of anal relaxation during straining and inability to evacuate a 1 ml intrarectal balloon were inversely related to physiological variables related to therapeutic success. Among the 49 patients with absent anal relaxation, 51% had a good response to treatment (versus 78% in patients with partial relaxation; $p < 0.01$), and among the 29 patients with failed balloon expulsion, 48% responded to treatment (versus 74% in patients able to evacuate > or = 1 ml intrarectal balloon; $p < 0.05$). CONCLUSIONS: Even in the presence of negative predictors, biofeedback is a valuable treatment option in a substantial proportion of constipated patients.

6 – INCONTINENCES

Influence of estradiol pretreatment on antimuscarinic action of oxybutynin in rat detrusor muscle.
Yildiz O, Ozgok Y, Seyrek M, Un I, Kilciler M, Tuncer M
Urology 2005 Apr;65(4):800-3.
OBJECTIVES: To investigate the antimuscarinic effect of oxybutynin in the rat detrusor muscle after estrogen pretreatment because, to our knowledge, no study has been done on the interaction of estrogen with antimuscarinic drugs. Estrogen has been shown to affect muscarinic receptors in the detrusor muscle of animals. In addition, oxybutynin has been shown to block muscarinic receptors in the bladder. METHODS: Estradiol benzoate (150 microg/kg) or saline was given subcutaneously to virgin female Wistar albino rats (n = 6, each group) for 10 consecutive days. On the 11th day, isolated detrusor muscle strips were taken, and acetylcholine (ACh)-induced contractions were evaluated in the absence or presence of oxybutynin (10 and 100 nM). RESULTS: ACh induced concentration-dependent contractions in the detrusor muscle. In the estradiol-pretreated group, the maximum of the ACh-induced contractions was diminished compared with that in the control group ($P < 0.05$). Oxybutynin (10 and 100 nM) inhibited ACh-induced contractions competitively (pK(B) 8.85). In the estradiol-pretreated group, the concentration-response curve to ACh was shifted further to the right in the presence of oxybutynin (100 nM). CONCLUSIONS: We have demonstrated for the first time that oxybutynin further inhibits ACh-induced and muscarinic receptor-mediated contractions in rat detrusor muscle after pretreatment with estrogen.

Randomized comparison of the suprapubic arc sling procedure vs tension-free vaginal taping for stress incontinent women.
Tseng LH, Wang AC, Lin YH, Li SJ, Ko YJ
Int Urogynecol J Pelvic Floor Dysfunct 2005 May-Jun;16(3):230-5. Epub 2004 Oct 27.
The purpose of this study was to compare the surgical outcome and attendant complications of the suprapubic arc (SPARC) sling and tension-free vaginal tape (TVT) procedures. Sixty-two women with genuine stress incontinence (GSI) alone or combined with pelvic prolapse less than International Continence Society (ICS) stage II were randomly allocated to either SPARC or TVT groups. A routine suprapubic ultrasonography was performed for all patients 1 day after the anti-incontinence operation. A comparison of the peri- and postoperative results comprising surgical outcomes and complications revealed no significant differences between the two groups. Although the difference in the rates of bladder injury was not statistically significant (SPARC 12.9 vs TVT 0.0%, p=0.112), it was clinically significant. Routine suprapubic ultrasonography revealed eight subjects had retropubic hematomas greater than 5 cm. The cure rate for SPARC was not significantly different from TVT (80.7 vs 87.1%, p=0.706). We concluded that the SPARC sling and TVT procedures proved to be equally effective. Subsequent suprapubic ultrasonography, in particular for the symptomatic patients, was found to be of clinical merit.

Use of three-dimensional ultrasound scan to assess the clinical importance of midurethral placement of the tension-free vaginal tape (TVT) for treatment of incontinence.
Ng CC, Lee LC, Han WH
Int Urogynecol J Pelvic Floor Dysfunct 2005 Jun;16(3):220-225. Epub 2004 Nov 6.
The aim of the study is to illustrate that the midurethral positioning of the tension-free vaginal tape (TVT) may not be necessary to achieve continence. Our secondary aim is to highlight that a fair number of successfully performed TVT procedures do not result in midurethral position of the tape. A review of 31 women who underwent TVT operations and consecutively returned for their follow-up visits from July 2003 to November 2003 was conducted. Their TVT procedures were performed between March 2000 and August 2003. Transperineal three-dimensional ultrasound was used to identify and obtain objective measurements of the position of the TVT tape relative to the urethra. Any patients with significant coexisting vault or uterovaginal prolapse were surgically corrected at the same time. Their stress urinary incontinence was objectively diagnosed by performing urodynamic studies (dual-channel subtraction cystometry, erect stress test) in the outpatient urogynaecology clinic. Postoperatively, patients were reviewed at 1 month and then at 6 months followed by annual reviews subsequently. All women were reassessed at the 6-month follow-up visit with a filling and voiding cystometry to detect recurrent genuine stress incontinence and detrusor instability. Any woman complaining of stress urinary incontinence after that was reassessed with urodynamic studies as mentioned above. The majority of women (67.7%, 21 women) had the TVT tape located in the middle one-third of the urethra; 9.7% (3 women) and 22.6% (7 women) of women had the TVT tape situated in the proximal and distal one-third of the urethra, respectively. Despite this, all 31 women remained continent at their postoperative follow-up visits. The midurethral position of the TVT tape may not be essential in restoring continence. The TVT tape once inserted may not always rest in the midurethral position as described.

[Quality of life assessment after TVT (tension-free vaginal tape) based on 3 different questionnaires]
Ducarme G, Ceccaldi PF, Staerman F
Prog Urol 2005 Feb;15(1):45-8.
OBJECTIVE: To prospectively evaluate the effects of TVT on the quality of life of patients with urinary incontinence by using 3 different questionnaires. PATIENTS AND METHODS: Fifty one patients with a mean age of 57.1 years (range: 34 to 82) were treated by TVT for urinary incontinence combined with laparoscopic sacral colpopexy for associated cystocele in 12 cases. Fifty of these patients suffered from stress urinary incontinence and one presented mixed urinary incontinence. These patients completed 2 quality of life questionnaires and a urinary symptom score: Ditrovie and Contilife scale and the MHU scale for measurement of urinary handicap before and 3 months after TVT. Statistical analysis was based on Student's test. RESULTS: The mean scores obtained with the MHU scale were 6.74 (range: 2-16) preoperatively and 1.4 (range: 0-7) postoperatively. The mean score obtained with the Ditrovie scale was 3.1 (range: 2-4) preoperatively and 1.32 (range: 1-3) postoperatively. The mean score obtained with the Contilife scale was 82.1 (range: 51-119) preoperatively and 38.8 (range: 30-15) postoperatively. The difference was statistically significant ($p<0.05$) for the MHU and Contilife scales, but not for the Ditrovie scale. CONCLUSION: TVT allows a marked improvement of the quality of life of patients with urinary incontinence. The MHU and Contilife questionnaires can be used to objectively quantify the improvement of quality of life after TVT and, due to their marked and reproducible variation, they can also be used to assess the degree of improvement and the stability of the results over time.

Tension-free vaginal tape: avoiding failure.
Al-Singary W, Arya M, Patel HR
Int J Clin Pract 2005 May;59(5):522-5.
A prospective, single-centre study to assess the outcome of incontinence surgery in the first 120 consecutive patients who had tension-free vaginal tape (TVT) by a single surgeon. All patients were initially seen at 3 months postsurgery, with a cough provocation test, measurement of residual urine volume and a satisfaction survey. At a mean of 26 months (6-42 months) after surgery, a validated telephone interview was performed. The operation was performed in accordance with the original technique described by Ulmsten et al. [Int Urogynecol J Pelvic Floor Dysfunct 1996; 7: 81-5]. A total of 87 of 120 patients completed the study with the others either not complying or having died. Sixty-three (72.4%) patients were completely dry on cough provocation test. Of these, four (4.5%) had a slow stream and 10 (11.4%) suffered persistent urgency. The remaining 24 patients had varying degrees of leakage (operative failure). Sixteen (18.3%) patients subjectively considered the procedure to have failed at 3 months follow-up, either because leakage occurred once or more a day, and/or the persistence of the preoperative frequency/urgency syndrome. Of these 16 TVT failures, two had previous pelvic radiotherapy, two had double incontinence and eight had TVT for recurrent incontinence. Among the failures, 81.3% had mixed incontinence with predominant urge and nocturia three times per twenty four hours. Our study highlights the need for selection when performing TVT. We recommend that TVT be performed for those who have simple stress incontinence failing conservative measures (pelvic floor exercises and physiotherapy), with no history of incontinence surgery, pelvic radiotherapy, faecal or mixed incontinence.

Analysis of the success rates of Burch colposuspension in relation to Valsalva leak-point pressure.
Bai SW, Park JH, Kim SK, Park KH
J Reprod Med 2005 Mar;50(3):189-92.
OBJECTIVE: To compare the success rates of Burch colposuspension in relation to a Valsalva leak-point pressure (VLPP) cutoff level of 60 cm H2O and to examine other predictive factors for intrinsic sphincter deficiency, such as maximal urethral closure pressure (MUCP) and functional urethral length (FUL), in an attempt to define the urodynamic contraindications to Burch colposuspension. STUDY DESIGN: From March 1999 to February 2001, among patients who had undergone Burch colposuspension after being diagnosed as having stress urinary incontinence at the Yonsei University Medical Center Urogynecology Clinic, 79 patients eligible for continuous postoperative follow-up were enrolled in the study. Patients with past histories of hysterectomy and/or incontinence surgery were excluded from the study, and all patients included in the study had pelvic organ prolapse stage II or less. Urodynamic studies were performed as a preoperative evaluation, and recurrence of stress urinary incontinence after surgery was diagnosed through thorough history and meticulous urodynamic evaluations. RESULTS: The mean age was 57.66 +/- 9.99 years, mean parity was 3.71 +/- 4.38, menopausal rate and mean age at menopause were 81.0% (64 of 79) and 50.31 +/- 4.60 years, respectively, and the proportion of patients receiving hormone replacement therapy was 10.1% (8 of 79). The success rates in 2 groups, VLPP > or = 60 cm H2O (n=55) and < 60 cm H2O (n=24) were 94.55% and 91.67%, respectively, demonstrating no statistical significance ($p > 0.05$). The MUCP and FUL values were within normal ranges in both groups (MUCP, 66.98 +/- 24.04 versus 66.23 +/- 22.89 cm H2O,

p>0.05; and FUL, 36.33 +/- 7.31 versus 38.71 +/- 8.54 mm, p > 0.05), without a significant difference. The Pearson correlation coefficients for VLPP versus MUCP and VLPP versus FUL were 0.50 (p < 0.001) and 0.57 (p < 0.001), respectively, demonstrating a significant positive correlation. CONCLUSION: A VLPP level < 60 cm H2O does not represent an absolute contraindication to Burch colposuspension, provided that other parameters, such as MUCP and FUL, are within acceptable ranges. To select appropriate candidates for Burch colposuspension, a comprehensive evaluation of urodynamic parameters is mandatory.

The impact of stress urinary incontinence on sexual activity in women.
Barber MD, Dowsett SA, Mullen KJ, Viktrup L
Cleve Clin J Med 2005 Mar;72(3):225-32.
In women, stress urinary incontinence is a common problem that may lead to sexual dysfunction. We review the epidemiological data, the pathophysiology, and the risk factors for these two "closet" disorders, how they are related, how we can get patients to talk about them, and how the treatment of stress urinary incontinence may affect sexual dysfunction.

Success of repeat detrusor injections of botulinum a toxin in patients with severe neurogenic detrusor overactivity and incontinence.
Grosse J, Kramer G, Stohrer M
Eur Urol 2005 May;47(5):653-9. Epub 2005 Jan 15.
OBJECTIVES: Detrusor injections with botulinum toxin type A are an effective treatment for neurogenic detrusor overactivity, lasting for 9-12 months. When the patients develop botulinum resistance, subsequent injections might be less effective. Repeat injections in patients with severe neurogenic detrusor overactivity and incontinence were studied. METHODS: Patients received Botox (300 UI) or Dysport (750 UI) injections. Clinical variables: satisfaction, anticholinergics use, mean and maximum bladder capacity, continence volume. Cystometric parameters: compliance, cystometric capacity, reflex volume. Statistics: Anova, chi2-tests; t-tests and paired t-tests (p=0.05). RESULTS: Forty-three men and 23 women (mean age 38.3 years; mean duration of lesion 9.2 years) were included. The interval between subsequent injections (on average 9-11 months) did not change significantly (p=0.5594). The satisfaction was high and anticholinergics use decreased substantially (p=0.0000). Significant improvements were found in clinical parameters and in cystometric capacity, for compliance only at the second treatment. The incidence of reflex contractions was significantly reduced. Four patients had transient adverse events after Dysport. CONCLUSIONS: Repeat injections with botulinum toxin type A are as effective as the first one. The cause for repeat treatment is relapse of overactive bladder symptoms.

A randomized controlled trial of duloxetine alone, pelvic floor muscle training alone, combined treatment and no active treatment in women with stress urinary incontinence.
Ghoniem GM, Van Leeuwen JS, Elser DM, Freeman RM, Zhao YD, Yalcin I, Bump RC
J Urol 2005 May;173(5):1647-53.
PURPOSE: We primarily compared the effectiveness of combined pelvic floor muscle training (PFMT) and duloxetine with imitation PFMT and placebo for 12 weeks in women with stress urinary incontinence (SUI). In addition, we compared the effectiveness of combined treatment with single treatments, single treatments with each other and single treatments with no treatment. MATERIALS AND METHODS: This blinded, doubly controlled, randomized trial enrolled 201 women 18 to 75 years old with SUI at 17 incontinence centers in the Netherlands, United Kingdom and United States. Women averaged 2 or more incontinence episodes daily and were randomized to 1 of 4 combinations of 80 mg duloxetine daily, placebo, PFMT and imitation PFMT, including combined treatment (in 52), no active treatment (in 47), PFMT only (in 50) and duloxetine only (in 52). The primary efficacy measure was incontinence episode frequency. Other efficacy variables included the number of continence pads used and the Incontinence Quality of Life questionnaire score. RESULTS: The intent to treat population incontinence episode frequency analysis demonstrated the superiority of duloxetine with or without PFMT compared with no treatment or with PFMT alone. However, pad and Incontinence Quality of Life analyses suggested greater improvement with combined treatment than single treatment. A completer population analysis demonstrated the efficacy of duloxetine with or without PFMT and suggested combined treatment was more effective than either treatment alone. CONCLUSIONS: The data support significant efficacy of combined PFMT and duloxetine in the treatment of women with SUI. We hypothesize that complementary modes of action of duloxetine and PFMT may result in an additive effect of combined treatment.

Functional magnetic stimulation for mixed urinary incontinence.
But I, Faganelj M, Sostaric A
J Urol 2005 May;173(5):1644-6.
PURPOSE: In this study we determined the efficacy of functional magnetic stimulation (FMS) compared to

placebo for treating women with mixed urinary incontinence (MUI). MATERIALS AND METHODS: A total of 39 women with MUI were randomly assigned to the FMS group (23 patients) or to the placebo group (16 patients). FMS was applied continuously at 18.5 Hz day and night for 2 months. Conventional urodynamic studies were performed before and after stimulation. Outcome measures assessed were clinical (daytime frequency, nocturia, pad use, pad weight) and urodynamic variables (first sensation of bladder filling, maximum cystometric capacity, maximum urethral closure pressure), and patient subjective assessment (visual analogue scale). RESULTS: After 2 months of FMS significant decreases in voiding frequency (from 9.0 to 6.7, p = 0.0002), nocturia (from 2.6 to 1.4, p = 0.0007) and pad use (from 3.9 to 2.2, p = 0.007) were observed only in the FMS group. First sensation of bladder filling and maximum cystometric capacity increased significantly after stimulation compared with prestimulation levels only in the FMS group, p = 0.003 (from 118 to 174 ml) and p = 0.00004 (from 267 to 396 ml), respectively. A total of 18 women (78.3%) reported an improvement in symptoms after FMS with an average success rate of 41.9%. The success rate was significantly lower in the placebo group (p = 0.021) at 22.9%. CONCLUSIONS: Functional magnetic stimulation was useful and safe for treating women with MUI.

The overactive bladder-symptom composite score: a composite symptom score of toilet voids, urgency severity and urge urinary incontinence in patients with overactive bladder.
Zinner N, Harnett M, Sabounjian L, Sandage B Jr, Dmochowski R, Staskin D
J Urol 2005 May;173(5):1639-43.
PURPOSE: To our knowledge there is no index in urology that yields a single, quantifiable and clinically interpretable measure of overactive bladder (OAB) symptoms, including urgency, 24-hour voiding frequency and urge urinary incontinence (UUI). Urgency is the most difficult of these symptoms to measure. The Indevus Urgency Severity Scale (Indevus Pharmaceuticals, Lexington, Massachusetts) was recently developed and validated to capture urgency severity per toilet void. The scale has been combined with 24-hour frequency and UUI episodes to create the OAB Symptom Composite Score (OAB-SCS). We present this composite score. MATERIALS AND METHODS: Two multicenter trials were performed to determine the effects of trospium chloride given as 20 mg tablets vs placebo. A total of 1,157 patients, including 581 who received placebo and 576 who received trospium, were randomly assigned to treatment. Daily OAB-SCS totals were obtained for each patient for each day during the 7-day diary collection period for every visit. RESULTS: The average baseline OAB-SCS value was 36. The mean change from baseline in the trospium and placebo groups was 5 and 1 OAB-SCS points in patients with mild OAB, 10 and 5 in patients with moderate OAB, and 13 and 9 in patients with severe OAB, respectively. CONCLUSIONS: The OAB-SCS discriminated between placebo and pharmacologically treated (trospium chloride) patients with OAB in this study. The OAB-SCS is an improvement over individual symptoms alone. It is easy to implement and interpret and it will prove to be a clinically relevant tool in clinical trials in which patient diary data are captured.

Long-term efficacy of a vaginal sling procedure in a rat model of stress urinary incontinence.
Hijaz A, Bena J, Daneshgari F
J Urol 2005 May;173(5):1817-9.
PURPOSE: We examined the long-term efficacy of a newly created vaginal sling procedure for the restoration of leak point pressure (LPP) in a rat model of stress urinary incontinence (SUI). MATERIAL AND METHODS: A total of 20 female Sprague-Dawley rats were randomly assigned to 1 of 4 groups, namely normal control, SUI plus vaginal sling, SUI plus sham sling and SUI only. SUI was created in the latter 3 groups by bilateral pudendal nerve transection (PNT). In the sling procedure a 2 x 0.3 cm strip of polypropylene mesh was placed at the mid urethral level. Animals in the SUI plus sham sling group underwent vaginal dissection only. After 5 weeks LPP was measured 4 or 5 times in each rat and the mean was determined. The Kruskal-Wallis and Wilcoxon rank sum tests were used to evaluate whether levels of measurements differed across and between groups. RESULTS: Mean LPP +/- SD in control rats was 48.8 +/- 10.2 cm H2O. PNT decreased LPP to 23.5 +/- 7.4 cm H2O. Sling placement improved LPP at 5 weeks to 35.5 +/- 2.3 cm H2O, whereas LPP in the sham sling group was 29.1 +/- 4.9 cm H2O. LPP recovery in the sling group was significantly above levels for PNT (p = 0.037). LPP in the sling group did not differ statistically from that in the control group (p = 0.11). CONCLUSIONS: The newly created vaginal sling model restores the LPP in the rat model of SUI in the long term (5 weeks). This model could be used to address research questions related to the sling procedure.

Prolonged sacral neuromodulation testing using permanent leads: a more reliable patient selection method?
Kessler TM, Madersbacher H, Kiss G
Eur Urol 2005 May;47(5):660-5. Epub 2005 Jan 4.
OBJECTIVE: To assess the effect of prolonged sacral neuromodulation testing using permanent leads

comparing the usual evaluation period of 4 to 7 days to a prolonged evaluation period of a minimum of 14 days. PATIENTS AND METHODS: A consecutive series of 20 patients (16 females and 4 males) undergoing prolonged sacral neuromodulation testing using permanent leads between September 2000 and March 2004 were evaluated retrospectively. 10 suffered from urgency-frequency syndrome, 3 from urge incontinence and 7 from non-obstructive chronic urinary retention. Key bladder diary variables at baseline, after the usual and prolonged evaluation period and at the last follow-up were compared. RESULTS: The median age was 52 years (interquartile range (IQR) 38-59) and the median evaluation period 28 days (IQR 18-29). 16 of the 20 patients (80%) had successful prolonged sacral neuromodulation testing and underwent the implantation of the IPG that was placed in the anterior abdominal wall in 6 and in the upper buttock in 10 patients. The eligibility for IPG implantation was significantly (p=0.031) increased from 50% after the usual to 80% after the prolonged evaluation period. At a median follow-up of 22 months (IQR 12-34), sacral neuromodulation was successful in 14 (88%) of the 16 IPG implanted patients but failed in 2. CONCLUSIONS: Prolonged sacral neuromodulation testing using permanent leads is more reliable for accurate patient selection than the usual evaluation period. Therefore, this method is strongly recommended and suggested to become the standard test procedure.

Erosions and urinary retention following polypropylene synthetic sling: Australasian survey.
Hammad FT, Kennedy-Smith A, Robinson RG
Eur Urol 2005 May;47(5):641-6; discussion 646-7. Epub 2004 Dec 31.
INTRODUCTION: There are few published reports on the incidence and management of urethral and vaginal erosions following the use of polypropylene synthetic slings. Moreover, there is very little Australasian data on their use for management of female urinary incontinence or on their associated complications. METHODS: A 1-page survey was mailed to the Australian and New Zealand members of the Urological Society of Australasia (N=326). The survey included questions on the use of polypropylene synthetic sling and the incidence and management of post-operative vaginal and urethral erosions and urinary retention. RESULTS: 198 surveys were returned (response rate: 61%). Polypropylene synthetic sling procedure is practiced by 39% of the respondents with a total of 1459 cases (TVT: 993, SPARC: 466). The incidence of vaginal erosions, urethral erosions and urinary retention was 1.2%, 0.6% and 6.5%, respectively. Thirty five percent of vaginal erosions were asymptomatic and only identified on routine post-operative vaginal examination. One third of urethral erosions presented more than 1 year after surgery and 89% of these were symptomatic. Thirty four percent of patients with urinary retention required surgical intervention to correct the retention. CONCLUSIONS: The incidence of urethral and vaginal erosions following polypropylene synthetic sling procedures is lower than that with other synthetic slings. However, a high index of suspicion and long-term follow-up are required to identify and manage these complications of this relatively new procedure.

Outcome following TVT sling procedure: a comparison of outcome recorded by surgeons to that reported by their patients at a London district general hospital.
Munir N, Bunce C, Gelister J, Briggs T
Eur Urol 2005 May;47(5):635-40; discussion 640. Epub 2005 Jan 27.
OBJECTIVE: Retrospective study to assess patient satisfaction rates after TVT sling procedure for stress urinary incontinence (SUI), and comparison of these results to the post-operative progress documented by the surgeons in the clinical notes. METHODS: All TVT sling cases at our institution during February 1999 to December 2002 were included. Data was collected from clinical notes on post-operative outcome as recorded by the surgeons, and a patient satisfaction questionnaire was used to assess patients' perception of their progress. RESULTS: The response rate to the patient satisfaction questionnaire was 72%. Overall 94% of the patients were satisfied with the procedure. However, they reported cure rates of only 44%. This is comparable to the 46% cure rates documented by the surgeons. CONCLUSION: The surgeons' and the patients' perceptions regarding outcome and change in symptoms after TVT sling for SUI at our hospital, correlate well. Hence, the documentation in the clinical notes by the surgeons can be relied upon as an accurate representation of post-operative patient progress. Despite the relatively low cure rates (44-46%) for SUI with TVT sling procedure, the patient satisfaction rates with the outcome are high (94%), reiterating that there is a poor correlation between quality of life impairment and the concept of cure.

Injectable bulking agents for treating faecal incontinence.
Vaizey CJ, Kamm MA
Br J Surg 2005 May;92(5):521-7.
BACKGROUND:: Reports of the use of injectable bulking agents for faecal incontinence are currently confined to a small number of pilot studies. However, the use of these agents is rapidly becoming widespread based on this limited knowledge. METHODS:: This review provides an overview of the products available and the methods of delivery based on the pilot studies, selected articles reporting experience of

these agents in urology, plastic surgery and laryngology, and some animal studies. RESULTS AND CONCLUSIONS:: Although bulking agents have been used to treat urinary incontinence for over four decades, their use in faecal incontinence has so far been limited. The large choice of products now available and the lack of a defined injection strategy will hamper efforts to produce meaningful prospective randomized trials. Copyright (c) 2005 British Journal of Surgery Society Ltd. Published by John Wiley & Sons, Ltd.

Outcome of overlapping anal sphincter repair after 3 months and after a mean of 80 months.
Barisic GI, Krivokapic ZV, Markovic VA, Popovic MA
Int J Colorectal Dis 2005 Apr 14;.
BACKGROUND: The aim of this study was to determine the functional results of anal sphincter repair after a long follow-up (mean 80.1 months). METHODS: In the period 1990-2002, 65 sphincter repairs were performed. Obstetric trauma was the cause of incontinence in 72.3% cases, fistulotomy in 13.8%, nonspecific trauma in 9.2%, and war injury in 4.6%. At the time of surgery, 12 patients had undergone an urgent stoma procedure. In all cases, anal manometry, electromyography, and defecography were performed. The severity of incontinence was evaluated preoperatively using the Wexner score system. Anterior sphincteroplasty was performed in 52 cases, lateral in 9 cases, and posterior in 4 cases. RESULTS: The results were determined according to the Wexner score system and the Browning-Parks scale. The Wexner score was calculated 3 months after operation and during every follow-up visit. Preoperative scores and those at the first and last follow-up visits were analyzed. Three months after operation excellent results were achieved in 55.5%, good in 18.5%, fair in 16.9%, and poor in 9.2% patients. After follow-up (mean 80.1 months), 26.8% had excellent results, 21.4% had good results, 12.5% had fair results, and 39.3% of patients had a poor outcome. Results determined by the Wexner score system improved from 17.8 preoperatively to 3.6 three months after operation, but deteriorated over time to 6.3 after longer follow-up ($p<0.001$). CONCLUSION: Overlapping sphincter repair provides satisfactory results in more than two-thirds of patients initially, but the results tend to worsen over time and are satisfactory in half of patients after longer follow-up.

Sacral nerve stimulation for faecal incontinence following a rectosigmoid resection for colorectal cancer.
Jarrett ME, Matzel KE, Stosser M, Christiansen J, Rosen H, Kamm MA
Int J Colorectal Dis 2005 Apr 21;.
INTRODUCTION: Following recto-sigmoid resection some patients may become faecally incontinent and remain so despite conservative treatment. This multicentre prospective study assessed the use of sacral nerve stimulation (SNS) in this group. METHODS: All patients had more than or equal to 4 days of faecal incontinence for solid or liquid stools over a 21-day period following recto-sigmoid resection for colorectal carcinoma. The operation had to have been deemed curative. They had to have failed pharmacological and biofeedback treatment. RESULTS: Three male patients met these criteria. One had had a colo-anal and two a colo-rectal anastomosis for rectal carcinoma. All patients had intact internal and external anal sphincters. Two patients had a successful temporary stimulation period and proceeded to permanent implantation. Pre-operative symptom duration was 1 year in the permanently implanted patients. They were followed up for 12 months. SNS improved the number of faecally incontinent episodes in both patients. Ability to defer was improved in both patients from 0-5 min to 5-15 min. The faecal incontinence-specific ASCRS quality of life assessment improved in all four subcategories. CONCLUSION: This study demonstrates that SNS may be effective in the treatment of patients with faecal incontinence following recto-sigmoid resection if conservative treatment has failed.

Fecal incontinence after stapled transanal rectotomy managed with Durasphere injection.
Spyrou M, De Nardi P
Tech Coloproctol 2005 Apr;9(1):87.

Patients' Views of a Colostomy for Fecal Incontinence.
Norton C, Burch J, Kamm MA
Dis Colon Rectum 2005 Mar 28;.
INTRODUCTION: Formation of a permanent stoma often is seen as a last resort when all other interventions for fecal incontinence have failed. However, no previous study has examined patients' views of a colostomy to manage fecal incontinence. METHODS: People who had a colostomy to manage fecal incontinence were recruited via an advertisement in the magazine of the British Colostomy Association or from those operated at a specialist colorectal hospital. Four questionnaires were sent, asking about the stoma, previous incontinence, anxiety and depression, and quality of life. RESULTS: A total of 69 replies were received. Respondents were 11 males and 58 females with a median age of 64 years and a median of 59 months since the operation. Rating their ability to live with their stoma now on a scale of 0 to 10, the median response was 8 (range, 0-10). The majority (83 percent) felt that the stoma restricted their life "a

little" or "not at all" (a significant improvement from perceived restriction from former incontinence, P = 0.008). Satisfaction with the stoma was a median of 9 on a scale of 0 to 10 (range, 0-10). Eighty-four percent would "probably" or "definitely" choose to have the stoma again. Quality of life (SF-36) was poor, but neither depression nor anxiety was a prominent feature. CONCLUSIONS: The majority of previously incontinent people were positive about the stoma and the difference it had made to their life. However, a few had not adapted and disliked the stoma intensely. Health care professionals should discuss a stoma as an option with patients whose lives are restricted by fecal incontinence.

Sacral nerve stimulation for faecal incontinence in patients with previous partial spinal injury including disc prolapse.
Jarrett ME, Matzel KE, Christiansen J, Baeten CG, Rosen H, Bittorf B, Stosser M, Madoff R, Kamm MA
Br J Surg 2005 Apr 18;.

Secondary implantation of an artificial sphincter after abdominoperineal resection and pseudocontinent perineal colostomy for rectal cancer.
Marchal F, Doucet C, Lechaux D, Lasser P, Lehur PA
Gastroenterol Clin Biol 2005 Apr;29(4):425-8.
INTRODUCTION: Fecal continence with a perineal colostomy performed after abdominoperineal resection (APR) is not always satisfactory despite retrograde colonic enemas. Functional improvement is currently examined using artificial sphincters. Preliminary results are disclosed.PATIENTS: In 3 female patients, 45, 59 and 68 years old, curative APR and perineal colostomy were performed after radiotherapy in 2, for T1-2N0 cancer of the lower rectum. Due to occasional leaks, need for strict diet and fear of incontinence, an Acticon Neosphincter(R) (AMS) was implanted consecutively at a mean 4.5 years after APR.RESULTS: Device implantation was feasible and uneventful. In one case, a superficial hematoma was drained and healed by second intention. Devices were activated 3 months after implantation. At a mean 2.5 years follow-up, the 3 patients had an activated and functional artificial sphincter. Leaks and fecal urgency significantly decreased but colonic enemas were maintained. Dietary restrictions were less and quality of life improved. All 3 considered the device as a useful adjunct.CONCLUSION: In this limited experience, implantation of artificial sphincter around a perineal colostomy following APR for rectal cancer appeared feasible and safe even in case of previous radiotherapy. Mid-term tolerance was satisfactory. Continence and quality of life significantly improved.

7 – PAIN

The effect of biofeedback physical therapy in men with Chronic Pelvic Pain Syndrome Type III.
Cornel EB, van Haarst EP, Schaarsberg RW, Geels J
Eur Urol 2005 May;47(5):607-11. Epub 2005 Jan 22.
Recent studies suggest that the symptoms of chronic non-bacterial prostatitis (CP) or Chronic Pelvic Pain Syndrome (CPPS) may be due to or associated with pelvic floor muscle dysfunction. Therapies aimed to improve relaxation and proper use of the pelvic floor muscles such as biofeedback physical therapy and pelvic floor re-education are expected to give symptom improvement. The objective of this study was to evaluate the effect of biofeedback physical therapy on the symptoms of men with CPPS. MATERIALS AND METHODS: Between March 2000 to March 2004, 33 consecutive men were diagnosed with CP/CPPS based on history including the NIH-CPSI questionnaire and physical examination including pelvic floor muscle tonus, urinalysis, uroflowmetry with residual urine measurement and transrectal ultrasonography of the prostate. All patients participated in a pelvic floor biofeedback re-educating program. A rectal EMG probe was used to measure resting tone of the pelvic floor muscles and was helpful for instruction pelvic floor muscles contraction and relaxation. RESULTS: Two of the 33 men dropped out. In the remaining 31 men, mean age 43.9 years (range 23-70), the mean total Chronic Prostatitis Symptom Index (NIH-CPSI) changed from 23.6 (range 11-34) at baseline to 11.4 (range 1-25) after treatment ($p<0.001$). The mean value of the pelvic floor muscle tonus was 4.9 at diagnosis (range 2.0-10.0) and decreased to 1.7 (range 0.5-2.8) after treatment ($p<0.001$). CONCLUSIONS: Our study clearly demonstrates a significant effect of biofeedback physical therapy and pelvic floor re-education for CP/CPPS patients, leading to a significant improvement of the symptom score. The correlation between the pelvic muscle tonus results with NIH-CPSI score is highly suggestive that the pelvic floor plays an important role in the pathophysiology of CP/CPPS.

Validation of Spanish version of Pelvic Pain and Urgency/Frequency (PUF) patient symptom scale.
Minaglia S, Ozel B, Nguyen JN, Mishell DR Jr
Urology 2005 Apr;65(4):664-9.
OBJECTIVES: To translate the previously described Pelvic Pain and Urgency/Frequency (PUF) questionnaire into Spanish using a back-translation technique and to validate the Spanish version in a group

of bilingual women with symptoms consistent with interstitial cystitis or painful bladder syndrome. METHODS: Bilingual women with complaints of urinary urgency/frequency and/or pelvic pain were randomized to complete initially either the Spanish version or the original English version of the PUF questionnaire followed by the questionnaire in the other language. To evaluate retest reliability, subjects completed the Spanish version a second time 1 week later. Demographic information, including age, ethnic origin, and primary language, was obtained. Paired t tests and Wilcoxon signed rank tests for total PUF score, its two domain scores, and each item were used to assess the difference between the Spanish and English versions. Test and retest reliability of the Spanish version was similarly assessed. Agreement between the Spanish and English versions was assessed by weighted kappa statistics and 95% confidence intervals for each item. P values less than 0.05 were considered significant, and kappa values greater than 0.7 were considered to indicate good agreement. RESULTS: No statistically significant difference was found in the mean or median scores (ie, item, symptom, bother, total) between the English and Spanish versions. Good agreement between English and Spanish versions in all eight items was demonstrated by weighted kappa statistics. The Spanish version demonstrated retest reliability among total scores and seven of eight items when administered 1 week later. CONCLUSIONS: The Spanish PUF questionnaire is a valid and reliable instrument for the evaluation and treatment of patients with interstitial cystitis or painful bladder syndrome.

Early hyperbaric oxygen therapy improves outcome for radiation-induced hemorrhagic cystitis.
Chong KT, Hampson NB, Corman JM
Urology 2005 Apr;65(4):649-53.
OBJECTIVES: To assess the clinical factors that affect the efficacy of hyperbaric oxygen (HBO2) therapy in treating radiation-induced hemorrhagic cystitis. HBO2 therapy is an effective treatment for radiation-induced hemorrhagic cystitis, with reported response rates ranging from 76% to 100%. METHODS: The data from patients with radiation-induced hemorrhagic cystitis treated at our institution between May 1988 and December 2001 were reviewed retrospectively. All patients received HBO2 therapy at 2.36 atm absolute pressure, with 90 minutes of 100% oxygen breathing per treatment. The outcome was assessed after at least 12 months of follow-up. We evaluated patient demographics, types of pelvic malignancy and radiotherapy, total radiation dose, onset and severity of hematuria, and prior intravesical management. Clinical improvement was defined as the absence of, or reduction in, macroscopic hematuria. RESULTS: A total of 60 patients (55 men and 5 women), mean age 70 years, received an average of 33 HBO2 treatments (range 9 to 63). Of the 60 patients, 48 (80%) had either total or partial resolution of hematuria. When treated within 6 months of hematuria onset, 96% (27 of 28) had complete or partial symptomatic resolution (P = 0.003). All 11 patients with previous clot retention had clinical improvement if treated within 6 months of hematuria onset (P = 0.007). Prior intravesical chemical instillation did not affect the clinical outcome. Patients who had undergone primary, adjuvant, or salvage external beam pelvic radiotherapy showed response rates of 81%, 83%, and 78%, respectively (P = 0.950). CONCLUSIONS: Our results show that delivery of HBO2 therapy within 6 months of hematuria onset is associated with a greater therapeutic response rate. Treatment efficacy was independent of prior intravesical therapy and the timing of radiotherapy.

[Management of acute prostatitis, based on a series of 100 cases]
Auzanneau C, Manunta A, Vincendeau S, Patard JJ, Guille F, Lobel B
Prog Urol 2005 Feb;15(1):40-4.
OBJECTIVES: To evaluate the current diagnostic and therapeutic management of acute prostatitis. MATERIAL AND METHODS: The authors report a series of 100 consecutive patients with a diagnosis of acute prostatitis managed between January 1999 and December 2003. They analysed the clinical and laboratory data and imaging findings leading to the diagnosis of acute prostatitis and then the modalities of treatment and follow-up of these patients. RESULTS: The median age was 56.5 years (range: 19-86 years). In 77% of cases, the initial septic syndrome was considered to be severe. Prostatic tenderness was detected on digital rectal examination in 68% of cases. In 76% of cases, the micro-organism responsible was Escherichia coli. 8% of patients had positive blood cultures. All patients presented laboratory signs of inflammatory syndrome, with elevated C Reactive Protein (CRP) in most cases. Renal and bladder ultrasound was performed in 49% of cases and CT was performed in 16% of cases. 92% of patients were treated with fluoroquinolones, as monotherapy in 34% of cases. The duration of prescription ranged from 2 weeks to 6 weeks. No aetiology was detected in 48% of cases, 8% were considered to be iatrogenic and 44% were associated with incomplete bladder emptying. CONCLUSION: Acute prostatitis, rapidly treated by aggressive and adapted antibiotics has a rapidly favourable outcome. Elevation of CRP and the presence of leukocyturia on urine dipsticks are almost constant and, when they are normal, the diagnosis of acute prostatitis should be questioned. Imaging is not required in the absence of diagnostic doubt and any suspicion of progression to abscess. The duration of antibiotic therapy varies from prescriber to prescriber

reflecting the various guidelines. Guidelines on this subject are contradictory and further effort is required to achieve homogenization and application of these guidelines.

Value of endorectal ultrasonography for diagnosing rectovaginal septal endometriosis infiltrating the rectum.

Delpy R, Barthet M, Gasmi M, Berdah S, Shojai R, Desjeux A, Boubli L, Grimaud JC
Endoscopy 2005 Apr;37(4):357-61.

BACKGROUND AND STUDY AIMS: Rectovaginal septal endometriosis (RVSE) can pose serious therapeutic problems when there is infiltration of the rectal septum (which occurs in approximately half of the cases). The aim of this study was to assess the value of endoscopic ultrasonography in diagnosing rectal wall involvement by pelvic endometriosis. PATIENTS AND METHODS: A prospective study was carried out from May 1998 to March 2003 at a single hospital center. The 30 patients included in the study presented with suspected RVSE and underwent systematic anorectal endoscopic ultrasonographic exploration prior to the surgical intervention. The endoscopic ultrasonography was carried out under general anesthesia with a 7.5-MHz miniprobe equipped with a distal balloon. RESULTS: The anorectal endoscopic ultrasonographic examination (EUS) showed the presence of endometriosis in the rectovaginal septum in 26 patients (88 %), in the uterosacral ligaments in 10 patients (33 %), and in the ovaries in two patients (6 %). At EUS, the nodules were infiltrating the rectal wall in 17 patients (56 %). The surgical exploration demonstrated endometriosis in the rectovaginal septum in 26 cases, the uterosacral ligaments in 22 cases, and the ovaries in 16 cases. The rectal wall was completely infiltrated in 12 cases and only partly in four cases, and intestinal tract resection was required in 10 cases. The sensitivity, specificity, and positive and negative predictive value of anorectal endoscopic ultrasonography as a means of diagnosing endometriosis of the rectovaginal septum and infiltration of the rectal wall were found to be 96 %, 100 %, 100 % and 83 %, and 92 %, 66 %, 64 % and 92 %, respectively; and the diagnostic accuracy was at 96 % and 80 %, respectively. The sensitivity for detecting nodules in the uterosacral ligaments or in the ovaries was 42 % and 14 %, respectively, leading to diagnostic accuracy rates of 56 % and 53 %. CONCLUSIONS: In terms of its sensitivity and its negative predictive value, anorectal endoscopic ultrasonography is a very effective means of detecting endometriosis of the rectovaginal septum and assessing possible infiltration of the rectal wall. However, this method is not as accurate for nodules located far from the EUS probe, as is the case with the uterosacral ligaments and ovaries.

Neural correlates of painful genital touch in women with vulvar vestibulitis syndrome.

Pukall CF, Strigo IA, Binik YM, Amsel R, Khalife S, Bushnell MC
Pain 2005 May;115(1-2):118-27.

Vulvar vestibulitis syndrome (VVS) is a common cause of dyspareunia in pre-menopausal women. Recent evidence points to the importance of the sensory component in VVS, particularly the heightened processing of tactile and pain sensation in the vulvar vestibule. The goal of the present study was to examine the neural basis of heightened sensitivity to touch (i.e. allodynia) in women with VVS. Using functional magnetic resonance imaging, we compared regions of neural activity in 14 women with VVS and 14 age- and contraceptive-matched control women in response to the application of mild and moderate pressure to the posterior portion of the vulvar vestibule. Intensity and unpleasantness ratings were recorded after each scan; these ratings were significantly higher for women with VVS than controls. All women with VVS described moderate pressure as painful and unpleasant, and 6 of the 14 women with VVS described mild pressure as painful and unpleasant. In contrast, none of the stimuli was painful for control women. Correspondingly, women with VVS showed more significant activations during pressure levels that they found to be either painful or non-painful than did controls during comparable pressure levels. During pressure described as painful by women with VVS, they had significantly higher activation levels in the insular and frontal cortical regions than did control women. These results suggest that women with VVS exhibit an augmentation of genital sensory processing, which is similar to that observed for a variety of syndromes causing hypersensitivity, including fibromyalgia, idiopathic back pain, irritable bowel syndrome, and neuropathic pain.

Successful treatment of Zoon's vulvitis with high potency topical steroid.

Botros SM, Dieterich M, Sand PK, Goldberg RP
Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 15;.

Zoon's vulvitis is a rare, chronic condition of the vulva that presents with burning, pruritus, and dysuria with characteristic lesions and histopathology. Several treatment options have been reported with limited success. A 63-year-old woman with Zoon's vulvitis diagnosed on histopathology was treated with clobetasol propionate 0.05%. Complete resolution of her symptoms and lesions occurred in less than 1 week. No recurrence of her symptoms has occurred after 9 months. Zoon's vulvitis may be successfully and expeditiously treated with high potency topical steroids.

Vitamin D Binding Protein in Endometriosis.
Ferrero S, Gillott DJ, Anserini P, Remorgida V, Price KM, Ragni N, Grudzinskas JG
J Soc Gynecol Investig 2005 May;12(4):272-277.
OBJECTIVE: Two-dimensional gel electrophoresis is a powerful method for identifying post-translationally modified molecules in biological fluids. We examined the presence and expression of vitamin D binding protein (DBP) in the peritoneal fluid (PF) and plasma (PL) of women with endometriosis. METHODS: PL and PF samples were obtained from 36 women with untreated mild endometriosis (revised classification of the American Fertility Society [rAFS] stage I-II), 52 women with untreated severe endometriosis (rAFS stage III-IV), 17 women with endometriosis treated with the oral contraceptive (OC), and 40 controls (infertility, n = 23; tubal sterilization, n = 12; pelvic pain, n = 5). PF and PL samples were analyzed by quantitative, high-resolution 2-dimensional gel electrophoresis. RESULTS: The expression of one DBP isoform (DBPE) in the PF of patients with untreated endometriosis was significantly lower than in the control group (P <.05). The levels of PF DBPE in patients with endometriosis using OC were significantly higher than in women with untreated endometriosis (P <.05). No significant difference was observed in PL DBPE expression between women with and without endometriosis, while it was significantly increased in patients with endometriosis using OC (P <.05). DBP expression was not correlated with the stage of endometriosis (rAFS classification) or the phase of the menstrual cycle. CONCLUSION: The decreased level of DBPE in the PF but not in PL of women with untreated endometriosis suggests that this molecule may be relevant in the pathogenesis of this disease.

Modified vulvar vestibulectomy: simple and effective surgery for the treatment of vulvar vestibulitis.
Lavy Y, Lev-Sagie A, Hamani Y, Zacut D, Ben-Chetrit A
Eur J Obstet Gynecol Reprod Biol 2005 May 1;120(1):91-5.
OBJECTIVE:: To evaluate the success of a simple modified vestibulectomy in treating vulvar vestibulitis. STUDY DESIGN:: Fifty-nine patients with vulvar vestibulitis refractory to nonsurgical treatment underwent modified vestibulectomy. Response was defined as return to normal coitus and was graded as complete, partial or non-responsive. RESULTS:: The postoperative follow-up period was 6 months-10 years. Thirty-nine (73.6%) patients reported complete response, 7 (13.2%) had partial response, and 7 (13.2%) were non-responsive to surgery. CONCLUSION:: Surgery is an effective treatment for vulvar vestibulitis refractory to conservative treatment. Simple modified vestibulectomy is considerably less invasive, technically simpler and probably less time consuming. Postoperative results employing this surgical procedure are found to be in line with postoperative results reported by others who employ surgical methods that are more extensive.

Bowel habit subtypes and temporal patterns in irritable bowel syndrome: systematic review.
Guilera M, Balboa A, Mearin F
Am J Gastroenterol 2005 May;100(5):1174-84.
Irritable bowel syndrome (IBS) is a heterogeneous condition characterized by the presence of abdominal discomfort or pain and bowel habit alterations: constipation (C-IBS), diarrhea (D-IBS), or alternating C and D (A-IBS). Its clinical course is poorly known. OBJECTIVES: (i) To compare bowel habit subtypes distribution in IBS according to sample origin and diagnosis criteria; (ii) To evaluate IBS temporal patterns based on follow-up studies. METHODS: A literature search (1966-2003) was conducted in the MEDLINE and EMBASE databases. A total of 72 studies were found and 22 were finally selected. RESULTS: Population-based studies from the United States (Manning) found similar distribution among C-IBS, D-IBS, and A-IBS, while European studies (Rome I, Rome II, or self-reporting) showed either C-IBS or A-IBS as the most prevalent subtypes. Primary care office-based studies (Rome I or Rome II) showed A-IBS as the most prevalent group. Gastroenterology specialized office-based studies found either C-IBS or D-IBS as the most frequently reported subtype. Prospective follow-up investigations showed that the most frequent IBS temporal pattern profile consists of mild to moderate symptoms appearing in cluster in an intermittent way, about once a week, and lasting 2-5 days on average. CONCLUSION: IBS clinical subtypes distribution differs depending on the population evaluated, the geographical location, and the criteria employed to define IBS and bowel habit subtypes. In most cases, clinical course is characterized by the presence of mild-to-moderate symptoms appearing sequentially. Prospective studies, using clear and stable diagnostic criteria and subtype definitions, and based on daily data collection should further characterize IBS clinical course. (Am J Gastroenterol 2005;100:1174-1184).

Amitriptyline reduces rectal pain related activation of the anterior cingulate cortex in patients with irritable bowel syndrome.
Morgan V, Pickens D, Gautam S, Kessler R, Mertz H
Gut 2005 May;54(5):601-7.
BACKGROUND AND AIMS: Irritable bowel syndrome (IBS) is a disorder of intestinal hypersensitivity and altered motility, exacerbated by stress. Functional magnetic resonance imaging (fMRI) during painful rectal

distension in IBS has demonstrated greater activation of the anterior cingulate cortex (ACC), an area relevant to pain and emotions. Tricyclic antidepressants are effective for IBS. The aim of this study was to determine if low dose amitriptyline reduces ACC activation during painful rectal distension in IBS to confer clinical benefits. Secondary aims were to identify other brain regions altered by amitriptyline, and to determine if reductions in cerebral activation are greater during mental stress. METHODS: Nineteen women with painful IBS were randomised to amitriptyline 50 mg or placebo for one month and then crossed over to the alternate treatment after washout. Cerebral activation during rectal distension was compared between placebo and amitriptyline groups by fMRI. Distensions were performed alternately during auditory stress and relaxing music. RESULTS: Rectal pain induced significant activation of the perigenual ACC, right insula, and right prefrontal cortex. Amitriptyline was associated with reduced pain related cerebral activations in the perigenual ACC and the left posterior parietal cortex, but only during stress. CONCLUSIONS: The tricyclic antidepressant amitriptyline reduces brain activation during pain in the perigenual (limbic) anterior cingulated cortex and parietal association cortex. These reductions are only seen during stress. Amitriptyline is likely to work in the central nervous system rather than peripherally to blunt pain and other symptoms exacerbated by stress in IBS.

Brain imaging and its implications for studying centrally targeted treatments in irritable bowel syndrome: a primer for gastroenterologists.
Drossman DA
Gut 2005 May;54(5):569-73.
Research into brain-gut interactions, and the use of brain imaging, as potential investigative tools for functional gastrointestinal disorders, such as irritable bowel syndrome, is a promising new area. Studies are beginning to identify the structure and function of regions of the brain and their relationships to pain perception, stress, and other psychosocial variables. These imaging modalities may also have diagnostic potential, and perhaps even therapeutic applications, particularly with regard to understanding the benefit of centrally targeted modalities such as antidepressants and psychological treatments.

What does the future hold for irritable bowel syndrome and the functional gastrointestinal disorders?
Drossman DA
J Clin Gastroenterol 2005 May-Jun;39(5 Suppl):S251-6.
Our understanding of irritable bowel syndrome and the functional GI disorders has grown considerably over the last 15 years. In part this relates changes in their classification and definition from being due solely to motility disturbances, to being symptom based (eg, Rome criteria). This opened the door to the study of many other factors that contribute to the clinical expression of these disorders, including visceral hypersensitivity, sensitization, altered mucosal immunity, and dysfunction in brain-gut regulatory processes. New knowledge has been gained in areas of genetics, central nervous system and enteric nervous system neurotransmitters of motility, sensitivity and secretion, the effect of altered mucosal inflammation on cytokine and paracrine activation, and neural sensitization, postinfectious disorders, the influence of psychologic stress on gut functioning via alterations in regulatory pathways (eg, hypothalamic-pituitary adrenal axis, or pain regulatory system like the cingulate cortex), improved accuracy of diagnosis using Rome II criteria plus "red flags" the institution of behavioral treatments, and the use of new pharmacologic treatments both at the gut and brain level. Future research will improve upon this new knowledge via basic and translational studies of neuropeptide signaling with new neurotransmitters, new knowledge on the mechanisms for central nervous system-enteric nervous system communication and dysfunction, and more advanced clinical research on education, communication skills and their effects on outcome, genetics, pharmacogenetics and genetic epidemiology, better understanding as to how certain psychosocial domains (eg, catastrophizing, abuse) affect symptom behavior and outcome, newer pharmacologic treatments, and the use of combined pharmacologic and behavioral treatment packages. I am pleased to have the opportunity to provide a personal perspective on what the future will be for irritable bowel syndrome and the other functional GI disorders. Having been involved in this field for almost 30 years, I have been fortunate to witness tremendous changes. The focus of this presentation is to address the advances that have recently occurred that set the stage for proposing future research to help move the field along and ultimately to help our patients.

Use of diet and probiotic therapy in the irritable bowel syndrome: analysis of the literature.
Floch MH
J Clin Gastroenterol 2005 May-Jun;39(5 Suppl):S243-6.
GOAL:: The goal of this report is to review the use of dietary intake and probiotics in patients with irritable bowel syndrome (IBS) in published reports. BACKGROUND:: Dietary factors can be important in inducing symptoms that occur in patients with the IBS. Dietary intolerances, dietary allergies, specific food metabolites, and regular diet contents all may act as triggers and aggravate the symptoms of IBS; but when

any of these mechanisms can be proven to cause the symptoms, then their elimination results in the resolution of that patient's IBS. METHODS:: Our previous review was updated. In addition, a careful Medline search was made for the years from 1975 to 2004 to evaluate human research reports on diet and probiotics in the IBS. Forty-six manuscripts were reviewed on diet and six were available on probiotic use in IBS. The most common dietary factor evaluated in the literature was bran, and the most common probiotic used was Lactobacillus plantarum. CONCLUSIONS:: Although investigations have shown that bran may be helpful in some patients, a complete review of the literature does not reveal conclusive evidence that diet therapy is effective in IBS. From the limited reports on probiotics, there appears to be a trend to decreasing symptoms. It is clear that much more prospective research is needed to study both dietary factors and probiotics in these areas.

Irritable bowel syndrome: a syndrome in evolution.
Lacy BE, Lee RD
J Clin Gastroenterol 2005 May-Jun;39(5 Suppl):S230-42.
As a group, functional gastrointestinal disorders are the most common gastrointestinal disorder seen by both generalists and specialists. These disorders can be frustrating to both patients and physicians as they are usually chronic in nature and difficult to treat. These disorders are associated with frequent healthcare visits, the scheduling of multiple, expensive diagnostic tests, and the use of both over-the-counter and prescription medications. All of these factors lead to a significant economic burden to society. In addition, functional gastrointestinal disorders are associated with a reduction in quality of life for the patient. Irritable bowel syndrome (IBS) is the most common of the functional gastrointestinal disorders. This syndrome has been the focus of a large number of research studies over the past two decades. These studies have resulted in a number of significant changes in our definition of IBS. In addition, these research studies have produced considerable changes in our understanding of the etiology and pathogenesis of IBS. In this section, we will review some of the evolutionary changes that have occurred in IBS. We will discuss how the definition of IBS has changed, consider our evolving strategies to evaluate and diagnose IBS, and finally, provide a brief overview of treatment options for this common disorder.

Nerves, reflexes, and the enteric nervous system: pathogenesis of the irritable bowel syndrome.
Gershon MD
J Clin Gastroenterol 2005 May-Jun;39(5 Suppl):S184-93.
The bowel exhibits reflexes in the absence of CNS input. To do so, epithelial sensory transducers, such as enterochromaffin (EC) cells, activate the mucosal processes of intrinsic (IPANs) and extrinsic primary afferent (sensory) neurons. EC cells secrete serotonin (5-HT) in response to mucosal stimuli. Submucosal IPANs, which secrete acetylcholine and calcitonin gene-related peptide, initiate peristaltic and secretory reflexes and are activated via "5-HT1P" receptors. Release of neurotransmitters is enhanced by 5-HT4 receptors, which are presynaptic and strengthen neurotransmission in prokinetic pathways. 5-HT3 receptors mediate signaling to the CNS and thus ameliorate cancer chemotherapy-associated nausea and the visceral hypersensitivity of diarrhea-predominant irritable bowel syndrome (IBS-D); however, because 5-HT3 receptors also mediate fast ENS neurotransmission and activate myenteric IPANs, they may be constipating. 5-HT4 agonists are prokinetic and relieve discomfort and constipation in IBS-C and chronic constipation. 5-HT4 agonists do not initiate peristaltic and secretory reflexes but strengthen pathways that are naturally activated. Serotonergic signaling in the mucosa and the ENS is terminated by a transmembrane 5-HT transporter, SERT. Mucosal SERT and tryptophan hydroxylase-1 expression are decreased in experimental inflammation, IBS-C, IBS-D, and ulcerative colitis. Potentiation of 5-HT due to the SERT decrease could account for the discomfort and diarrhea of IBS-D, while receptor desensitization may cause constipation. Similar symptoms are seen in transgenic mice that lack SERT. The loss of mucosal SERT may thus contribute to IBS pathogenesis.

Do interventions which reduce colonic bacterial fermentation improve symptoms of irritable bowel syndrome?
Dear KL, Elia M, Hunter JO
Dig Dis Sci 2005 Apr;50(4):758-66.
Abnormal fermentation may be an important factor in irritable bowel syndrome (IBS). Gastroenteritis or antibiotic therapy may damage the colonic microflora, leading to increased fermentation and the accumulation of gas. Gas excretion may be measured by whole-body calorimetry but there has only been one such study on IBS to date. We aimed to assess the relationship between IBS symptoms and fermentation rates in IBS. A purpose-built, 1.4-m3, whole-body calorimeter was used to assess excretion of H2 and CH4 in IBS subjects while consuming a standard diet and, again, after open randomization on either the standard diet together with the antibiotic metronidazole or a fiber-free diet to reduce fermentation. Metronidazole significantly reduced the 24-hr excretion of hydrogen (median value compared to the control

group, 397 vs 230 ml/24 hr) and total gas (H2 + CH4; 671 vs 422 ml/min) and the maximum rate of gas excretion (1.6 vs 0.8 ml/min), as did a no-fiber polymeric diet (hydrogen, 418 vs 176 ml/min; total gas, 564 vs 205 ml/min; maximum rate of gas excretion, 1.35 vs 0.45 ml/min), with a significant improvement in abdominal symptoms. IBS may be associated with rapid excretion of gaseous products of fermentation, whose reduction may improve symptoms.

Brain Responses to Visceral and Somatic Stimuli in Irritable Bowel Syndrome: a Central Nervous System Disorder?
Chang L
Gastroenterol Clin North Am 2005 Jun;34(2):271-279.

Definition and classification of irritable bowel syndrome: current consensus and controversies.
Longstreth GF
Gastroenterol Clin North Am 2005 Jun;34(2):173-87.

Irritable bowel syndrome.
Talley NJ
Gastroenterol Clin North Am 2005 Jun;34(2):xi-xii.

The pathogenesis of bloating and visible distension in irritable bowel syndrome.
Azpiroz F, Malagelada JR
Gastroenterol Clin North Am 2005 Jun;34(2):257-69.

The role of food intolerance in irritable bowel syndrome.
Lea R, Whorwell PJ
Gastroenterol Clin North Am 2005 Jun;34(2):247-55.

Is irritable bowel syndrome a low-grade inflammatory bowel disease?
Bercik P, Verdu EF, Collins SM
Gastroenterol Clin North Am 2005 Jun;34(2):235-45.

Disturbances of motility and visceral hypersensitivity in irritable bowel syndrome: biological markers or epiphenomenon.
Quigley EM
Gastroenterol Clin North Am 2005 Jun;34(2):221-33.

Diagnosis of irritable bowel syndrome.
Cash BD, Chey WD
Gastroenterol Clin North Am 2005 Jun;34(2):205-20.

Irritable bowel syndrome: epidemiology, natural history, health care seeking and emerging risk factors.
Cremonini F, Talley NJ
Gastroenterol Clin North Am 2005 Jun;34(2):189-204.

Potential future therapies for Irritable Bowel Syndrome: Will Disease Modifying Therapy as Opposed to Symptomatic Control Become a Reality?
Spiller RC
Gastroenterol Clin North Am 2005 Jun;34(2):337-54.

Efficacy of current drug therapies in irritable bowel syndrome: what works and does not work.
Schoenfeld P
Gastroenterol Clin North Am 2005 Jun;34(2):319-35.

Genetics and genotypes in irritable bowel syndrome: implications for diagnosis and treatment.
Park MI, Camilleri M
Gastroenterol Clin North Am 2005 Jun;34(2):305-17.

Temporal changes in the management of diverticulitis.
Salem L, Anaya DA, Flum DR
J Surg Res 2005 Apr;124(2):318-23.

PURPOSE: This study was designed to evaluate temporal trends in the use and type of operative and non-operative interventions in the management of diverticulitis. METHODS: A retrospective cohort using a statewide administrative database was used to identify all patients hospitalized for diverticulitis in the state of Washington (1987-2001). Poisson and logistic regression were used to calculate changes in the frequency of hospitalization, operative and percutaneous interventions, and colostomy over time. RESULTS: Of the 25,058 patients hospitalized non-electively with diverticulitis (mean age 69 +/- 16, 60% female) there were only minimal changes in the frequency of admissions over time (0.006% increase per year-IRR 1.00006 95% CI 1.00004, 1.00008). The odds of an emergency colectomy at initial hospitalization decreased by 2% each year (OR 0.98 95% CI 0.98, 0.99) whereas the odds of percutaneous abscess drainage increased 7% per year (OR 1.07 95% CI 1.05, 1.1). Among patients undergoing percutaneous drainage, the odds of operative interventions decreased by 9% compared to patients who did not have a percutaneous intervention (OR 0.91 95% CI 0.87, 0.94). The proportion of patients undergoing colostomy during emergency operations remained essentially stable over time (range 49-61%), as did the proportion of patients undergoing prophylactic colectomy after initial non-surgical management (approximately 10%). CONCLUSIONS: There was a minimal increase in the frequency of diverticulitis admissions over time. A rise in percutaneous drainage procedures was associated with a decrease in emergency operative interventions. The proportion of patients undergoing colostomy remained stable, and there does not seem to be a significant increase in the use of one-stage procedures for diverticulitis.

Hypersensitivity to cutaneous thermal nociceptive stimuli in irritable bowel syndrome.
Rodrigues AC, Nicholas Verne G, Schmidt S, Mauderli AP
Pain 2005 May;115(1-2):5-11.
Irritable bowel syndrome (IBS) is a common intestinal ailment of which the pathophysiological mechanisms are not well understood. Most IBS patients demonstrate enhanced perception, visceral hypersensitivity, in response to distension of the gut lumen but there are conflicting results about changes in somatic sensitivity. This study focused on the possible contribution of abnormal pain sensitization due to positive feedback (vicious pain cycle) that affects somatic tissues due to viscero-somatic convergence. The specific objectives were to measure cutaneous thermal pain sensitivity along the segmental axis, including in dermatomes that are remote from the visceral pain focus. Pain sensitivity was probed with cutaneous thermal stimulation to the lower and upper extremities and the face in nine diarrhea-predominant IBS patients (diagnosed with ROME II criteria) and 12 healthy female controls. The stimuli were administered with a contact thermode, assuring that size of the stimulated area and stimulus duration were clearly defined and identical in all locations. Sensitization of IBS patients was not limited to symptomatic dermatomes (calf) but extended evenly across the body, including to the face (no sensitization gradient from foot to face). Also, the difference between IBS and control groups did not depend on the evoked pain intensity level, i.e. the degree of sensitization of IBS patients was similar near threshold (10% on the visual analog scale) and at higher intensities. Lastly, no correlation was found between IBS subjects' pain sensitivity of any of the three test sites and their ratings of spontaneous pain.

8 – FISTULAE

Laparoscopic repair of vesicovaginal fistula.
Sotelo R, Mariano MB, Garcia-Segui A, Dubois R, Spaliviero M, Keklikian W, Novoa J, Yaime H, Finelli A
J Urol 2005 May;173(5):1615-8.
PURPOSE: Vesicovaginal fistula may be a complication of urogynecologic surgery. We describe the technique of laparoscopic repair of vesicovaginal fistula as performed at our 2 institutions. MATERIALS AND METHODS: Since August 1998 laparoscopic repair of vesicovaginal fistula was performed in 15 select patients who had clear indications to undergo surgical treatment through an abdominal approach. Hysterectomy had previously been performed in 14 patients (93%). Conservative treatment was initially attempted for more than 2 months in all cases. Four patients had undergone a previous surgical fistula closure attempt with unsuccessful results. Our technique involved cystoscopy, catheterization of the vesicovaginal fistula, laparoscopic cystotomy, opening and excision of the fistulous tract, dissection of the bladder from the vagina, cystotomy closure and colpotomy with interposition of a flap of healthy tissue. Demographic as well as perioperative and outcome data were recorded. RESULTS: Average patient age was 38 years. None of the cases required open conversion. Mean operative time was 170 minutes (range 140 to 240). Mean hospital stay was 3 days (range 2 to 5). The mean duration of bladder catheterization was 10.4 days (range 9 to 15) At a mean followup of 26.2 months (range 3 to 60) 14 patients (93%) were cured. CONCLUSIONS: We believe that laparoscopic repair of vesicovaginal fistula is a feasible and efficacious minimally

Fibrin Glue in the Treatment of Pilonidal Sinus: Results of a Pilot Study.
Lund JN, Leveson SH
Dis Colon Rectum 2005 Mar 28;.
INTRODUCTION: Pilonidal sinus is a common condition of uncertain etiology. There is no agreed best surgical treatment. Treatment of fistula-in-ano has been described with some success with fibrin tissue glue. The use of fibrin glue is investigated in this pilot study. METHODS: Six patients with chronic pilonidal sinus were treated with injection of fibrin tissue glue after curettage of the pits. RESULTS: There were no complications. Postoperative discomfort was minimal and early return to normal activities was possible. There was no recurrence of disease in five of six patients at one year. CONCLUSIONS: Fibrin tissue glue may be a possible novel treatment for pilonidal disease.

Actinomycosis, a rare and unsuspected cause of anal fistulous abscess: report of three cases and review of the literature.
Coremans G, Margaritis V, Van Poppel HP, Christiaens MR, Gruwez J, Geboes K, Wyndaele J, Vanbeckevoort D, Janssens J
Dis Colon Rectum 2005 Mar;48(3):575-81.

Treatment of pilonidal sinus by phenol application and factors affecting the recurrence.
Kaymakcioglu N, Yagci G, Simsek A, Unlu A, Tekin OF, Cetiner S, Tufan T
Tech Coloproctol 2005 Apr;9(1):21-4.

Endoanal ultrasound-guided needle drainage of intersphincteric abscess.
Epstein J, Giordano P
Tech Coloproctol 2005 Apr;9(1):67-9.

Smoking Impairs Rectal Mucosal Bloodflow-A Pilot Study: Possible Implications for Transanal Advancement Flap Repair.
Zimmerman DD, Gosselink MP, Mitalas LE, Delemarre JB, Hop WJ, Briel JW, Schouten WR
Dis Colon Rectum 2005 Apr 14;.
Transanal advancement flap repair has been advocated as the treatment of choice for transsphincteric perianal fistulas, because it enables the healing of almost all fistulas without sphincter damage and consequent continence disturbance. After initial promising reports, recently less favorable results have been reported. It remains unclear why there is such a large variety in the reported healing rates. Recently, it has been suggested that impaired wound healing caused by a diminished rectal mucosal perfusion in patients who smoke may lead to the breakdown of the advancement flap in patients undergoing flap repair for perianal fistulas. This study was designed to investigate the difference in blood flow in rectal mucosa between patients who smoke and those who do not smoke. Furthermore, we assessed the impact of the creation of a mucosa advancement flap and the difference in blood flow in the flap between smoking and nonsmoking patients. Between July 2001 and July 2002, 23 consecutive patients (19 males; median age, 46 (range, 26-69) years) with a perianal fistula of cryptoglandular origin underwent surgery for a perianal fistula. Among them were 13 patients who smoked cigarettes. All patients underwent intraoperative laser Doppler flowmetry. Median blood flow before transanal advancement flap repair was 35 (range, 8-70) volts in patients

who did not smoke. In patients who smoked the median blood flow before transanal advancement flap repair was 18 (range, 7-35) volts. Blood flow was significantly lower in patients who smoked (P = 0.018; Mann-Whitney). In conclusion, it seems likely that impaired wound healing caused by a diminished rectal mucosal perfusion is a contributing factor in the breakdown of advancement flaps in patients who smoke cigarettes.

9 – BEHAVIOUR, PSYCHOLOGY, SEXOLOGY

Is it possible to predict one-year survival in centenarians? A neural network study.

Tafaro L, Cicconetti P, Piccirillo G, Ettorre E, Marigliano V, Cacciafesta M

Gerontology 2005 May-Jun;51(3):199-205.

BACKGROUND: Human life expectancy is constantly increasing: the challenge for modern geriatric medicine is to identify the means to reach successfully extreme longevity. OBJECTIVE: To determine which are the survival determinants in centenarians using a neural network. METHODS: Sample of 110 centenarians living in Rome, mean age 101.6 years (SD=1.8) with a sex ratio males:females of 1:3. We administered an extensive health interview (lasting 1-2 h) to each subject. The questionnaire, carried out according to the Geriatric Multidimensional Assessment, is made up of 100 items including a comprehensive health and psychosocial assessment aimed at various topics of general health and well-being and some scales used in geriatric practice. We applied several three-layered feed-forward neural networks by mixing in different ways the most important of the 100 items. RESULTS: The most predicting powered net is the one constructed with 23 variables regarding comorbidity, cardiovascular risk factors, cognitive status, mood, functional status and social interactions, which therefore are strictly related to survival in centenarians. CONCLUSION: Survival in longevity is a complex biological phenomenon, which is an ideal field for using the neural network as a statistic method. The net shows us that the maintenance of social relationships even in presence of disability is of major importance for survival in the oldest old.

Practice patterns of physician members of the American Urogynecologic Society regarding female sexual dysfunction: results of a national survey.

Pauls RN, Kleeman SD, Segal JL, Silva WA, Goldenhar LM, Karram MM

Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 19;.

The purpose of the study was to evaluate practice patterns of members of the American Urogynecologic Society (AUGS) with respect to female sexual dysfunction (FSD). A brief self-administered survey of 20 questions was mailed to 966 physician members of the AUGS in the United States of America and Canada; 471 surveys were returned (49% response rate). The majority of responders see urogynecology (19%) or urogynecology and general gynecology patients (43%). Sixty-eight percent of physicians were familiar with questionnaires to assess FSD; however, only 13% said they use these for screening purposes. Most said they believed screening for FSD was somewhat (47%) or very important (42%). Despite having these beliefs, only 22% of the responding physicians stated they always screen for FSD, while 55% do so most of the time and 23% admitted they never or rarely screen. Similar results were obtained regarding screening following urogynecologic surgery. Several barriers to screening for FSD existed, the most common being lack of time. The majority of respondents (69%) underestimated the prevalence of FSD in their patient population. Finally, although more than half of responders had received post-residency training in urogynecology (59%), 50% of them stated the training with respect to FSD was unsatisfactory, while only 10% were satisfied. Overall, many urogynecologists do not consistently screen for FSD, underestimate its prevalence, and feel they received unsatisfactory training.

Effects of pregnancy and childbirth on postpartum sexual function: a longitudinal prospective study.

Connolly A, Thorp J, Pahel L

Int Urogynecol J Pelvic Floor Dysfunct 2005 Apr 19;.

This study was conducted to evaluate the effects of pregnancy and childbirth on postpartum sexual function. Nulliparous, English-literate women were enrolled who had presented to the UNC Hospital's obstetrical practice; these women were 18 years of age and older and at 30-40 weeks' gestation. Questionnaires were completed regarding sexual function prior to pregnancy, at enrollment, and at 2, 6, 12, and 24 weeks postpartum. Demographic and delivery data were abstracted from the departmental perinatal database. One hundred and fifty women were enrolled. At 6, 12, and 24 weeks postpartum, 57, 82, and 90% of the women had resumed intercourse. At similar postpartum timepoints, approximately 30 and 17% of women reported dyspareunia; less than 5% described the pain as major. At these times, 39, 60, and 61% of women reported orgasm. Orgasmic function was described as similar to that prior to pregnancy or improved by 71, 77, and 83%. Delivery mode and episiotomy were not associated with intercourse resumption or anorgasmia; dyspareunia was only associated with breast-feeding at 12 weeks (RR=3.36, 95% CI=1.77-6.37). Most women resumed painless intercourse by 6 weeks and experienced orgasm by 12 weeks postpartum. Function was described as similar to or improved over that prior to pregnancy.

Social-cognitive determinants of vaccination behavior against hepatitis B: an assessment among men who have sex with men.
de Wit JB, Vet R, Schutten M, van Steenbergen J
Prev Med 2005 Jun;40(6):795-802.

The long-term voiding function and sexual function after pelvic nerve-sparing radical surgery for rectal cancer.
Ameda K, Kakizaki H, Koyanagi T, Hirakawa K, Kusumi T, Hosokawa M
Int J Urol 2005 Mar;12(3):256-63.
Background: The aim of the present study is to symptomatically analyze the extent to which pelvic nerve-sparing radical surgery for rectal cancer impacts on long-term voiding and male sexual function. Methods: A self-administered questionnaire was mailed to 68 patients who underwent pelvic nerve-sparing radical surgery for invasive rectal cancer with 52 responses (28 men and 24 women; 27 complete and 25 incomplete preservation; response rate 76.5%). Each patient was asked to record if there had been any changes in lower urinary tract symptoms after surgery. Sexual function was also investigated in men. Results: Of the 52 patients, 48 (92%) maintained voluntary voiding without catheterization in the long term. Clean intermittent self-catheterization was performed in only four patients with incomplete preservation because of persistent voiding dysfunction. Subjectively, approximately 60% of the patients remained unchanged in lower urinary tract symptoms after surgery. The satisfaction rate regarding the current voiding status was significantly higher in women than in men (83% versus 61%, P = 0.0294), but was not significantly different between those with complete (76%) and incomplete preservation (64%). Despite the acceptable urinary status, 88% of men had some deterioration in the erectile function, regardless of the types of surgical procedures. Overall, 64% of men were unsatisfied with the current sexual function. Conclusions: Pelvic nerve-sparing radical surgery for rectal cancer preserved the long-term voiding function in the majority of patients. In completely preserved patients and in women, symptomatic outcomes were more satisfactory. Postoperative erectile dysfunction was found to be a serious problem, even in complete nerve-sparing procedure.

Munchausen syndrome revisited.
Cheng TO
Int J Clin Pract 2005 Apr;59(4):504-5; author reply 505.

Voiding and sexual dysfunction after deep rectal resection and total mesorectal excision Prospective study on 52 patients.
Sterk P, Shekarriz B, Gunter S, Nolde J, Keller R, Bruch HP, Shekarriz H
Int J Colorectal Dis 2005 Apr 22;.
OBJECTIVE: Voiding and sexual dysfunction after deep rectal resection have been described with various frequencies in the literature. In this study, we prospectively evaluated the baseline preoperative voiding and sexual function in a cohort of patients undergoing deep rectal resection with mesorectal excision to determine any pre-existing abnormalities. Postoperatively, we sought first to determine the frequency of a urinary or sexual dysfunction, secondly whether there is a time-dependent change of a dysfunction and thirdly whether there is a relationship between postoperative urological dysfunction and the patient's age. PATIENTS AND METHODS: Fifty-two patients (36 men and 16 women) with a primary rectal carcinoma were prospectively examined directly before and after the operation, as well after the third and sixth postoperative month. The preoperative urological evaluation consisted of a careful voiding and sexual history, uroflowmetry and a sonographic residual urine determination. A detailed sexual history was obtained via the use of a questionnaire. RESULTS: Urological dysfunction: Preoperatively, 49 of the 52 patients had a completely normal bladder function and three patients had post void residual >100 ml. Postoperatively, 12 of the 49 patients with normal preoperatively urinary function had voiding dysfunction, but only four male patients had residual urine in the third postoperative month. Therefore, in about 90% of the patients, postoperative bladder function became normal and only 10% suffered from vesical denervation after 6 months. We could not determine a relationship between the degree of bladder dysfunction and the patient's age due to a relatively small patient cohort in this study. Sexual dysfunction: Preoperatively, 36 (seven women, 29 men) of the 52 patients were potent and had regular sexual intercourse. Eleven men specified a limited erection, but all had occasional sexual intercourse. One of the potent men experienced no ejaculation. Postoperatively, eight of the 29 men were impotent and two of the 29 men experienced retrograde ejaculation. Therefore, 30% of the preoperatively potent men had sexual dysfunction postoperatively. There was no correlation between the postoperative impotence and the age of the patients at the time of surgery. Although it is likely that the potency may diminish with advanced age, the incidence of impotence was not higher in the older patients of our study. CONCLUSIONS: The results of our study

underline the importance of risk estimation for possible postoperative urological dysfunction by means of preoperative urologic evaluation in this patient collective. Of patients with postoperative bladder dysfunction, 90% improved within 6 months after surgery and only 10% continued to have bladder dysfunction beyond 6 months, indicating irreversible nerve damage.

Psychiatric and psychological dysfunction in irritable bowel syndrome and the role of psychological treatments.
Palsson OS, Drossman DA
Gastroenterol Clin North Am 2005 Jun;34(2):281-303.

Sexual function in women with pelvic organ prolapse compared to women without pelvic organ prolapse.
Novi JM, Jeronis S, Morgan MA, Arya LA
J Urol 2005 May;173(5):1669-72.
PURPOSE: We compared sexual function in women with pelvic organ prolapse to that in women without prolapse. MATERIALS AND METHODS: We collected sexual function data using a standardized, validated, condition specific questionnaire. The study group consisted of 30 women with pelvic organ prolapse and it was compared with 30 unmatched controls without evidence of prolapse. RESULTS: The 2 groups were similar in age, race, parity and postmenopausal hormone use. Subjects in the study group were more likely to have undergone previous pelvic surgery. Mean total Pelvic Organ Prolapse/Urinary Incontinence Sexual Function Questionnaire scores +/- SD were lower in the study group compared with controls (81.4 +/- 7.3 vs 106.4 +/- 15.5, p <0.001). In the study group total questionnaire scores in women with prior pelvic surgery were similar to those in women without prior pelvic surgery (79.3 +/- 14.9 vs 82.9 +/- 10.2, p = 0.61). CONCLUSIONS: Pelvic organ prolapse appears to have a significant negative impact on sexual function.

10 – MISCELLANEOUS

Institutional practice guidelines on management of pelvic fracture-related hemodynamic instability: do they make a difference?
Balogh Z, Caldwell E, Heetveld M, D'Amours S, Schlaphoff G, Harris I, Sugrue M
J Trauma 2005 Apr;58(4):778-82.
BACKGROUND: The management of patients with hemodynamic instability related to pelvic fracture is a major challenge, with high morbidity and mortality. Evidence-based institutional practice guidelines (PG) were developed as a strategy to optimize the care of these patients. The aims of this study were to evaluate the adherence to the new PG and compare the outcomes before and after their implementation. METHODS: Major blunt trauma patients (Injury Severity Score [ISS] > 15) with hemodynamic instability (initial base deficit > 6 mEq/L or received > 6 units of packed red blood cells [PRBCs] during the first 12 hours) related to pelvic fracture were investigated. Patients presenting with ongoing bleeding from other regions or with severe head injury (Glasgow Coma Scale score < 9) were excluded. The pre-PG group (n = 17) were patients managed during the 18 months ending on December 31, 2001. The post-PG group (n = 14) consisted of patients managed during the subsequent 18 months. Demographics, ISS, shock severity, resuscitation, and outcome data were prospectively collected. The adherence to the key steps of PG was evaluated retrospectively in the pre-PG and prospectively in the post-PG group, including abdominal clearance (AC) with diagnostic peritoneal aspiration/lavage or ultrasound (<15 minutes), noninvasive pelvic binding (PB) (<15 minutes), pelvic angiography (PA) (<90 minutes after admission), and minimally invasive orthopedic fixation (MIOF) (<24 hours). Data are presented as mean +/- SEM or percentages. RESULTS: The pre-PG and post-PG groups were similar regarding age (40 +/- 4 years vs. 42 +/- 6 years), gender (both 71% male), ISS (39 +/- 3 vs. 37 +/- 4), admission base deficit (9 +/- 1 vs. 10 +/- 1) admission systolic blood pressure (116 +/- 7 vs. 112 +/- 6 mm Hg), Glasgow Coma Scale score (12 +/- 1 vs. 12 +/- 1), and PRBC transfusion in the first 12 hours (9 +/- 2 U vs. 9 +/- 2 U). The adherence to the guidelines in the post-PG period was as follows: AC, 100%; PB, 86% (p < 0.05 based on t test or chi test); PA, 93% (p < 0.05 based on t test or chi test); and MIOF, 86%. In the pre-PG period, adherence to the guidelines was as follows: AC, 65%; PB, 0%; PA, 30%; and MIOF 52%. In the post-PG period, the 24-hour PRBC transfusion decreased from 16 +/- 2 U to 11 +/- 1 U and the mortality decreased from 35% to 7% (p < 0.05 based on t test or chi test for both). CONCLUSION: The adherence to the PG as a reflection of optimal management was significantly improved. PG focusing particular on timely hemorrhage control reduced the 24-hour transfusion requirements and the mortality rate in the post-PG group.

Anal melanoma in the era of sentinel lymph node mapping: a diagnostic and therapeutic challenge.
Olsha O, Mintz A, Gimon Z, Gold Deutch R, Rabin I, Halevy A, Reissman P
Tech Coloproctol 2005 Apr;9(1):60-2.

Melanoma of the anal canal is a rare malignancy that often has an atypical presentation. Locoregional metastases, which are often present at the initial presentation, may occur in both groin and pelvic lymph nodes, but the utility of lymph node dissection remains unknown. We explored the possibility of applying the technique of sentinel lymph node (SLN) mapping to anal melanoma. SLN mapping was performed in 2 patients with anal melanoma. Radioactive tracer and blue dye were injected around the lesions. The SLN was identified pre-operatively by lymphoscintigraphy, and at surgery with a hand-held gamma detector and by visualization of the dye. The SLN was identified in both patients, only in the groin in one and only in the presacral region in the other. One patient had a wide local excision of the anal lesion with house flap anoplasty, while the other had abdominoperineal resection with total mesorectal excision. There were no SLN metastases in either patient. The technique of SLN mapping and biopsy is easily adapted to surgery for malignant melanoma of the anus. SLN mapping and biopsy could aid in planning surgical strategy, but definitive conclusions may only be reached after more experience has been acquired.

Severe acute respiratory syndrome-related diarrhea.
Kwan AC, Chau TN, Tong WL, Tsang OT, Tso EY, Chiu MC, Yu WC, Lai TS
J Gastroenterol Hepatol 2005 Apr;20(4):606-10.

Prostate botulinum A toxin injection--an alternative treatment for benign prostatic obstruction in poor surgical candidates.
Kuo HC
Urology 2005 Apr;65(4):670-4.

Obstetrics and gynecology: more than just a job.
Scott JR
Obstet Gynecol 2005 May;105(5):936.

Vulvar granuloma fissuratum: a description of fissuring of the posterior fourchette and the repair.
Kennedy CM, Dewdney S, Galask RP
Obstet Gynecol 2005 May;105(5):1018-23.

Screening for the Lynch syndrome (hereditary nonpolyposis colorectal cancer).
Hampel H, Frankel WL, Martin E, Arnold M, Khanduja K, Kuebler P, Nakagawa H, Sotamaa K, Prior TW, Westman J, Panescu J, Fix D, Lockman J, Comeras I, de la Chapelle A
N Engl J Med 2005 May 5;352(18):1851-60.
Routine molecular screening of patients with colorectal adenocarcinoma for the Lynch syndrome identified mutations in patients and their family members that otherwise would not have been detected. The data suggest that the effectiveness of screening with immunohistochemical analysis of the mismatch-repair proteins would be similar to that of the more complex strategy of genotyping for microsatellite instability.

Prospective, randomised study on antibiotic prophylaxis in colorectal surgery. Is it really necessary to use oral antibiotics?
Espin-Basany E, Sanchez-Garcia JL, Lopez-Cano M, Lozoya-Trujillo R, Medarde-Ferrer M, Armadans-Gil L, Alemany-Vilches L, Armengol-Carrasco M
Int J Colorectal Dis 2005 Apr 21;.
The addition of three doses of oral antibiotics to intravenous antibiotic prophylaxis is associated with lower patient tolerance in terms of increased nausea, vomiting and abdominal pain, and has shown no advantages in the prevention of postoperative septic complications. Therefore, we recommend that oral antibiotics should not be used prior to colorectal surgery.

HPV in anal squamous cell carcinoma and anal intraepithelial neoplasia (AIN) Impact of HPV analysis of anal lesions on diagnosis and prognosis.
Varnai AD, Bollmann M, Griefingholt H, Speich N, Schmitt C, Bollmann R, Decker D
Int J Colorectal Dis 2005 Apr 29;.

Different role of the colonic pouch for low anterior resection and coloanal anastomosis.
Tonelli F, Garcea A, Batignani G
Tech Coloproctol 2005 Apr;9(1):15-20.
Colonic J-pouch provides an advantage over straight anastomosis in sphincter-saving operations by reducing the daily number of defecations, and the frequencies of fecal soiling and urgency. The role of the pouch seems to be different in LAR compared to CAA. In fact, in LAR the pouch increases compliance and consequently decreases the daily number of defecations. In CAA, the pouch does not reduce the number of

defecations or the compliance, but reduces the frequency of fecal soiling and urgency.

Good colorectal cancer surgery.
Mahteme H, Pahlman L
Tech Coloproctol 2005 Apr;9(1):1-7.

Anorectal atresia treated with non-continent pull through and artificial bowel sphincter: a case report.
Bracale U, Nastro P, Beral DL, Romano G, Renda A
Tech Coloproctol 2005 Apr;9(1):45-8.
Anorectal atresia, which is classified as a low anorectal malformation, is characterised by the absence of the anal verge and by variable rectal atresia. In some cases, which have been classified as rectal agenesis, the atresia is associated with the absence of the internal sphincter. The therapeutic options are definitely surgical, aiming to relieve the bowel occlusion and to restore faecal continence by lowering the cul-de-sac to the perineum. We present the case of an adult patient with congenital rectal agenesis, double fistula (cul-de-sac-urethra and cul-de-sac-perineum) and caecostomy since birth. The patient was treated with a resection of sigmoid-rectum for the presence of a 20-cm faecaloma in the cul-de-sac, with a non-continent pull-through, and with implantation of an artificial bowel sphincter. Despite some difficulties in managing the device and a slight symptomatic mucosal prolapse, the results after 30 months have so far satisfied both the patient and the medical staff, especially in consideration of the limited number of alternative therapies.

Wide local excision or abdominoperineal resection as the initial treatment for anorectal melanoma?
Droesch JT, Flum DR, Mann GN
Am J Surg 2005 Apr;189(4):446-9.
BACKGROUND: Anorectal melanoma (AM) is a rare tumor with a poor prognosis. Treatment with abdominoperineal resection (APR) over wide local excision (WLE) is still debated. This study aimed to compare median survival of WLE and APR in patients with AM. METHODS: A systematic review of the literature was performed. Only series that allowed calculation of median survival were included. RESULTS: Fourteen studies met inclusion criteria. Average median survival of stage I WLE patients (N=34) and stage I APR patients (N=31) was 44 and 22 months, respectively (P=.001). For stage II patients, 7 underwent WLE, and 10 underwent APR with an average median survival of 36 and 14 months, respectively (P=.19). CONCLUSIONS: This study identified no stage-specific survival advantage to APR in favor of AM. Given that WLE is a more limited intervention associated with at least comparable survival, we propose that it be considered the initial treatment of choice for AM.

A novel approach to the treatment of ulcerative colitis: is it kosher?
Mayer L
Gastroenterology 2005 Apr;128(4):1117-9.

Ionizing radiation and rectal cancer: victims of our own success.
Grady WM, Russell K
Gastroenterology 2005 Apr;128(4):1114-7.

Therapeutic effects of rectal administration of basic fibroblast growth factor on experimental murine colitis.
Matsuura M, Okazaki K, Nishio A, Nakase H, Tamaki H, Uchida K, Nishi T, Asada M, Kawasaki K, Fukui T, Yoshizawa H, Ohashi S, Inoue S, Kawanami C, Hiai H, Tabata Y, Chiba T
Gastroenterology 2005 Apr;128(4):975-86.

Ornidazole for prophylaxis of postoperative Crohn's disease recurrence: a randomized, double-blind, placebo-controlled trial.
Rutgeerts P, Van Assche G, Vermeire S, D'Haens G, Baert F, Noman M, Aerden I, De Hertogh G, Geboes K, Hiele M, D'Hoore A, Penninckx F
Gastroenterology 2005 Apr;128(4):856-61.

Trichuris suis therapy for active ulcerative colitis: a randomized controlled trial.
Summers RW, Elliott DE, Urban JF Jr, Thompson RA, Weinstock JV
Gastroenterology 2005 Apr;128(4):825-32.

Increased risk of rectal cancer after prostate radiation: a population-based study.
Baxter NN, Tepper JE, Durham SB, Rothenberger DA, Virnig BA

Gastroenterology 2005 Apr;128(4):819-24.
We noted a significant increase in development of rectal cancer after radiation for prostate cancer. Radiation had no effect on development of cancer in the remainder of the colon, indicating that the effect is specific to directly irradiated tissue.

Impaired capsaicin and neurokinin-evoked colonic motility in inflammatory bowel disease.
Smith AS, Smid SD
J Gastroenterol Hepatol 2005 May;20(5):697-704.

Birth size and colorectal cancer risk: a prospective population-based study.
Nilsen TI, Romundstad PR, Troisi R, Potischman N, Vatten LJ
Gut 2005 Apr 20;.

Probiotics in IBD: mucosal and systemic routes of administration may promote similar effects.
Foligne B, Grangette C, Pot B
Gut 2005 May;54(5):727-8.

Placenta growth factor expression is correlated with survival of patients with colorectal cancer.
Wei SC, Tsao PN, Yu SC, Shun CT, Tsai-Wu JJ, Wu CH, Su YN, Hsieh FJ, Wong JM
Gut 2005 May;54(5):666-72.

Increased microvascular blood content is an early event in colon carcinogenesis.
Wali RK, Roy HK, Kim YL, Liu Y, Koetsier JL, Kunte DP, Goldberg MJ, Turzhitsky V, Backman V
Gut 2005 May;54(5):654-60.

Osteopontin expression in ulcerative colitis is distinctly different from that in Crohn's disease and diverticulitis.
Masuda H, Takahashi Y, Asai S, Hemmi A, Takayama T
J Gastroenterol 2005 Apr;40(4):409-13.

Surgical management of perineal masses in patients with anorectal malformations.
Shaul DB, Monforte HL, Levitt MA, Hong AR, Pena A
J Pediatr Surg 2005 Jan;40(1):188-91.
BACKGROUND: The aim of this study was to review the outcome of surgical management of various types of perineal masses encountered in patients with anorectal malformations (ARM). METHODS: Retrospective review from 2 large pediatric anorectal referral centers. RESULTS: Twenty-two patients with a perineal mass were identified in more than 2000 patients treated for an ARM over a 15-year period. The 22 patients (4 men) represented all levels of severity of ARMs. The lesions were of 3 types: lipomas (n = 10), vascular anomalies (n = 4), and hamartomas/choristomas (n = 8). The lipomas were carefully removed from between the muscle fibers during the posterior sagittal anorectoplasty. The vascular anomalies (3 of 4 were hemangiomas) underwent magnetic resonance imaging preoperatively, but none were found to invade deeply and all were excised at the time of the posterior sagittal anorectoplasty. The hamartomas/choristomas all occurred in women, and 50% arose as a pedunculated mass from the vulva. The lesions contained tissues such as glia, osteoid, nephrogenic rests, and endocervical-type mucosa. One was initially misinterpreted as a teratoma, prompting a wider excision. This and all subsequent patients have been correctly diagnosed pathologically as having either hamartomas or choristomas, which were not widely excised. Follow-up ranges from 5 months to 12 years. Six of the 10 lipoma patients are continent. One vascular anomaly was re-excised and there was minor wound separation in another. None of the hamartoma/choristoma lesions recurred. CONCLUSION: The presence of unusual perineal masses can add to the complexity of ARMs; however, most of these lesions can be carefully excised with preservation of the muscle complex and ultimate continence. Hamartomatous lesions can be mistaken for teratomas but do not require aggressive excision with clear margins.

Continent Ileostomy: Current Experience.
Castillo E, Thomassie LM, Whitlow CB, Margolin DA, Malcolm J, Beck DE
Dis Colon Rectum 2005 Mar 31;.
Continent ileostomies continue to have a high rate of reoperations, reasonable functional results, and are a viable option for failed ileal pouch-anal pouch patients. Surgeons electing to perform continent ileostomies must carefully select their patients and advise them of the high potential for reoperations. Despite a high reoperation rate, patients are pleased with their continent ileostomies.

Long-Term Function After Restorative Proctocolectomy.
Wheeler JM, Banerjee A, Ahuja N, Jewell DP, Mortensen NJ
Dis Colon Rectum 2005 Mar 28;.
PURPOSE: Early functional outcome after restorative proctocolectomy and formation of an ileoanal pouch is known to be good, but there are minimal data on the long-term function of the pouch. The aim of this study was to look at the long-term functional outcome in patients who had undergone restorative proctocolectomy and formation of an ileoanal pouch. METHODS: A total of 151 consecutive patients (96 males, 55 females) who underwent ileoanal pouch surgery between April 1983 and May 1993 were identified. Functional outcomes from the previous 12 months were appraised by a standardized questionnaire. RESULTS: The median age at surgery was 31 years (range, 6-63 years), with a median follow-up of 142 months (range, 100-221 months). Eighteen patients have had their pouches excised, with another patient being defunctioned. Therefore 19 patients (13 percent) had suffered pouch failure. Altogether, 115 patients were available for follow-up, and 98 patients (85 percent) returned questionnaires. The median pouch-emptying frequency was five times (range, 1-17) during the day and one time (range, 0-6) at night. A total of 74 percent of patients had perfect continence during the day. Most of the patients had no life-style restrictions related to the pouch, and 98 percent of patients would recommend a pouch to others. CONCLUSIONS: Long-term functional outcome after ileoanal pouch surgery is good in most patients. For patients requiring proctocolectomy, ileoanal pouch surgery can now be recommended as an excellent long-term option.

Infrared Coagulatortrade mark: A Useful Tool for Treating Anal Squamous Intraepithelial Lesions.
Goldstone SE, Kawalek AZ, Huyett JW
Dis Colon Rectum 2005 Mar 28;.
The infrared coagulatortrade mark is a safe, office-based modality for treating anal high-grade squamous intraepithelial lesion in human immunodeficiency virus-positive men who have sex with men. Successive treatments led to decreased recurrence rates.

Endoscopic Transanal Rectal Mucosal Ablation in the Surgical Treatment of Ulcerative Colitis: Preliminary Results of a Novel Technique.
Forshaw MJ, Buchanan GN, Murali K, Stewart M
Dis Colon Rectum 2005 Apr 14;.
PURPOSE: We describe a new technique that endoscopically eradicates rectal stump mucosa after total colectomy for ulcerative colitis. METHODS: Seven patients (5 males; median age, 56 (range, 36-72) years) underwent attempted endoscopic transanal rectal mucosal ablation using the 28-French-gauge urologic resectoscope, either at the time of total colectomy and ileostomy for failed medical therapy (5 patients) or as an alternative to completion proctectomy (2 patients) with rectal stump discharge. All had declined restorative proctocolectomy. Clinical, endoscopic, and histologic follow-up was undertaken during a mean of 15 (range, 3-28) months. RESULTS: The operative technique evolved during these cases; mucosal ablation was successfully performed leaving a denuded muscular rectal tube in situ in six patients. Mean operative time was 45 minutes. Postoperative endoscopic surveillance has not demonstrated any viable rectal mucosa in these six patients, with only granulation tissue detected histologically. Narrowing of the rectal tube has occurred in two patients. Although all patients report insignificant rectal discharge, urinary and sexual function have remained unchanged. CONCLUSIONS: Diathermy ablation of the rectal mucosa via endoscopic transanal rectal mucosal ablation avoids the complications of pelvic dissection and might offer an effective alternative to proctectomy for ulcerative colitis.

Practice parameters for the management of rectal cancer (revised).
Tjandra JJ, Kilkenny JW, Buie WD, Hyman N, Simmang C, Anthony T, Orsay C, Church J, Otchy D, Cohen J, Place R, Denstman F, Rakinic J, Moore R, Whiteford M
Dis Colon Rectum 2005 Mar;48(3):411-23.
The American Society of Colon and Rectal Surgeons is dedicated to assuring high-quality patient care by advancing the science, prevention, and management of disorders and diseases of the colon, rectum, and anus. The Standards Committee is composed of Society members who are chosen because they have demonstrated expertise in the specialty of colon and rectal surgery. This Committee was created to lead international efforts in defining quality care for conditions related to the colon, rectum, and anus. This is accompanied by developing Clinical Practice Guidelines based on the best available evidence. These guidelines are inclusive, and not prescriptive. Their purpose is to provide information on which decisions can be made, rather than dictate a specific form of treatment. These guidelines are intended for the use of all practitioners, health care workers, and patients who desire information about the management of the conditions addressed by the topics covered in these guidelines. It should be recognized that these guidelines should not be deemed inclusive of all proper methods of care or exclusive of methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific

procedure must be made by the physician in light of all of the circumstances presented by the individual patient.

Myocutaneous flaps promote perineal healing in inflammatory bowel disease.
Collie MH, Potter MA, Bartolo DC
Br J Surg 2005 Apr 18;.
No Abstract.

Adenomas in Young Patients: What is the Optimal Evaluation?
Stoffel EM, Syngal S
Am J Gastroenterol 2005 May;100(5):1150-3.
Colorectal adenomas are a known risk factor for colorectal cancer. The prevalence of colorectal adenomas among individuals under age 40 and the clinical implications of finding a single adenoma in a young individual have not been defined. Until the most recent revision of the Bethesda Guidelines, having one or more adenomas diagnosed at age <40 was an indication for evaluation for hereditary nonpolyposis colorectal cancer (HNPCC). In an effort to explore the association of young-onset adenomas with HNPCC, Velayos et al. tested adenomas from 34 subjects aged 18-39 for pathologic features of HNPCC. Finding that none of the young-onset adenomas demonstrated features of microsatellite instability (MSI) or loss of mismatch repair protein expression by immunohistochemistry (IHC), the authors conclude that the yield of such testing is low, and support the decision to exclude young-onset adenomas from the Revised Bethesda Guidelines for HNPCC. However, this study also revealed that MSI and IHC failed to detect abnormalities in half of the adenomas from control subjects with identified MLH1 and MSH2 mutations. These findings highlight the limitations of current molecular techniques for examining adenomas as an initial screen for HNPCC and the need for further studies evaluating the optimal genetic and clinical evaluation of patients with young-onset adenomas. (Am J Gastroenterol 2005;100:1150-1153).

Comparison between Prospective and Retrospective Evaluation of Crohn's Disease Activity Index.
Frenz MB, Dunckley P, Camporota L, Jewell DP, Travis SP
Am J Gastroenterol 2005 May;100(5):1117-20.
The Crohn's disease activity index (CDAI) is the most widely used measure of clinical disease activity in patients entered into clinical trials. The prospective nature of the CDAI calculation precludes its use as a clinical assessment tool. We compared the retrospective evaluation of the CDAI with the prospective evaluation in a heterogenous patient population of 100 patients with Crohn's disease. The correlation between the two assessment methods was good with an r-value of 0.84 ($p < 0,0001$). There was a tendency of patients with a high retrospective CDAI to have a lower prospective CDAI which is explained by intention to treat. This study shows that a retrospective assisted evaluation of the CDAI is as accurate as the traditional prospective evaluation. (Am J Gastroenterol 2005;100:1117-1120).

Probiotic Therapy in the Prevention of Pouchitis Onset: Decreased Interleukin-1beta, Interleukin-8, and Interferon-gamma Gene Expression.
Lammers KM, Vergopoulos A, Babel N, Gionchetti P, Rizzello F, Morselli C, Caramelli E, Fiorentino M, D'errico A, Volk HD, Campieri M
Inflamm Bowel Dis 2005 May;11(5):447-454.
The data suggest that probiotic treatment regulates the mucosal immune response by reducing mucosal levels of neutrophil-chemoattractant IL-8 and tissue influx of polymorphonuclear cells, and may further act by inhibition of T-cell activation, by reinforcement of barrier function and by a tight control of the potent pro-inflammatory cytokine IL-1beta.

National audit of the sensitivity of double-contrast barium enema for colorectal carcinoma, using control charts.
Bartram C
Clin Radiol 2005 May;60(5):555-7.

Necrotizing Enterocolitis: Assessment of Bowel Viability with Color Doppler US.
Faingold R, Daneman A, Tomlinson G, Babyn PS, Manson DE, Mohanta A, Moore AM, Hellmann J, Smith C, Gerstle T, Kim JH
Radiology 2005 May;235(2):587-94.
Color Doppler US is more accurate than abdominal radiography in depicting bowel necrosis in NEC.

Transanal endoscopic versus total mesorectal laparoscopic resections of T2-N0 low rectal cancers after neoadjuvant treatment: a prospective randomized trial with a 3-years minimum follow-up period.

Lezoche E, Guerrieri M, Paganini AM, D'Ambrosio G, Baldarelli M, Lezoche G, Feliciotti F, De Sanctis A
Surg Endosc 2005 May 4;.
The findings show comparative results between the two study arms in terms of probability of failure and survival.

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Our results and the literature review clearly demonstrate that laparoscopic resection for rectal cancer is not associated with higher morbidity and mortality. Established oncological and surgical principles are respected and long-term outcomes are at least as good as those after open surgery.