FORUM
In Reappraisal of the Bidet, Nearly Half a Century Later.
Dis Colon Rectum. 2006 May 11;.Epub

Women in surgery: do we really understand the deterrents?
Gargiulo DA, Hyman NH, Hebert JC
Arch Surg. 2006 Apr;141(4):405-7; discussion 407-8.

Incidence, patterns, and prevention of wrong-site surgery.
Kwaan MR, Studdert DM, Zinner MJ, Gawande AA
Arch Surg. 2006 Apr;141(4):353-7; discussion 357-8.

Patient Safety in Surgery.
Makary MA, Sexton JB, Freischlag JA, Millman EA, Pryor D, Holzmueller C, Pronovost PJ
Ann Surg. 2006 May;243(5):628-635.

1 – THE PELVIC FLOOR
The effects of the exaggerated lithotomy position for radical perineal prostatectomy on respiratory mechanics.
Choi SJ, Gwak MS, Ko JS, Lee H, Yang M, Lee SM, Kim GS, Kim MH
Anaesthesia. 2006 May;61(5):439-43.
Summary The exaggerated lithotomy position is used during radical perineal prostatectomy to increase perineal exposure. The aim of this study was to evaluate the effects of the exaggerated lithotomy position on respiratory mechanics and arterial blood gases. In the exaggerated lithotomy position, dynamic compliance and static compliance were found to be significantly decreased by 27.4% and 34.8%, respectively, whilst peak, plateau, and mean airway pressures increased significantly by 34.0%, 45.8% and 31.7%, respectively. The physiological dead space/tidal volume ratio and total inspiratory work of breathing increased significantly by 11.1% and 33.7%, respectively. Arterial oxygen tension was significantly decreased by 26.9%; however, no significant differences were seen in end-tidal or arterial carbon dioxide tension. These results indicate that the exaggerated lithotomy position under general anaesthesia can cause significant effects on respiratory system mechanics and arterial oxygenation and highlights the need for careful monitoring of patients placed in this position for surgery.

Clinical implications of the biology of grafts: conclusions of the 2005 IUGA Grafts Roundtable.
Davila GW, Drutz H, Deprest J
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 6;.
With few exceptions, the current expansion of graft utilization in pelvic reconstructive surgery is not a product of evidence-based medicine. Abdominal sacrocolpopexy and suburethral sling procedures are two situations under which synthetic graft utilization is indicated, based on randomized prospective trials and reported clinical outcomes. Otherwise, indications and contraindications for graft utilization are unclear. Current published data on the biology of synthetic and biologic grafts are limited and overall not very helpful to the reconstructive surgeon who is faced with the selection of a graft for use during a reconstructive procedure. This Roundtable presented the opportunity for a series of basic science researchers to present their data to a group of reconstructive surgeons and provide publishable background information on the various currently available grafts. The occurrence of healing abnormalities after graft implantation is becoming increasingly recognized as a potentially serious problem. To date, definitions and a classification system for healing abnormalities do not exist. Based on the input from basic scientists and experienced surgeons, a simple classification is suggested based on the site of healing abnormality, timing relative to graft implantation, presence of inflammatory changes, and the viscera into which the graft is exposed. Many opportunities for clinical and basic science research exist. As the use of grafts in reconstructive surgery is expanded, surgeons are encouraged to familiarize themselves with currently published data, and determine whether a graft should, or should not be, utilized during a reconstructive procedure, and if so, the type of graft best indicated in each specific clinical situation.

2 – FUNCTIONAL ANATOMY

Dissection bias in subperitoneal pelvic anatomy.
Hockel M, Fritsch H
Am J Obstet Gynecol. 2006 May;194(5):1504; author reply 1505. Epub 2006 Apr 21.

Inhibitory effects of sildenafil on small intestinal motility and myoelectrical activity in dogs.
Xu X, Chen JD
Dig Dis Sci. 2006 Apr;51(4):671-6.
Previous studies have shown that sildenafil inhibits the esophageal motility in both humans and animals. The aim of this study was to investigate the effects of sildenafil on intestinal myoelectrical activity and motility. The study was composed of 2 experiments and performed in 7 healthy female dogs with a duodenal cannula 20 cm beyond pylorus (19-26 kg). The first experiment was designed to study the effects of sildenafil on intestinal myoelectrical activity and it included 2 sessions each consisting of 30-minute baseline, 15-minute posttreatment (placebo or 100 mg sildenafil) and 90 minutes after a liquid meal. Intestinal myoelectrical activity was recorded during the entire experiment period. The second experiment was aimed to investigate the effect of sildenafil on intestinal motility and was performed immediately after a solid meal. Intestinal motility was measured by a manometric catheter inserted into the small intestine via the duodenum cannula for 30 minutes at baseline and 60 minutes after sildenafil. Sildenafil significantly reduced the amplitude but had no effect on the frequency and regularity of the intestinal myoelectrical activity. Sildenafil significantly inhibited postprandial intestinal contractions. Although the frequency of the contractions was not altered, the mean area under the curve was significantly reduced during the first 30 minutes ($P < .03$) and second 30 minutes after sildenafil ($P < .03$); the power of intestinal contractile activities was also significantly reduced during the first 30 minutes ($P < .0004$) and second 30 minutes after sildenafil ($P < .0003$) in comparison with baseline. In conclusion, sildenafil inhibits the amplitude of both intestinal contractile activity and intestinal slow waves.

Unopposed estrogen therapy and the risk of invasive breast cancer.
Chen WY, Manson JE, Hankinson SE, Rosner B, Holmes MD, Willett WC, Colditz GA
Arch Intern Med. 2006 May 8;166(9):1027-32.
Users of unopposed estrogen were at increased risk of breast cancer but only after longer-term use.

Appearance of the levator ani muscle subdivisions in magnetic resonance images.
Margulies RU, Hsu Y, Kearney R, Stein T, Umek WH, Delancey JO
Obstet Gynecol. 2006 May;107(5):1064-9.
OBJECTIVE: Identify and describe the separate appearance of 5 levator ani muscle subdivisions seen in axial, coronal, and sagittal magnetic resonance imaging (MRI) scan planes. METHODS: Magnetic resonance scans of 80 nulliparous women with normal pelvic support were evaluated. Characteristic features of each Terminologia Anatomica-listed levator ani component were determined for each scan plane. Muscle component visibility was based on pre-established criteria in axial, coronal, and sagittal scan planes: 1) clear and consistently visible separation or 2) different origin or insertion. Visibility of each of the levator ani subdivisions in each scan plane was assessed in 25 nulliparous women. RESULTS: In the axial plane, the puborectal muscle can be seen lateral to the pubovisceral muscle and decussating dorsal to the rectum. The course of the puboperineal muscle near the perineal body is visualized in the axial plane. The coronal view is perpendicular to the fiber direction of the puborectal and pubovisceral muscles and shows them as "clusters" of muscle on either side of the vagina. The sagittal plane consistently demonstrates the puborectal muscle passing dorsal to the rectum to form a sling that can consistently be seen as a "bump." This plane is also parallel to the pubovisceral muscle fiber direction and shows the puboperineal muscle. CONCLUSION: The subdivisions of the levator ani muscle are visible in MRI scans, each with distinct morphology and characteristic features. LEVEL OF EVIDENCE: III.

Colonic health: fermentation and short chain fatty acids.
Wong JM, de Souza R, Kendall CW, Emam A, Jenkins DJ

J Clin Gastroenterol. 2006 Mar;40(3):235-43.
Interest has been recently rekindled in short chain fatty acids (SCFAs) with the emergence of prebiotics and probiotics aimed at improving colonic and systemic health. Dietary carbohydrates, specifically resistant starches and dietary fiber, are substrates for fermentation that produce SCFAs, primarily acetate, propionate, and butyrate, as end products. The rate and amount of SCFA production depends on the species and amounts of microflora present in the colon, the substrate source and gut transit time. SCFAs are readily absorbed. Butyrate is the major energy source for colonocytes. Propionate is largely taken up by the liver. Acetate enters the peripheral circulation to be metabolized by peripheral tissues. Specific SCFA may reduce the risk of developing gastrointestinal disorders, cancer, and cardiovascular disease. Acetate is the principal SCFA in the colon, and after absorption it has been shown to increase cholesterol synthesis. However, propionate, a gluconeogenerator, has been shown to inhibit cholesterol synthesis. Therefore, substrates that can decrease the acetate: propionate ratio may reduce serum lipids and possibly cardiovascular disease risk. Butyrate has been studied for its role in nourishing the colonic mucosa and in the prevention of cancer of the colon, by promoting cell differentiation, cell-cycle arrest and apoptosis of transformed colonocytes; inhibiting the enzyme histone deacetylase and decreasing the transformation of primary to secondary bile acids as a result of colonic acidification. Therefore, a greater increase in SCFA production and potentially a greater delivery of SCFA, specifically butyrate, to the distal colon may result in a protective effect. Butyrate irrigation (enema) has also been suggested in the treatment of colitis. More human studies are now needed, especially, given the diverse nature of carbohydrate substrates and the SCFA patterns resulting from their fermentation. Short-term and long-term human studies are particularly required on SCFAs in relation to markers of cancer risk. These studies will be key to the success of dietary recommendations to maximize colonic disease prevention.

Probiotics for women's health.
Onderdonk AB
J Clin Gastroenterol. 2006 Mar;40(3):256-9.
GOALS: The goals of this research were 2-fold: (1) to determine whether a commercially available probiotic mixture (VSL-3) could survive and grow in a continuous culture system simulating the vaginal environment and (2) to determine whether the probiotic mixture was capable of suppressing the growth of a known vaginal vault pathogen, Gardnerella vaginalis. BACKGROUND: An abnormal vaginal microflora, such as that associated with bacterial vaginosis (BV) is an important health issue for women. In addition, the association of this condition with preterm labor and delivery suggests that control of BV may impact the number of preterm births. Interventional trials with antibiotics have received mixed reviews and other interventional options, including the use of probiotics, are being considered. STUDY: A well-documented continuous culture system has been used to determine whether VSL-3 can survive and grow in conditions simulating a vaginal environment. In addition, the ability of VSL-3 to inhibit the growth of a known vaginal vault pathogen, G. vaginalis, has been determined. RESULTS: The probiotic mixture was shown to survive and maintain itself within the fermentation vessel of the continuous culture system over an extended period of time. This mixture, when challenged with a known pathogen, was also shown to suppress the growth of G. vaginalis. CONCLUSIONS: It may be feasible to use probiotics as interventional therapy to suppress the growth of pathogens within the vaginal vault associated with BV.

Probiotics and the immune response.
Madsen K
J Clin Gastroenterol. 2006 Mar;40(3):232-4.
Beneficial effects exerted by probiotic bacteria in the treatment of human disease may be broadly classified as those effects which arise due to activity in the large intestine and are related to colonization or inhibition of pathogen growth; and those effects which arise in both the small and large intestine, and are related to enhancement of the host immune response and intestinal barrier function. In a strain dependent fashion, probiotic bacteria can enhance intestinal barrier function and modulate signal transduction pathways and gene expression in epithelial and immune cells. Oral administration of live probiotics and bacterial structural components can also differentially modulate dendritic cells resulting in an increased production of IL-10 and regulatory T cells. Both innate and adaptive immune responses can be modulated by probiotic bacteria.

Interindividual differences in microbial counts and biochemical-associated variables in the feces of healthy Spanish adults.
Delgado S, Ruas-Madiedo P, Suarez A, Mayo B
Dig Dis Sci. 2006 Apr;51(4):737-43.
The aim of this study was to examine, over a period of 1 year, interindividual variations in the most prominent and representative of the cultivatable microbial populations in the feces of eight healthy Spanish persons. A number of biochemical variables (enzyme activities and ammonium and short-chain fatty acid [SCFA] concentrations) thought to be influenced by the GIT microbiota were also analyzed. Total cultivatable microbial counts ranged from 10(10) to 10(11) cfu/g of feces. The largest populations were obligate anaerobes belonging to the Clostridium clusters, followed by species of bifidobacteria and bacteroides. Coliforms and lactobacilli were found at a more intermediate level (10(5)-10(9) cfu/g). The predominant anaerobe populations remained quite constant over time, but all other microbial groups showed significant interindividual differences. Enzyme profiles were individual-dependent, but within subjects, moderate to high intersample variations over time were recorded for some activities. Fecal ammonium concentration was the most unpredictable variable; this fluctuated widely between individuals and samples. Acetic acid was the most abundant SCFA in the feces, followed by butyric and propionic acids. SCFA concentrations also varied according to the individual; some subjects showed specific profiles in terms of SCFA composition or concentration. The fecal microbial and biochemical parameters studied seemed to be individual-dependent. Most variables were rather stable over time, while others (e.g., ammonium concentration) varied widely.

Applied principles of neurogastroenterology: physiology/motility sensation.
Kellow JE, Azpiroz F, Delvaux M, Gebhart GF, Mertz HR, Quigley EM, Smout AJ
Gastroenterology. 2006 May;130(5):1412-20.
Inflammatory, immunologic, and other processes, as well as psychosocial factors such as stress, can alter the normal patterns of sensitivity and motility through alterations in local reflex activity or via altered neural processing along the brain-gut axis.

Fundamentals of neurogastroenterology: basic science.
Grundy D, Al-Chaer ED, Aziz Q, Collins SM, Ke M, Tache Y, Wood JD
Gastroenterology. 2006 May;130(5):1391-411.
The focus of neurogastroenterology in Rome II was the enteric nervous system (ENS).. This review is an abbreviated version of a fuller account that appears in the forthcoming book, Rome III. This report reviews current basic science understanding of visceral sensation and its modulation by inflammation and stress and advances in the neurophysiology of the ENS and of functional gastrointestinal disorders (FGIDs).

Decrease in rat internal anal pressure with the use of a topical ointment containing a killed E. coli culture suspension.
Kido H, Yasukawa H, Hirota T, Shindo A, Naruse T
Int J Colorectal Dis. 2006 Apr 21;.
OBJECTIVES: The present study aimed to clarify the mechanisms of a topical ointment containing an Escherichia coli culture suspension and hydrocortisone (Posterisan forte, BCS+HC) in lowering internal anal pressure in conscious rats. MATERIALS AND METHODS: Internal anal pressure was measured using a water-filled balloon system for consecutive 10-min periods. The changes in pressure were evaluated by the number of peaks above 20 mmH(2)O between 1 and 8 min of recording. RESULTS: Topical intra-anal application of BCS+HC ointment (160 mg/kg) significantly decreased the internal anal pressure at 3 h after the application. Thereafter, this effect reached a maximum decrease at 4 h and lasted until 6 h. BCS+HC ointment (40, 80, and 160 mg/kg) lowered the internal anal pressure at 4-5 h in a dose-dependent manner. The maximum decrease ratios of the ointment and corresponding hydrocortisone-free ointment (Posterisan, BCS) were 32.6+/-12.7 and 25.7+/-9.0%, respectively, revealing significant pressure-lowering effects compared with a placebo ($P<0.05$). In contrast, the same ointment containing hydrocortisone alone and other ointments containing steroids or local anesthetics had no effects. DISCUSSION: Treatment with 1 mg/kg N(G)-nitro-L: -arginine methyl ester HCl (L: -NAME), a non-selective nitric oxide synthase inhibitor, significantly suppressed the effect of BCS+HC ointment (160 mg/kg) in lowering the internal anal pressure. Furthermore, BCS+HC ointment (160 mg/kg) significantly lowered capsaicin-induced high internal anal

pressure compared to a placebo. CONCLUSION: These findings suggest that BCS+HC and BCS ointments containing an E. coli culture suspension significantly lowered the internal anal pressure due to endogenous nitric oxide production in conscious rats.

Magnetic resonance imaging of the levator ani in the squirrel monkey: a comparison of muscle volume between a cohort with pelvic organ prolapse and matched normals.
Kramer LA, Gendron JM, Pierce LM, Runge VM, Shull BL, Kuehl TJ
Am J Obstet Gynecol. 2006 May;194(5):1467-71.
OBJECTIVE: Magnetic resonance imaging was used to test whether squirrel monkeys with pelvic organ prolapse have reduced pelvic muscle volumes, compared with matched normals. STUDY DESIGN: Levator ani and obturator internus volumes obtained from T1-weighted axial scans of matched groups were measured. Muscle volumes and weights were compared for animals necropsied after magnetic resonance imaging. RESULTS: Two observers concurred on measures of levator ani and obturator internus (Kendal tau > or = 0.60 with P < .003). Levator ani volume was related to mass (R2 = 0.62, P = .0009). Animals with pelvic organ prolapse did not differ (P = .67, Wilks multivariate test) from those without pelvic organ prolapse in age, parity, and weight. Levator ani differed between groups (pelvic organ prolapse = 520 mm3 versus normals = 392 mm3, P = .015) and not sides (P = .80). The obturator internus did not differ between groups (P = .29) or sides (P = .72). CONCLUSION: Magnetic resonance imaging demonstrates that levator ani volumes in parous squirrel monkeys with pelvic organ prolapse were not reduced, suggesting that prolapse is not related to pelvic muscle size reduction in this species.

Distribution and immunohistochemical characterization of primary afferent neurons innervating the levator ani muscle of the female squirrel monkey.
Pierce LM, Rankin MR, Foster RT, Dolber PC, Coates KW, Kuehl TJ, Thor KB
Am J Obstet Gynecol. 2006 Apr 22;.
OBJECTIVE: This study was undertaken to examine the neurofilament and neurochemical composition of subpopulations of primary afferent neurons innervating the levator ani muscle by combining retrograde tracing and triple labeling immunofluorescence in the female squirrel monkey. STUDY DESIGN: Cholera toxin B subunit (CTB) was injected unilaterally into the levator ani muscle of 3 monkeys to identify primary sensory neurons in the dorsal root ganglia (DRG) and their central projections in the spinal cord. L7-S2 DRG were processed for dual or triple labeling immunofluorescence 3 days after injection to examine labeling of the 200 kD neurofilament marker RT97 (a marker of myelinated neurons), calcitonin gene-related peptide (CGRP; a marker of peptidergic neurons), isolectin B4 (IB4; a marker of small, unmyelinated neurons), and nerve growth factor receptor (TrkA) in CTB-positive neurons. RESULTS: RT97-negative (C-fiber) neurons were more numerous (74% of total CTB-labeled neurons) and smaller in size than RT97-positive (A-fiber) afferent neurons (26% of CTB-labeled neurons). IB4 labeling was almost exclusively found in RT97-negative afferent neurons. Approximately 43% of all CTB-labeled DRG neurons expressed CGRP, and the majority of these were small. The distribution and sizes of CTB-labeled TrkA-positive DRG neurons were similar to those of CTB-labeled CGRP-positive DRG neurons. CONCLUSION: The levator ani muscle is innervated by 3 major subpopulations of primary afferent neurons consisting of cells with large, neurofilament-rich soma and A fibers (putative proprioceptive neurons) and those with small, peptidergic or nonpeptidergic, neurofilament-poor soma and C fibers (putative nociceptive, mechanoreceptive, ergoreceptive, and thermoreceptive neurons). Future investigation is needed to elucidate the relationship between primary sensory neuron subpopulations and changes in neuropeptide and neurotrophin expression on experimental levator ani nerve damage, childbirth, and aging.

External anal sphincter volume measurements using 3-dimensional endoanal ultrasound.
Gregory WT, Boyles SH, Simmons K, Corcoran A, Clark AL
Am J Obstet Gynecol. 2006 May;194(5):1243-8. Epub 2006 Apr 21.
OBJECTIVE: Significant nerve injury to a muscle can be associated with muscle atrophy and volume loss. Three-dimensional (3D) ultrasound can measure muscle volume, but the reproducibility of the technique has not been established for the anal sphincter. STUDY DESIGN: Using a 10 MHz 360-degree rotating endoanal probe, we performed 3D endoanal ultrasounds on 9 nulliparous and 23 asymptomatic primiparous subjects at 12 weeks' postpartum. Two blinded examiners measured the length of the external anal sphincter (EAS)

from a midsagittal image, and the width of the EAS and internal anal sphincter (IAS) from axial images at mid anal canal. The EAS volume was calculated by repetitively outlining only the EAS in each sequential axial view. Both examiners measured the EAS volumes twice, blinded to previous calculations. RESULTS: The intrarater reliability for EAS volume was 0.79 to 0.89 (intraclass coefficient). The mean difference of the EAS volume between the 2 examiners was 0.5 mL (P = .3, t test). Correlation between the 2 examiners for measuring EAS volume was r = 0.77 (P < .001, Pearson's). The "limits of agreement" (between 2 examiners) varied by as much as 40% of the mean volume. CONCLUSION: Quantitative 3D ultrasound of the anal sphincter is moderately reproducible.

The cell adhesion molecule l1 is required for chain migration of neural crest cells in the developing mouse gut.
Anderson RB, Turner KN, Nikonenko AG, Hemperly J, Schachner M, Young HM
Gastroenterology. 2006 Apr;130(4):1221-32.
BACKGROUND & AIMS: During development, the enteric nervous system is derived from neural crest cells that emigrate from the hindbrain, enter the foregut, and colonize the gut. Defects in neural crest migration can result in intestinal aganglionosis. L1 is important for the migration of neural crest cells through the developing gut and is likely to be involved in the etiology of Hirschsprung's disease.

Dietary Fiber Enhances a Tumor Suppressor Signaling Pathway in the Gut.
Nguyen KA, Cao Y, Chen JR, Townsend CM Jr, Ko TC
Ann Surg. 2006 May;243(5):619-627.

3 – DIAGNOSTICS

The incidence of ureteral obstruction and the value of intraoperative cystoscopy during vaginal surgery for pelvic organ prolapse.
Gustilo-Ashby AM, Jelovsek JE, Barber MD, Yoo EH, Paraiso MF, Walters MD
Am J Obstet Gynecol. 2006 May;194(5):1478-85.
OBJECTIVE: The objective of the study was to determine the incidence of ureteral obstruction during vaginal surgery for pelvic organ prolapse and the accuracy and efficacy of intraoperative cystoscopy. STUDY DESIGN: The study was a retrospective review of 700 consecutive patients who underwent vaginal surgery for anterior and/or apical pelvic organ prolapse with universal intraoperative cystoscopy. RESULTS: Thirty-seven patients (5.3%) had no spillage of dye from 1 or both ureters intraoperatively. The false-positive and negative cystoscopy rates were 0.4% and 0.3%, respectively. Thus, the true incidence of intraoperative ureteral obstruction was 5.1%. Intraoperative cystoscopy was accurate in 99.3% of cases, with a sensitivity and specificity of 94.4% and 99.5%, respectively. Suture removal relieved ureteral obstruction in 88% of cases. Six subjects (0.9%) had true ureteral injuries. CONCLUSION: Vaginal surgery for anterior and/or apical pelvic organ prolapse is associated with an intraoperative ureteral obstruction rate of 5.1%. Intraoperative cystoscopy accurately detects ureteral obstruction and allows for relief of obstruction in the majority of cases.

Prophylactic antibiotics after urodynamics in women: a decision analysis.
Lowder JL, Burrows LJ, Howden NL, Weber AM
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 4;.
Prophylactic antibiotics after urodynamics are not beneficial until the rate of urinary tract infection (UTI) without antibiotics exceeds 10%.

Incidence of colonic perforation at CT colonography: review of existing data and implications for screening of asymptomatic adults.
Pickhardt PJ
Radiology. 2006 May;239(2):313-6.

The Norwegian Gastronet project: Continuous quality improvement of colonoscopy in 14 Norwegian centres.

Hoff G, Bretthauer M, Huppertz-Hauss G, Kittang E, Stallemo A, Hoie O, Dahler S, Nyhus S, Halvorsen FA, Pallenschat J, Vetvik K, Kristian Sandvei P, Friestad J, Pytte R, Coll P
Scand J Gastroenterol. 2006 Apr;41(4):481-7.
There is a need for formal, centralized training of colonoscopists or the development of quality standards for colonoscopy training and practice.

4 – PROLAPSES

Women seeking treatment for advanced pelvic organ prolapse have decreased body image and quality of life.
Jelovsek JE, Barber MD
Am J Obstet Gynecol. 2006 May;194(5):1455-61.
OBJECTIVE: Women who seek treatment for pelvic organ prolapse strive for an improvement in quality of life. Body image has been shown to be an important component of differences in quality of life. To date, there are no data on body image in patients with advanced pelvic organ prolapse. Our objective was to compare body image and quality of life in women with advanced pelvic organ prolapse with normal controls. STUDY DESIGN: We used a case-control study design. Cases were defined as subjects who presented to a tertiary urogynecology clinic with advanced pelvic organ prolapse (stage 3 or 4). Controls were defined as subjects who presented to a tertiary care gynecology or women's health clinic for an annual visit with normal pelvic floor support (stage 0 or 1) and without urinary incontinence. All patients completed a valid and reliable body image scale and a generalized (Short Form Health Survey) and condition-specific (Pelvic Floor Distress Inventory-20) quality-of-life scale. Linear and logistic regression analyses were performed to adjust for possible confounding variables. RESULTS: Forty-seven case and 51 control subjects were enrolled. After controlling for age, race, parity, previous hysterectomy, and medical comorbidities, subjects with advanced pelvic organ prolapse were more likely to feel self-conscious (adjusted odds ratio 4.7; 95% confidence interval 1.4 to 18, P = .02), less likely to feel physically attractive (adjusted odds ratio 11; 95% confidence interval 2.9 to 51, P < .001), less likely to feel feminine (adjusted odds ratio 4.0; 95% confidence interval 1.2 to 15, P = .03), and less likely to feel sexually attractive (adjusted odds ratio 4.6; 95% confidence interval 1.4 to 17, P = .02) than normal controls. The groups were similar in their feeling of dissatisfaction with appearance when dressed, difficulty looking at themselves naked, avoiding people because of appearance, and overall dissatisfaction with their body. Subjects with advanced pelvic organ prolapse suffered significantly lower quality of life on the physical scale of the SF-12 (mean 42; 95% confidence interval 39 to 45 versus mean 50; 95% confidence interval 47 to 53, P < .009). However, no differences between groups were noted on the mental scale of the SF-12 (mean 51; 95% confidence interval 50 to 54 versus mean 50; 95% confidence interval 47 to 52, P = .56). Additionally, subjects with advanced pelvic organ prolapse scored significantly worse on the prolapse, urinary, and colorectal scales and overall summary score of Pelvic Floor Distress Inventory-20 than normal controls (mean summary score 104; 95% confidence interval 90 to 118 versus mean 29; 95% confidence interval 16 to 43, P < .0001), indicating a decrease in condition-specific quality of life. Worsening body image correlated with lower quality of life on both the physical and mental scales of the SF-12 as well as the prolapse, urinary, and colorectal scales and overall summary score of Pelvic Floor Distress Inventory-20 in subjects with advanced pelvic organ prolapse. CONCLUSION: Women seeking treatment for advanced pelvic organ prolapse have decreased body image and overall quality of life. Body image may be a key determinant for quality of life in patients with advanced prolapse and may be an important outcome measure for treatment evaluation in clinical trials.

Mesh erosion in abdominal sacral colpopexy with and without concomitant hysterectomy.
Wu JM, Wells EC, Hundley AF, Connolly A, Williams KS, Visco AG
Am J Obstet Gynecol. 2006 May;194(5):1418-22.
OBJECTIVE: The purpose of this study was to examine risk factors for mesh erosion, including concomitant hysterectomy, in abdominal sacral colpopexies. STUDY DESIGN: We conducted a retrospective cohort study of 313 women who underwent an abdominal sacral colpopexy. Data regarding patient demographics, operative techniques, length of follow-up, postoperative complications, and mesh erosion were collected. RESULTS: Of 313 subjects, 101 (32.3%) had concomitant hysterectomies and 212 (67.7%) had had previous hysterectomies. The overall rate of mesh erosion was 5.4%. In bivariate analysis, concomitant

hysterectomy was not associated with erosion (6.9% vs 4.7% previous hysterectomy, P = .42); however, estrogen therapy was an effect modifier. In women on estrogen, hysterectomy (OR 4.9, CI 1.2-19.7) and anterior imbrication (OR 5.6, CI 1.1-28.6) were associated with mesh erosion. No risk factors were identified in women not on estrogen. CONCLUSION: In women on estrogen therapy, hysterectomy was associated with mesh erosion in abdominal sacral colpopexy.

Effect of patient age on increasing morbidity and mortality following urogynecologic surgery.
Sung VW, Weitzen S, Sokol ER, Rardin CR, Myers DL
Am J Obstet Gynecol. 2006 May;194(5):1411-7.
OBJECTIVE: The purpose of this study was to estimate the effect of age on the risk of in-hospital mortality and morbidity following urogynecologic surgery and to compare risks associated with obliterative versus reconstructive procedures for prolapse in elderly women. STUDY DESIGN: We conducted a retrospective cohort study utilizing data from 1998 to 2002 from the Nationwide Inpatient Sample. Multivariable logistic regression was performed to obtain odds ratios estimating the effect of age on risk of death and complications, adjusting for comorbidities and demographic factors. RESULTS: There were 264,340 women in our study population. Increasing age was associated with higher mortality risks per 1000 women (< 60 years, 0.1; 60-69 years, 0.5; 70-79 years, 0.9; > or = 80 years, 2.8; P < .01) and higher complication risks per 1000 women (< 60 years, 140; 60-69 years, 130; 70-79 years, 160; > or = 80 years, 200; P < .01). Using multivariable logistic regression, increasing age was associated with an increased risk of death (60-69 years, odds ratio [OR] 3.4 [95% CI 1.7-6.9]; 70-79 years, OR 4.9 [95% CI 2.2-10.9]; > or = 80 years, OR 13.6 [95% CI 5.9-31.4]), compared with women < 60 years. The risk of peri-operative complications was also higher in elderly women 80 years of age and older (OR 1.4 [95% CI 1.3-1.5]) compared with younger women. Elderly women 80 years and over who underwent obliterative procedures had a lower risk of complication compared with those who underwent reconstructive procedures for prolapse (17.0% vs 24.7%, P < .01). CONCLUSION: Although the absolute risk of death is low, elderly women have a higher risk of mortality and morbidity following urogynecologic surgery.

Responsiveness of the Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ) in women undergoing vaginal surgery and pessary treatment for pelvic organ prolapse.
Barber MD, Walters MD, Cundiff GW
Am J Obstet Gynecol. 2006 May;194(5):1492-8.
OBJECTIVE: This study was undertaken to evaluate the responsiveness of the Pelvic Floor Distress Inventory (PFDI) and Pelvic Floor Impact Questionnaire (PFIQ) in women with pelvic organ prolapse undergoing surgical and nonsurgical management. STUDY DESIGN: The responsiveness of the prolapse, urinary and colorectal scales of the PFDI and PFIQ were assessed in 2 independent populations: (1) 42 women with stage II or greater prolapse enrolled in an ongoing multicenter randomized trial comparing 2 different pessaries (Pessary group) and (2) 64 women with stage III or greater prolapse who underwent vaginal reconstructive surgery (Surgery group). All subjects completed the PFDI and PFIQ at baseline and again either 3 months (Pessary group) or 6 months (Surgery group) after initiation of treatment. Responsiveness was assessed with standardized response mean (SRM), effect size (ES), and the paired t test. RESULTS: In the Pessary group, there was a significant improvement in the prolapse and urinary scales of the PFDI, with each demonstrating moderate responsiveness (prolapse: SRM 0.69, ES 0.68; urinary: SRM 0.57, ES: 0.50, P < .001 for each). The colorectal scale of the PFDI and each of the 3 scales of the PFIQ demonstrated no significant change in scores with pessary use. In the Surgery group, there was a significant improvement in the prolapse, urinary, and colorectal scales of both the PFDI and PFIQ (P < .01 for each). The prolapse and urinary scales of the PFDI demonstrated excellent responsiveness with SRM and ES 1.20 or greater for the prolapse scale and equal to1.05 for the urinary scales. The colorectal scale of the PFDI and the urinary and prolapse scales of the PFIQ demonstrated moderate responsiveness (SRM 0.61-0.70 and ES 0.56-0.60) after surgery. Subjects who had a recurrence of their prolapse develop after surgery (6%) had significantly less improvement in the prolapse scale of the PFDI than those who did not. After controlling for preoperative prolapse stage and baseline quality of life scores, subjects in the Surgery group had significantly greater improvement in each of the scales of the PFDI and the prolapse and urinary scales of the PFIQ than did the Pessary group (P < .05 for each). CONCLUSION: The PFDI and PFIQ are responsive to change in women undergoing surgical and nonsurgical treatment for pelvic organ prolapse.

The PFDI is more responsive than the PFIQ.

Can we screen for pelvic organ prolapse without a physical examination in epidemiologic studies?
Barber MD, Neubauer NL, Klein-Olarte V
Am J Obstet Gynecol. 2006 May 6;. Epub
Screening for POP without a physical examination is subject to spectrum bias. Spectrum bias occurs when a diagnostic test performs differently in different groups of patients. In groups with a high prior probability of POP, a simple screening question can accurately screen for advanced POP without a physical exam. However, in groups with a low prior probability of POP such as might be seen in a population-based epidemiologic study, this question has poor sensitivity.

Clinical and physiologic outcomes after transvaginal rectocele repair.
Yamana T, Takahashi T, Iwadare J
Dis Colon Rectum. 2006 May;49(5):661-7.
PURPOSE: This study was designed to evaluate the clinical and physiologic outcomes after transvaginal rectocele repair. METHODS: Between June 2000 and January 2003, 30 females (mean age, 62 (range, 45-78) years) with a symptomatic large rectocele (>3 cm) underwent transvaginal rectocele repair (anterior levatorplasty). Six months after surgery, a physiologic evaluation was performed by using defecography (depth of rectocele) and anorectal manometry (maximum resting pressure, maximum squeeze pressure, rectal threshold, and maximum tolerable volume). Using a questionnaire, a clinical evaluation was performed one year after surgery to analyze symptoms, including difficult evacuation, digital support, sexual discomfort, as well as patient satisfaction. Follow-up of all patients was conducted during a median duration of 38 (range, 23-54) months. RESULTS: There were no operative complications, such as hematoma, wound infection, or rectovaginal fistula.Difficult evacuation improved in 27 of 30 patients (90 percent) and completely disappeared in 9 patients. Postoperatively, digital support was no longer necessary during evacuation in 15 of 21 patients (71 percent). Overall patient satisfaction reached 25 of 30 (83 percent). Although mild sexual discomfort was observed in nine patients, it disappeared gradually and only one patient complained of persistent symptoms. No patient reported symptomatic recurrences at the end of the follow-up. The radiologic mean depth of the rectocele was significantly reduced: preoperative, 3.9 cm; postoperative, 0.5 cm. None of the physiologic parameters significantly changed after surgery. CONCLUSIONS: Transvaginal rectocele repair can provide excellent long-term symptomatic relief and a high rate of patient satisfaction without any alteration in anorectal physiologic function.

Outcomes with porcine graft placement in the anterior vaginal compartment in patients who undergo high vaginal uterosacral suspension and cystocele repair.
Wheeler TL 2nd, Richter HE, Duke AG, Burgio KL, Redden DT, Varner RE
Am J Obstet Gynecol. 2006 May;194(5):1486-91.
Significant improvements in Pelvic Organ Prolapse Quantification measures, urinary symptoms, and the impact of incontinence were seen after the operation. However, a significant proportion of patients had Pelvic Organ Prolapse Quantification stage II prolapse or greater, which made it unclear whether graft use confers a significant advantage.

Anatomical conditions for pelvic floor reconstruction with polypropylene implant and its application for the treatment of vaginal prolapse.
Reisenauer C, Kirschniak A, Drews U, Wallwiener D
Eur J Obstet Gynecol Reprod Biol. 2006 May 2;. Epub
OBJECTIVE: The purpose of the surgical treatment of vaginal prolapse is not only the restoration of the anatomy but also of the visceral functioning. To maintain the quality of life for patients with recurrent vaginal prolapse, to reduce the failure rates of operations and to avoid a colpectomy or a colpocleisis at the same time, synthetic materials have been introduced in transvaginal reconstructive surgery of the pelvic floor. The TVM Group from France described the reconstruction of the pelvic floor with polypropylene implants in 2004. The aim of this study is to determine the anatomical position of the polypropylene implants after reconstruction of each compartment of the pelvic floor and to determine the relation of the implants to the major neighbouring neurovascular structures on the basis of corpse dissections. STUDY DESIGN: Following

the technique of the TVM Group from France we present the pelvic floor reconstruction using Gynecare Prolift* (Ethicon, Sommerville, NJ, USA). To reach the aims of the study, anatomical dissections of the pelvic floor on three specially preserved anatomical specimens are performed after the placement of the implants. RESULTS: The anatomical dissections show that every defect in all three compartments of the pelvic floor can be repaired by using polypropylene implants. Between the implants and the major neighbouring neurovascular structures a safe distance exists with slight individual differences. CONCLUSION: The pelvic floor reconstruction using polypropylene implants is a treatment option especially for the surgical correction of the recurrent vaginal prolapse. If the surgeon has thorough anatomical knowledge and performs the surgical technique in the recommended manner, injuries of the major neighbouring neurovascular structures will be avoided. Clinical studies will analyze the long-term results after pelvic floor reconstruction using polypropylene implants.

Sacral colpopexy with concurrent burch colposuspension in patients with vaginal vault prolapse.
Wille S, Braun M, Heidenreich A, Hofmann R, Engelmann U
Urol Int. 2006;76(4):339-44.
Introduction: Abdominal sacral colpopexy (SC) is one option in the management of vaginal vault prolapse. In patients who are additionally incontinent an anti-incontinence procedure such as a Burch colposuspension or pubovaginal sling is usually performed at the same time. For those patients undergoing SC who are continent there are no clear guidelines for the use of a 'prophylactic' anti-incontinence procedure. We describe our experience with SC and concurrent Burch colposuspension. Patients and Methods: 47 patients (mean age 65 years) underwent SC and concurrent Burch colposuspension. The preoperative diagnostic check-up included a validated questionnaire, clinical examination, urodynamic tests, ultrasound and colpocystorectography. Patients were also evaluated using Stress, Emptying, Anatomic, Protection and Instability (SEAPI) scores. All patients had a uterine or vaginal vault prolapse in combination with a cystocele, enterocele or rectocele. Thirty-three of 47 (70%) patients were continent and 14 (30%) incontinent. Nineteen (40%) of the 33 'continent' patients were found to have occult incontinence. Clinical examination according to the Halfway system showed 9 of 47 (19%), 21 of 47 (45%) and 17 of 47 (36%) patients with grade 2, 3 and 4 vaginal vault prolapse, respectively. Thirty-five of 47 (74%) patients demonstrated a grade-4 cystocele and 12 of 47 (26%) a grade-3 cystocele. The mean follow-up was 34 months and included a questionnaire (SEAPI), clinical examination and ultrasound. Results: Postoperative SEAPI scores showed a statistically significant improvement in all SEAPI domains ($p < 0.001$). Ninety-four percent of the patients were satisfied, continent and would undergo the surgery again. Three patients were incontinent. No continent patient who underwent concurrent Burch colposuspension had obstructive symptoms or residual urine. Five patients (11%) who had dyspareunia preoperatively were free of this symptom postoperatively. Complications were: dilatation of the upper urinary tract in 2 patients (4%) secondary to distal ureteric deviation by suturing the posterior peritoneum. One patient underwent psoas hitch neoureterocystostomy and 1 patient was successfully treated by insertion of a ureteric stent for 6 weeks. One patient (2%) had a mesh infection necessitating removal of the Gore-Tex mesh. Conclusions: Sacral colpopexy provides good patient satisfaction, durable pelvic support and restores vaginal function. Due to excellent continence rates concurrent Burch colposuspension should be considered as a joint procedure even in continent patients.

Abdominal sacrocolpopexy with Burch colposuspension to reduce urinary stress incontinence.
Brubaker L, Cundiff GW, Fine P, Nygaard I, Richter HE, Visco AG, Zyczynski H, Brown MB, Weber AM
N Engl J Med. 2006 Apr 13;354(15):1557-66.
BACKGROUND: We designed this trial to assess whether the addition of standardized Burch colposuspension to abdominal sacrocolpopexy for the treatment of pelvic-organ prolapse decreases postoperative stress urinary incontinence in women without preoperative symptoms of stress incontinence. METHODS: Women who did not report symptoms of stress incontinence and who chose to undergo sacrocolpopexy to treat prolapse were randomly assigned to concomitant Burch colposuspension or to no Burch colposuspension (control) and were evaluated in a blinded fashion three months after the surgery. The primary outcomes included measures of stress incontinence (symptoms, stress testing, or treatment) and measures of urge symptoms. Enrollment was stopped after the first interim analysis because of a significantly lower frequency of stress incontinence in the group that underwent the Burch colposuspension.

RESULTS: Of 322 women who underwent randomization, 157 were assigned to Burch colposuspension and 165 to the control group. Three months after surgery, 23.8 percent of the women in the Burch group and 44.1 percent of the controls met one or more of the criteria for stress incontinence (P<0.001). There was no significant difference between the Burch group and the control group in the frequency of urge incontinence (32.7 percent vs. 38.4 percent, P=0.48). After surgery, women in the control group were more likely to report bothersome symptoms of stress incontinence than those in the Burch group who had stress incontinence (24.5 percent vs. 6.1 percent, P<0.001). CONCLUSIONS: In women without stress incontinence who are undergoing abdominal sacrocolpopexy for prolapse, Burch colposuspension significantly reduced postoperative symptoms of stress incontinence without increasing other lower urinary tract symptoms.

Pelvic organ prolapse and measurements of the pelvic floor.
Rizk DE
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 27;. Epub

The biology behind fascial defects and the use of implants in pelvic organ prolapse repair.
Deprest J, Zheng F, Konstantinovic M, Spelzini F, Claerhout F, Steensma A, Ozog Y, De Ridder D
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 9;. Epub
Implant materials are increasingly being used in an effort to reduce recurrence after prolapse repair with native tissues. Surgeons should be aware of the biology behind both the disease as well as the host response to various implants. We will discuss insights into the biology behind hernia and abdominal fascial defects. Those lessons from "herniology" will, wherever possible, be applied to pelvic organ prolapse (POP) problems.

Evaluation of a unique bovine collagen matrix for soft tissue repair and reinforcement.
Connolly RJ
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 9;.
Veritas((R)) Collagen Matrix, a product of Synovis Surgical Innovations, is derived from bovine pericardium. It can be used for a number of applications including body wall repair and replacement. In this study, we evaluated its efficacy as an adhesion barrier in a rabbit model of uterine horn surgery. When Veritas((R)) was placed on the uterine horn stump it reduced the incidence of adhesions by 50% (n.s.) compared with untreated controls. Histologic analysis of recovered material showed that the surface was covered with a monolayer of mesothelial-like cells. In addition, there was an infiltration of host cells into the matrix of the product, which suggests a replacement of the material with host tissue.

Biology of polypropylene/polyglactin 910 grafts.
Barbolt TA
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 6;. Epub
The biological evaluation of polypropylene (PP)/polyglactin 910 grafts was reviewed including regulatory considerations, biocompatibility assessment, tissue reaction and integration, and infection potentiation of these synthetic materials used in urogynecological surgical procedures.

Pelvic organ prolapse: demographics and future growth prospects.
Drutz HP, Alarab M
Int Urogynecol J Pelvic Floor Dysfunct. 2006; 17: suppl.7 6-9.
Eventually clinicians may be able to identify women who may be genetically predetermined to develop POP.

Evolution of biological and synthetic grafts in reconstructive pelvic surgery.
Dwyer PL
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 6;. Epub

[The solitary rectal ulcer syndrome.]
Meurette G, Regenet N, Frampas E, Sagan C, Le Borgne J, Lehur PA
Gastroenterol Clin Biol. 2006 Mar;30(3):382-90.
The solitary rectal ulcer syndrome is a rare debilitating disorder of the rectum characterized by perianal

chronic pain with passage of blood and mucus. The pathogenesis remains uncertain, rectal prolapse and trauma from straining are the main hypothesis. The diagnosis includes clinical symptoms associated with endoscopic lesion (erythema, ulcer or polypoid lesion) and histological features. Mano-metric studies and defecography are helpful to determinate an underlying defecation disorder or rectal prolapse. The treatment is controversial including a conservative option (medications and behavioural therapy) with poor long term results, and the surgical option (treatment of a rectal prolapse with or without resection of the lesion), more aggressive with uncertain results in a long follow-up period.

Preoperative Anal Manometry Predicts Continence After Perineal Proctectomy for Rectal Prolapse.
Glasgow SC, Birnbaum EH, Kodner IJ, Fleshman JW, Dietz DW
Dis Colon Rectum. 2006 May 2;. Epub
Perineal proctectomy provides relief from rectal prolapse, with good intermediate term results. Preoperative anal manometry can predict fecal continence rates after proctectomy, because patients with maximal squeeze pressures >60 mmHg have significantly improved outcomes.

Disseminated Klebsiella pneumoniae infection after hemorrhoidectomy.
Chen WH, Yen JC, Kao YF
Int J Colorectal Dis. 2006 Apr 20;. Epub

Mucosal flap excision for treatment of remnant prolapsed hemorrhoids or skin tags after stapled hemorrhoidopexy : Dis Colon Rectum 2005; 48:1660-1662.
Koh PK, Seow-Choen F
Tech Coloproctol. 2006 Mar;10(1):71.

5 – RETENTIONS
Acute urinary retention caused by a large peritoneal inclusion cyst: a case report.
Advincula AP, Hernandez JC
J Reprod Med. 2006 Mar;51(3):202-4.
BACKGROUND: Pelvic masses have been known to cause bladder symptoms and compression. This is the first documented case of a large peritoneal inclusion cyst causing acute urinary retention from bladder outlet obstruction. Laparoscopy relieved the symptoms.

The prevalence of voiding difficulty after TVT, its impact on quality of life, and related risk factors.
Vervest HA, Bisseling TM, Heintz AP, Schraffordt Koops SE
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 22;.

Management of urethral strictures.
Waxman SW, Morey AF
Lancet. 2006 Apr 29;367(9520):1379-80.

Refining diagnosis of anatomic female bladder outlet obstruction: comparison of pressure-flow study parameters in clinically obstructed women with those of normal controls.
Wein AJ
J Urol. 2006 May;175(5):1802-3.

Diagnosis and treatment of primary bladder neck obstruction in men.
Wein AJ
J Urol. 2006 May;175(5):1802.

Postoperative voiding, bacteriuria and urinary tract infection with Foley catheterization after gynecological surgery.
Schiotz HA, Tanbo TG
Acta Obstet Gynecol Scand. 2006;85(4):476-81.
One-day bladder drainage by transurethral Foley catheter may be used routinely in common gynecological

surgery with a low rate of voiding problems, asymptomatic bacteriuria, and urinary tract infection. Methenamine hippurate prophylaxis effectively reduces postoperative urinary tract infection.

Multiple food hypersensitivity as a cause of refractory chronic constipation in adults.
Carroccio A, Di Prima L, Iacono G, Florena AM, D'Arpa F, Sciume C, Cefalu AB, Noto D, Averna MR
Scand J Gastroenterol. 2006 Apr;41(4):498-504.
In adult patients, refractory chronic constipation may be caused by food hypersensitivity and an elimination diet is effective in these subjects.

Constipation of anorectal outlet obstruction: Pathophysiology, evaluation and management.
Andromanakos N, Skandalakis P, Troupis T, Filippou D
J Gastroenterol Hepatol. 2006 Apr;21(4):638-646.
Constipation is a subjective symptom of various pathological conditions. Incidence of constipation fluctuates from 2 to 30% in the general population. Approximately 50% of constipated patients referred to tertiary care centers have obstructed defecation constipation. Constipation of obstructed defecation may be due to mechanical causes or functional disorders of the anorectal region. Mechanical causes are related to morphological abnormalities of the anorectum (megarectum, rectal prolapse, rectocele, enterocele, neoplasms, stenosis). Functional disorders are associated with neurological disorders and dysfunction of the pelvic floor muscles or anorectal muscles (anismus, descending perineum syndrome, Hirschsprung's disease). However, this type of constipation should be differentiated by colonic slow transit constipation which, if coexists, should be managed to a second time. Assessment of patients with severe constipation includes a good history, physical examination and specialized investigations (colonic transit time, anorectal manometry, rectal balloon expulsion test, defecography, electromyography), which contribute to the diagnosis and the differential diagnosis of the cause of the obstructed defecation. Thereby, constipated patients can be given appropriate treatment for their problem, which may be conservative (bulk agents, high-fiber diet or laxatives), biofeedback training or surgery.

6 – INCONTINENCES

TVT and TVT-Obturator: Comparison of two operative procedures.
Neuman M
Eur J Obstet Gynecol Reprod Biol. 2006 Apr 16;. Epub
AIM: To compare two anti-incontinence operations: the tension-free vaginal tape (TVT) and the TVT-Obturator for the first two 75-patient groups. METHODS: One surgeon operated on two patient groups with urodynamically proven urinary stress incontinence. The first 75-patient group in 1998 included the first TVT procedures performed according to Ulmsten [Ulmsten U, Henriksson L, Johnson P, Varhos G. An ambulatory surgical procedure under local anesthesia for treatment of female urinary incontinence. Int Urogynecol J 1996;7:81-6]. Follow-up lasted for 5-6 years. The second 75-patient group in 2004 included the first TVT-Obturator operations performed according to [De Leval J. Novel surgical technique for the treatment of female stress urinary incontinence: transobturator vaginal tape inside-out. Eur. Urol. 2003;44:724-30]. Follow-up lasted for 6-13 months. RESULTS: The two patient groups were similar from the demographic and therapeutic points of view. The TVT-Obturator procedure required neither bladder catheterization nor intra-operative diagnostic cystoscopy. TVT-related bladder penetration (8.0%), post-operative voiding difficulties (5.0%), intra-operative bleeding (4.0%), post-operative field infection (2.7%), and post-operative pelvic floor relaxation (1.3%) were not noted with the TVT-Obturator. The early therapeutic failure rates were 2.7% for the TVT and 1.3% for the TVT-Obturator, and neither bowel nor urethral injuries were recorded. CONCLUSIONS: The surgeons' learning curves of these two minimally invasive surgical procedures for the treatment of female urinary stress incontinence are comparable. The safety and cost-effectiveness of the TVT are well-established. The TVT-Obturator, a novel mid-urethral sling, was designed to overcome some of the TVT-related operative complications. The TVT-Obturator patients seem to have less intra-operative and post-operative surgical complications than the TVT patients. However, long-term comparative data collection is required prior to drawing solid conclusions concerning the superiority of one of these two operative techniques.

[Spanish registry of the TRT Reemex system in women with stress urinary incontinence (SUI)]
Moreno Sierra J, Marques Queimadelos A, Arano Beltran P, De La Fuente Perez P, Cerezuela Requena JF, Cortes Otero E, Amat Tardiu L, Sousa Escandon A, Ruiz Caballero J, Gambini Ricapa J, Urgell Morera S, Santisteban J, Valls Porcel M, Arnaiz Esteban F, Cam
Arch Esp Urol. 2006 Mar;59(2):169-74.

Reductions in overactive bladder-related incontinence from pooled analysis of phase III trials evaluating treatment with solifenacin.
Cardozo L, Castro-Diaz D, Gittelman M, Ridder A, Huang M
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 20;. Epub
Solifenacin is an effective antimuscarinic agent for the treatment of incontinence associated with OAB.

A 3-month preclinical trial to assess the performance of a new TVT-like mesh (TVTx) in a sheep model.
Rezapour M, Novara G, Meier PA, Holste J, Landgrebe S, Artibani W
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 21;. Epub

Fecal Incontinence in Females Older Than Aged 40 Years: Who is at Risk?
Varma MG, Brown JS, Creasman JM, Thom DH, Van Den Eeden SK, Beattie MS, Subak LL Group.
Dis Colon Rectum. 2006 May 10;. Epub
PURPOSE: This study was designed to estimate the prevalence of, and identify risk factors associated with, fecal incontinence in racially diverse females older than aged 40 years. METHODS: The Reproductive Risks for Incontinence Study at Kaiser is a population-based study of 2,109 randomly selected middle-aged and older females (average age, 56 years). Fecal incontinence, determined by self-report, was categorized by frequency. Females reported the level of bother of fecal incontinence and their general quality of life. Potential risk factors were assessed by self-report, interview, physical examination, and record review. Multivariate logistic regression analysis was used to determine the independent association between selected risk factors and the primary outcome of any reported fecal incontinence in the past year. RESULTS: Fecal incontinence in the past year was reported by 24 percent of females (3.4 percent monthly, 1.9 percent weekly, and 0.2 percent daily). Greater frequency of fecal incontinence was associated with decreased quality of life (Medical Outcome Short Form-36 Mental Component Scale score, P = 0.01), and increased bother (P < 0.001) with 45 percent of females with fecal incontinence in the past year and 100 percent of females with daily fecal incontinence reporting moderate or great bother. In multivariate analysis, the prevalence of fecal incontinence in the past year increased significantly [odds ratio per 5 kg/m(2) (95 percent confidence interval)] with obesity [1.2 (1.1-1.3)], chronic obstructive pulmonary disease [1.9 (1.3-2.9)], irritable bowel syndrome [2.4 (1.7-3.4)], urinary incontinence [2.1 (1.7-2.6)], and colectomy [1.9 (1.1-3.1)]. Latina females were less likely to report fecal incontinence than white females [0.6 (0.4-0.9)]. CONCLUSIONS: Fecal incontinence, a common problem for females, is associated with substantial adverse affects on quality of life. Several of the identified risk factors are preventable or modifiable, and may direct future research in fecal incontinence therapy.

Anal sphincter lacerations and upright delivery postures-a risk analysis from a randomized controlled trial.
Altman D, Ragnar I, Ekstrom A, Tyden T, Olsson SE
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 25;. Epub
OBJECTIVE: To evaluate obstetric sphincter lacerations after a kneeling or sitting position at second stage of labor in a multivariate risk analysis model. MATERIALS AND METHODS: Two hundred and seventy-one primiparous women with normal pregnancies and spontaneous labor were randomized, 138 to a kneeling position and 133 to a sitting position. Medical data were retrieved from delivery charts and partograms. Risk factors were tested in a multivariate logistic regression model in a stepwise manner. RESULTS: The trial was completed by 106 subjects in the kneeling group and 112 subjects in the sitting group. There were no significant differences with regard to duration of second stage of labor or pre-trial maternal characteristics between the two groups. Obstetrical sphincter tears did not differ significantly between the two groups but an intact perineum was more common in the kneeling group (p<0.03) and episiotomy (mediolateral) was more

common in the sitting group (p<0.05). Three grade IV sphincter lacerations occurred in the sitting group compared to none in the kneeling group (NS). Multivariate risk analysis indicated that prolonged duration of second stage of labor and episiotomy were associated with an increased risk of third- or fourth-degree sphincter tears (p<0.01 and p<0.05, respectively). Delivery posture, maternal age, fetal weight, use of oxytocin, and use of epidural analgesia did not increase the risk of obstetrical anal sphincter lacerations in the two upright postures. CONCLUSION: Obstetrical anal sphincter lacerations did not differ significantly between a kneeling or sitting upright delivery posture. Episiotomy was more common after a sitting delivery posture, which may be associated with an increased risk of anal sphincter lacerations. Upright delivery postures may be encouraged in healthy women with normal, full-term pregnancy.

Intra-abdominal erosion of artificial bowel sphincter reservoir.
Tejirian T, Kaminski A, Abbas MA
Int J Colorectal Dis. 2006 May 3;. Epub

7 – PAIN
Current issues in the diagnosis of painful bladder syndrome/interstitial cystitis.
Evans RJ, Stanford EJ
J Reprod Med. 2006 Mar;51(3 Suppl):241-52.
PBS/IC, which was traditionally thought to be a rare condition, is increasingly thought to be a frequent cause of CPP. Failure to consider the bladder as a component of this pain is common, primarily because of the similarity in symptoms to other urogynecologic conditions. The diagnosis of PBS/IC has been one of exclusion; as a result, PBS/IC is frequently misdiagnosed as urogenital infection, OAB or endometriosis, among other conditions with similar symptomatology. Such misdiagnosis results in unnecessary and ineffective pharmacologic or even surgical interventions. Diagnosis of PBS/IC and appropriate management early in the disease process afford women a better outcome and a better quality of life. Making PBS/IC a diagnosis of inclusion is necessary to attain this goal. Two additions to the diagnostic armamentarium, the PUF Patient Symptom Scale and the PST, can help to identify women whose presenting complaints of CPP might have a bladder component. The high correlation between these 2 tools allows clinicians to administer the noninvasive PUF questionnaire as an initial screening device to identify women suspected of having IC. If PBS/IC is diagnosed early in the disease process, it can be treated successfully in most patients.

Mensendieck somatocognitive therapy as treatment approach to chronic pelvic pain: results of a randomized controlled intervention study.
Haugstad GK, Haugstad TS, Kirste UM, Leganger S, Klemmetsen I, Malt UF
Am J Obstet Gynecol. 2006 May;194(5):1303-10. Epub 2006 Apr 21.
OBJECTIVE: The etiology of chronic pelvic pain is disputed and multifactorial. We studied the effect of Mensendieck somatocognitive therapy aimed at reducing physical pain by changing posture, movement and respiration patterns combined with standard gynecological treatment. STUDY DESIGN: Women with chronic pelvic pain unexplained by pelvic pathology were randomized into 2 groups: (1) standard gynecological treatment and (2) gynecological treatment plus somatocognitive therapy. A Mensendieck test of motor function (posture, movement, gait, sitting posture, respiration) and a visual analogue score of pain were obtained before and after the 90-day treatment period. RESULTS: The test results of patients treated by standard gynecological measures were unchanged (nonsignificant). By contrast, the patients receiving somatocognitive therapy in addition improved scores by 25% to 60% for all motor functions (P < .01, largest improvement for respiration, up from average 2.98 [SEM 0.30] to 4.72 [0.37]), and pain scores reduced by 50% (down from 5.60 [0.40] to 2.89 [0.40], P < .01). CONCLUSION: Mensendieck somatocognitive therapy combined with standard gynecological care improved pain experience and motor functions of women with chronic pelvic pain better than gynecological treatment alone.

The Prevalence of Endometriosis in Women with Chronic Pelvic Pain.
Guo SW, Wang Y
Gynecol Obstet Invest. 2006 Apr 28;62(3):121-130.
Background: The 2004 American College of Obstetrics and Gynecology clinical management guideline states that the prevalence of endometriosis is approximately 33% in women with chronic pelvic pain (CPP).

This estimate came from a review showing that 28% of adult women with CPP were found to have endometriosis. The prevalence of 28% in adult women was arrived based on a compilation of 11 published studies. Yet even within the 11 studies, the reported prevalence of endometriosis varies wildly, ranging from 2 to 74%. Such an astounding variation or heterogeneity raises the question whether it is appropriate to use a single prevalence of endometriosis for all women with CPP. Methods: We sought to identify possible sources of heterogeneities in the estimation of prevalence of endometriosis in women with CPP. We included more studies that reported prevalence estimates than the review, and examined the effect of sample size and the year of publication on the heterogeneity. Results: The year of publication is positively associated with the prevalence estimate, which may indicate an increasing awareness of various appearances of endometriosis, or the prevalence of endometriosis may have increased among women with CPP. An alternative analysis with removal of four studies reporting highest prevalence estimates indicated that sample size is negatively associated with the prevalence estimates while the year of publication became only marginally significant. Conclusions: There are identifiable sources of heterogeneity in prevalence estimates, with the year of publication, sample size, and difference in evaluation of CPP being three apparent sources. Having a single prevalence estimate for all women with CPP may be too simplistic at best. The true prevalence is very likely to be higher than 33%. Copyright (c) 2006 S. Karger AG, Basel.

Vulvodynia: diagnosis and management.
Reed BD
Am Fam Physician. 2006 Apr 1;73(7):1231-8.
The diagnosis of vulvodynia is made after taking a careful history, ruling out infectious or dermatologic abnormalities, and eliciting pain in response to light pressure on the labia, introitus, or hymenal remnants. Several treatment options have been used, although the evidence for many of these treatments is incomplete. Treatments include oral medications that decrease nerve hypersensitivity (e.g., tricyclic antidepressants, selective serotonin reuptake inhibitors, anticonvulsants), pelvic floor biofeedback, cognitive behavioral therapy, local treatments, and (rarely) surgery. Most women experience substantial improvement when one or more treatments are used.

Prevalence of pelvic musculoskeletal disorders in a female chronic pelvic pain clinic.
Tu FF, As-Sanie S, Steege JF
J Reprod Med. 2006 Mar;51(3):185-9.
OBJECTIVE: To determine the prevalence of 2 musculoskeletal pain disorders among women presenting to a referral chronic pelvic pain clinic. STUDY DESIGN: This was a retrospective, cross-sectional study of 987 women (aged 14-79) presenting for evaluation from 1993 to 2000 at a university-based gynecologic chronic pelvic pain clinic. RESULTS: At the initial visit, all women completed standardized interviews and underwent a pelvic examination. Single-digit palpation of the levator ani and piriformis muscles was performed intravaginally. Among these women, 212 of 955 (22%) had tenderness of the levator ani muscles, while 128 of 943 (14%) had tenderness of the piriformis muscle (pain score > 3 of 10 on a visual analogue scale). Both levator ani tenderness and piriformis tenderness were associated with a higher total number of pain sites, previous surgery for pelvic pain, Beck Depression Inventory score, McGill Pain Inventory score and pain worsened with bowel movements ($p < 0.05$). CONCLUSION: Piriformis and levator ani pain are present in a significant proportion of female chronic pelvic pain patients. Further research into the natural course, diagnosis and treatment of pelvic musculoskeletal pain is needed to determine its true contribution to chronic pain.

A Survey of Irritable Bowel Syndrome in Vietnam Using the Rome Criteria.
Zuckerman MJ, Nguyen G, Ho H, Nguyen L, Gregory GG
Dig Dis Sci. 2006 May 3;. Epub
Prevalence estimates for irritable bowel syndrome from surveys in Western countries are 4.4% to 22%, generally higher in women than men, and only a minority seek health care. There are few studies of bowel patterns in Asian countries. We conducted a survey of a nonpatient population in Ho Chi Minh City, Vietnam, to determine bowel patterns and the prevalence of bowel dysfunction. A forced-choice, self-report questionnaire was distributed to 738 predominantly health care workers, as well as patient relatives, at Cho Ray Hospital in Ho Chi Minh City and returned by 411 (response rate of 55.7%). Results were analyzed for

men and women using Student's t-test for continuous variables and chi-square test for categorical variables. Subjects were 53.6% female, with a mean age of 27.7+/-6.9 years. Overall perception of health was excellent/very good in 13.6%, good in 54.2%, and fair/poor in 32.1% (males, 17.1%, 51.3%, and 31.5%, vs. females, 10.6%, 56.7%, and 32.7%; P=NS). The mean number of stools reported per week was 6.5 (males, 6.6, vs. females, 6.4; P=NS) and ranged between 3 and 21 stools per week in 95.5%. The frequency of irritable bowel syndrome symptoms (using Rome I criteria) was 7.2% (95% CI=4.8-10.1), with males at 4.8% (95% CI=2.2-8.9) vs. females at 9.2% (95% CI=5.7-13.9) (P=0.08). Of the subjects with irritable bowel syndrome symptoms, 6 of 29 (20.7%) had seen a physician for bowel symptoms. There were no gender differences in reported infrequent stool (12.0%), frequent stool (11.3%), hard stool (17.5%), loose stool (6.5%), straining (14.5%), incomplete emptying (16.2%), bloating (15.0%), urgency (10.0%), or mucus (2.7%). In conclusion, this survey of a nonpatient population in Vietnam showed that irritable bowel syndrome symptoms as defined by Rome criteria were common and that there were no significant differences between sexes in either stool frequency or prevalence of irritable bowel syndrome, unlike previous studies from the United States. The prevalence of irritable bowel syndrome in Vietnam in this study was in the lower range of reported data from Western countries, possibly in part related to the use of the Rome criteria. Only a minority of subjects with irritable bowel syndrome symptoms reported seeking health care for these symptoms.

Visceral hypersensitivity in irritable bowel syndrome: a summary review.
Stacher G, Christensen J
Dig Dis Sci. 2006 Mar;51(3):440-5.
We examined published reports from 1970 to the present to evaluate the theory that abnormal visceral sensitivity characterizes the irritable bowel syndrome. Evidence to support claims that abnormal visceral sensitivity defines the irritable bowel syndrome falls short because of cognitive deficits in gastrointestinal neurobiology, limitations in experimental design and execution, and the interpretation of results.

Prevalence of irritable bowel syndrome and depression in fibromyalgia.
Kurland JE, Coyle WJ, Winkler A, Zable E
Dig Dis Sci. 2006 Mar;51(3):454-60.
The purpose of this study was to determine the point prevalence of depressive symptoms, using the PRIME-MD questionnaire, and irritable bowel syndrome (IBS), while comparing the Rome II to the Rome I criteria, in patients with fibromyalgia (FM) and rheumatologic controls in an outpatient setting. The prevalence of IBS in FM patients (n = 105) was 63% by Rome I and 81% by Rome II criteria. The prevalence of IBS in controls (n = 62) was 15% by Rome I and 24% by Rome II criteria (FM vs. control; P < 0.001). Depressive symptoms were met in 40% of FM patients and 8% of controls (P < 0.001). The coexistence of IBS and depressive symptoms in the FM patients was 31% (Rome I) and 34% (Rome II). The prevalence of IBS and depressive symptoms was higher in FM patients compared to the control population. Identification of IBS and depressive symptoms in FM patients might enable clinicians to better meet the needs of this patient population.

Recommendations for probiotic use.
Floch MH, Madsen KK, Jenkins DJ, Guandalini S, Katz JA, Onderdonk A, Walker WA, Fedorak RN, Camilleri M
J Clin Gastroenterol. 2006 Mar;40(3):275-8.
Probiotics are live microbial organisms that are administrated as supplements or in foods to benefit the host. It is the recommendation that they may be helpful in the prevention and treatment of acute diarrhea in adults and children, the prevention of antibiotic-associated diarrhea in adults and children, and the maintenance of remission and prevention of pouchitis. Although early results indicate that probiotics may also be useful in immunologic modulation to prevent atopy, treatment of radiation intestinal disease, vaginosis, ulcerative colitis, and the irritable bowel syndrome, the studies available are not sufficient to say they are definitely helpful. Even fewer data are available to recommend probiotics for the treatment of H pylori and Crohn disease and for the prevention of cardiovascular risk factors or other degenerative diseases. Clearly, larger and better-designed studies of probiotics are necessary, including comparative and dose-ranging trials.

Probiotics and chronic disease.

Broekaert IJ, Walker WA
J Clin Gastroenterol. 2006 Mar;40(3):270-4.
In today's climate, changed lifestyles and the increased use of antibiotics are significant factors that affect the preservation of a healthy intestinal microflora. The concept of probiotics is to restore and maintain a microflora advantageous to the human body. Probiotics are found in a number of fermented dairy products, infant formula, and dietary supplements. Basic research on probiotics has suggested several modes of action beneficial for the human body and clinical research has proven its preventive and curative features in different intestinal and extraintestinal diseases. Chronic diseases cause considerable disablement in patients and represent a substantial economic burden on healthcare resources. Research has demonstrated a crucial role of nutrition in the prevention of chronic disease. Thus, positive, strain-specific effects of probiotics have been shown in diarrheal diseases, inflammatory bowel diseases, irritable bowel syndrome, and Helicobacter pylori-induced gastritis, and in atopic diseases and in the prevention of cancer. As the majority of probiotics naturally inhabit the human intestinal microflora, their use has been regarded as very safe. However, in view of the range of potential benefits on health that might be achieved by the use of some probiotic bacteria, major and thorough evaluation is still necessary. In conclusion, probiotics act as an adjuvant in the prevention and treatment of a wide variety of chronic diseases.

Probiotics and irritable bowel syndrome: rationale, putative mechanisms, and evidence of clinical efficacy.
Camilleri M
J Clin Gastroenterol. 2006 Mar;40(3):264-9.
The irritable bowel syndrome (IBS) follows an acute, presumably infectious diarrheal illness in approximately 15% of patients. There may be a persistent, mild inflammatory state with changes in mucosal function or structure. Changes in the colonic bacterial flora reported in IBS seem related to predominant bowel. Colonic bacteria normally metabolize nutrients with the formation of gas and short chain fatty acids. The latter may induce propulsive contractions and accelerate colonic transit or they may enhance fluid and sodium absorption in the colon. This review addresses the mechanisms, rationale and current evidence for the efficacy of probiotics, including Lactobacilli, Bifidobacteria, and VSL#3, in the treatment of IBS. The mechanisms influenced by probiotics include immune function, motility, and the intraluminal milieu. Probiotics may suppress the low-grade inflammation associated with IBS or restore normal local immune function. Lactobacilli and Bifidobacteria subspecies are able to deconjugate and absorb bile acids, potentially reducing the colonic mucosal secretion of mucin and fluids that may contribute to functional diarrhea or IBS with diarrhea. Therapeutic trials show the potential benefit of Bifidobacteria or Lactobacilli species alone or in the specific probiotic combination, VSL#3, on symptoms in IBS. Colonic transit was retarded in IBS patients treated with VSL#3 without induction of significant changes in bowel function. In summary, probiotics are promising therapies in IBS.

Design of Treatment Trials for Functional Gastrointestinal Disorders.
Irvine EJ, Whitehead WE, Chey WD, Matsueda K, Shaw M, Talley NJ, Veldhuyzen van Zanten SJ
Gastroenterology. 2006 May;130(5):1538-1551.

Functional anorectal disorders.
Bharucha AE, Wald A, Enck P, Rao S
Gastroenterology. 2006 May;130(5):1510-8.
This report defines criteria for diagnosing functional anorectal disorders (ie, fecal incontinence, anorectal pain, and disorders of defecation). Functional fecal incontinence is defined as the uncontrolled passage of fecal material recurring for >/=3 months in an individual with a developmental age of >/=4 years that is associated with: (1) abnormal functioning of normally innervated and structurally intact muscles, and/or (2) no or minor abnormalities of sphincter structure and/or innervation insufficient to explain fecal incontinence, and/or (3) normal or disordered bowel habits (ie, fecal retention or diarrhea), and/or (4) psychological causes. However, conditions wherein structural and/or neurogenic abnormalities explain the symptom, or are part of a generalized process (eg, diabetic neuropathy) are not included within functional fecal incontinence. Functional fecal incontinence is a common, but underrecognized symptom, which is equally prevalent in men and women, and can often cause considerable distress. The clinical features are useful for guiding

diagnostic testing and therapy. Functional anorectal pain syndromes include proctalgia fugax (fleeting pain) and chronic proctalgia; chronic proctalgia may be subdivided into levator ani syndrome and unspecified anorectal pain, which are defined by arbitrary clinical criteria. Functional defecation disorders are characterized by 2 or more symptoms of constipation, with >/=2 of the following features during defecation: impaired evacuation, inappropriate contraction of the pelvic floor muscles, and inadequate propulsive forces. Functional disorders of defecation may be amenable to pelvic floor retraining by biofeedback therapy (such as dyssynergic defecation).

Functional abdominal pain syndrome.
Clouse RE, Mayer EA, Aziz Q, Drossman DA, Dumitrascu DL, Monnikes H, Naliboff BD
Gastroenterology. 2006 May;130(5):1492-7.
Functional abdominal pain syndrome (FAPS) differs from the other functional bowel disorders; it is less common, symptoms largely are unrelated to food intake and defecation, and it has higher comorbidity with psychiatric disorders. The etiology and pathophysiology are incompletely understood. Because FAPS likely represents a heterogenous group of disorders, peripheral neuropathic pain mechanisms, alterations in endogenous pain modulation systems, or both may be involved in any one patient. The diagnosis of FAPS is made on the basis of positive symptom criteria and a longstanding history of symptoms; in the absence of alarm symptoms, an extensive diagnostic evaluation is not required. Management is based on a therapeutic physician-patient relationship and empirical treatment algorithms using various classes of centrally acting drugs, including antidepressants and anticonvulsants. The choice, dose, and combination of drugs are influenced by psychiatric comorbidities. Psychological treatment options include psychotherapy, relaxation techniques, and hypnosis. Refractory FAPS patients may benefit from a multidisciplinary pain clinic approach.

Functional bowel disorders.
Longstreth GF, Thompson WG, Chey WD, Houghton LA, Mearin F, Spiller RC
Gastroenterology. 2006 May;130(5):1480-91.
Employing a consensus approach, our working team critically considered the available evidence and multinational expert criticism, revised the Rome II diagnostic criteria for the functional bowel disorders, and updated diagnosis and treatment recommendations. Diagnosis of a functional bowel disorder (FBD) requires characteristic symptoms during the last 3 months and onset >/=6 months ago. Alarm symptoms suggest the possibility of structural disease, but do not necessarily negate a diagnosis of an FBD. Irritable bowel syndrome (IBS), functional bloating, functional constipation, and functional diarrhea are best identified by symptom-based approaches. Subtyping of IBS is controversial, and we suggest it be based on stool form, which can be aided by use of the Bristol Stool Form Scale. Diagnostic testing should be guided by the patient's age, primary symptom characteristics, and other clinical and laboratory features. Treatment of FBDs is based on an individualized evaluation, explanation, and reassurance. Alterations in diet, drug treatment aimed at predominant symptoms, and psychotherapy may be beneficial.

Gender, Age, Society, Culture, and the Patient's Perspective in the Functional Gastrointestinal Disorders.
Chang L, Toner BB, Fukudo S, Guthrie E, Locke GR, Norton NJ, Sperber AD
Gastroenterology. 2006 May;130(5):1435-1446.
Patients with functional gastrointestinal disorders (FGID) often experience emotional distress, a perceived lack of validation, and an unsatisfactory experience with health care providers. A health care provider can provide the patient with a framework in which to understand and legitimize their symptoms, remove self-doubt or blame, and identify factors that contribute to symptoms that the patient can influence or control. This framework can be strengthened with the consideration of various important factors that impact FGID but are often overlooked. These include gender, age, society, culture, and the patient's perspective. There is evidence for sex- and gender-related differences in FGID, particularly irritable bowel syndrome (IBS). Whereas the majority of FGID, including IBS, bloating, constipation, chronic functional abdominal pain, and pelvic floor dysfunction, are more prevalent in women than men, functional esophageal and gastroduodenal disorders do not appear to vary by gender. Limited studies suggest that sex differences in visceral perception, cardioautonomic responses, gastrointestinal motility, and brain activation patterns to visceral

stimuli exist in IBS. Gender differences in social factors, psychological symptoms, and response to psychological treatments have not been adequately studied. However, there appears to be a greater clinical response to serotonergic agents developed for IBS in women compared to men. The impact of social and cultural factors on the meaning, expression, and course of FGID are important. The prevalence of IBS appears to be lower in non-Western than Western countries. Although further studies are needed, the existing literature suggests that they are important to consider from both research and clinical perspectives.

Pharmacological and pharmacokinetic aspects of functional gastrointestinal disorders.
Camilleri M, Bueno L, de Ponti F, Fioramonti J, Lydiard RB, Tack J
Gastroenterology. 2006 May;130(5):1421-34.

Probiotics prevent bacterial translocation and improve intestinal barrier function in rats following chronic psychological stress.
Zareie M, Johnson-Henry KC, Jury J, Yang PC, Ngan BY, McKay DM, Soderholm JD, Perdue MH, Sherman PM
Gut. 2006 Apr 25;.

The Functional Gastrointestinal Disorders and the Rome III Process.
Drossman DA
Gastroenterology. 2006 May;130(5):1377-90.

Digestive Disease Week and the 107th Annual Meeting of the American Gastroenterological Association Institute, May 20-25, 2006, Los Angeles, California, USA. Abstracts.
Gastroenterology. 2006 Apr;130(4 Suppl 2):A1-911.

8 – FISTULAE

Clindamycin and rifampicin combination therapy for hidradenitis suppurativa.
Mendonca CO, Griffiths CE
Br J Dermatol. 2006 May;154(5):977-8.

Vesicovaginal fistula following a transobturator midurethral sling procedure.
Starkman JS, Meints L, Scarpero HM, Dmochowski RR
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 21;. Epub

Urethrovaginal fistula-a rare complication after the placement of a suburethral sling (IVS).
Reisenauer C, Wallwiener D, Stenzl A, Solomayer FE, Sievert KD
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 4;.
A sixty-year-old woman with stress urinary incontinence had undergone a placement of an IVS (Tyco Health Care UK) in another hospital in February 2003. Seventeen months after the procedure, she complained about a suppurative discharge from the vagina and a recurrent severe stress urinary incontinence. The gynecological examination revealed an erosion of the sling into the vagina and a large urethrovaginal fistula bordered by granuloma. After removal of the sling, the urethrovaginal fistula was closed using a vaginal flap. A subsequent conservative treatment regime with duloxetine and pelvic floor training improved the stress urinary incontinence to the patient's satisfaction.

Laparoscopic repair of vesicovaginal fistula.
Modi P, Goel R, Dodia S
Urol Int. 2006;76(4):374-6.
Vesicovaginal fistula (VVF) may be a complication of prolonged repair or urogynecologic surgery. Failing conservative management, it may be repaired using an abdominal or vaginal approach. We herein report laparoscopic repair of VVF following vaginal hysterectomy and detail the operative steps.

Cyanoacrylate glue in the treatment of ano-rectal fistulas.

Barillari P, Basso L, Larcinese A, Gozzo P, Indinnimeo M
Int J Colorectal Dis. 2006 Apr 20;. Epub
BACKGROUND AND AIMS: The management of anal fistula is debatable. Although several procedures have been described, none of them is free from complications, such as anal incontinence and anal pain. The purpose of this study was to evaluate the employment of a glue composed of N-butil-2-cyanoacrylate and methacryloxysulfolane (Glubran 2) to treat fistula-in-ano. PATIENTS AND METHODS: Twenty-one patients (14 men and 7 women) with cryptoglandular anal fistula were enrolled in the study and treated as day-cases. Fistulas were assessed both clinically and by trans-rectal endosonography with a rotating 10-MHz 360 degrees endoscopic probe. Assessment of continence was also performed. The fistula tract was identified, curetted and washed-out with normal saline and hydrogen peroxide; then the glue was injected from the syringe nozzle through a catheter previously inserted into the fistula. Additional treatments were performed when the first failed. RESULTS: Five of seven simple fistulas (71.4%) healed with primary glue treatment; the other two needed second and third injections, and both healed. Ten of 14 (71.4%) complex fistulas healed with primary treatment; of the other four patients, one showed signs of intolerance to cyanoacrylate, which required re-intervention to remove the applied glue. In the second patient, treatment was successful after a second session; in the third case, three glue injections were required; while the fourth patient was lost at follow-up after three unsuccessful sessions. The ratio of cumulative healing with only one treatment was 15/21 (71.4%), and the ratio of overall healing after more than one session was 19/21 (90.2%). There was no sign of recurrence of the disease after 18 months of follow-up. CONCLUSION: Cyanoacrylate glue seems to be ideal to treat fistula-in-ano, as it is a safe, cost-effective, repeatable and muscle-sparing technique. The incidence of recurrence is low, and post-procedure complicated fistulas or perianal abscesses were not reported.

9 – BEHAVIOUR

Psychosocial aspects of the functional gastrointestinal disorders.
Levy RL, Olden KW, Naliboff BD, Bradley LA, Francisconi C, Drossman DA, Creed F
Gastroenterology. 2006 May;130(5):1447-58.
This report reviews recent research on the psychosocial aspects of the functional gastrointestinal disorders (FGIDs). A review and evaluation of existing literature was conducted by a multidisciplinary committee of experts in this field. This report is a synopsis of a chapter published in the Rome III book. The committee reached consensus in finding considerable evidence supporting the association between psychological distress, childhood trauma and recent environmental stress, and several of the FGIDs but noted that this association is not specific to FGIDs. There is also considerable evidence that psychosocial variables are important determinants of the outcomes of global well-being, health-related quality of life, and health care seeking. In line with these descriptive findings, there is now increasing evidence that a number of psychological treatments and antidepressants are helpful in reducing symptoms and other consequences of the FGIDs in children and adults. The FGIDs are a result of complex interactions between biological, psychological, and social factors, and they can only be treated satisfactorily when all these factors are considered and addressed. Therefore, knowledge about the psychosocial aspects of FGIDs is fundamental and critical to the understanding, assessment, and treatment of these disorders. More extensive physician training is needed if these aspects of treatment are to be used effectively and widely in clinical practice.

Viewpoint: teaching respect for patients.
Branch WT Jr
Acad Med. 2006 May;81(5):463-7.
Respect is a core value of medical professionalism. Respect for patients often manifests itself as an attitude, of which the physician is only partially self-aware. To teach respect means bringing it fully into consciousness. Physicians then should strive to make respect an inner quality, beyond being a behavior. The author illustrates the depth of feeling involved in respecting another person by citing passages from Let Us Now Praise Famous Men, James Agee's classic book that describes Depression-era tenant farmers. However, major barriers inhibit teaching of respect in clinical settings. The author proposes that synergies can be achieved that overcome the barriers by combining the effective modeling of respect in bedside teaching with formal teaching exercises involving patients and deep critical reflection using narratives wherein learners describe their experiences in patient care.

Alexithymia is associated with gastrointestinal symptoms, but does not predict endoscopy outcome in patients with gastrointestinal symptoms.
van Kerkhoven LA, van Rossum LG, van Oijen MG, Tan AC, Witteman EM, Laheij RJ, Jansen JB
J Clin Gastroenterol. 2006 Mar;40(3):195-9.
BACKGROUND: Alexithymia, where a person has difficulty in distinguishing between emotions and bodily sensations, is considered to be a character trait and a vulnerability factor for various psychosomatic disorders. Assessing alexithymia in patients with gastrointestinal (GI) symptoms before endoscopy might therefore be useful in selecting patients who are more prone to functional GI disorders. GOAL: To determine whether alexithymia might be a useful factor in predicting GI endoscopy outcomes. STUDY: Patients referred for endoscopy between February 2002 and February 2004 were enrolled. They were asked to report alexithymia on the Toronto Alexithymia Scale-20 2 weeks before endoscopy. Information about endoscopic diagnoses was obtained from medical files. RESULTS: A total of 1141 subjects was included (49% male), of whom 245 (21%) reported alexithymia. There was no difference in mean+/-SD alexithymia scores between patients with (51+/-12) and without (50+/-12) an endoscopic organic abnormality at GI endoscopy. When divided into subgroups, according to the most prominent finding at either upper or lower GI endoscopy, there was no association with alexithymia. Patients with alexithymia reported a worse sensation of GI symptoms during the last weeks before enrollment in the study (mean+/-SD symptom severity score: 42+/-34 vs. 34+/-30, respectively; P<0.01). CONCLUSIONS: Alexithymia is not associated with endoscopic findings, and has therefore no additive value in predicting endoscopy outcomes. Patients with alexithymia more often present with a higher number and more severe GI symptoms.

On studying the connection between stress and IBD.
Bernstein CN, Walker JR, Graff LA
Am J Gastroenterol. 2006 Apr;101(4):782-5.
A number of investigators over the years have attempted to determine if a relationship exists between flares of inflammatory bowel disease (IBD) and stress. There are many complexities to addressing this issue, including determining the appropriate tools to measure stress, determining the appropriate measures of quantifying a disease flare and also determining the point at which the timing of the stress could be seen to be reasonably related to the onset of the flare. While advances have been made in understanding physiological responses to acute stress, it is unclear whether it is acute, chronic, or recurrent stress that might most impact on a chronic inflammatory disease. In the case of IBD, the disease itself poses a stress to the individual further clouding the issue.

Sexual assault victims: Factors associated with follow-up care.
Ackerman DR, Sugar NF, Fine DN, Eckert LO
Am J Obstet Gynecol. 2006; 194: 1653-59
OBJECTIVE: This study was undertaken to describe patient, assault, and examination characteristics associated with compliance with follow-up in sexual assault victims. STUDY DESIGN: We conducted a retrospective cohort study of consecutive women presenting to an urban hospital after sexual assault over a 36-month period. We compared those who did and did not follow-up by using standardized history, examination, and data collection forms. RESULTS: Eight hundred twelve women met inclusion criteria; 288 (35.5%) attended follow-up. Young age (odds ratio [OR] = 2.70), assault at home (OR = 1.90), amnesia (OR = 1.80), alcohol use (OR = 1.55), genital trauma (OR = 1.55), and receipt of postexamination medications (OR = 1.87) were associated with greater follow-up; homelessness (OR = 0.30), psychiatric diagnosis (OR = 0.34), assault by an intimate partner (OR = 0.47), and cocaine use (OR = 0.29) with less. CONCLUSION: Although only 35.5% of sexual assault victims seek follow-up, we found many factors positively and negatively associated with this. These findings may inform care strategies designed to improve follow-up for women who are at risk for significant sequelae.

Women's Sexual Dysfunction: A Review of the "Surgical Landscape"
Salonia A, Briganti A, Deho F, Zanni G, Rigatti P, Montorsi F
Eur Urol. 2006 Mar 31;. Epub
OBJECTIVES: To assess the impact of urogynaecologic surgery for stress urinary incontinence, oncologic

pelvic surgery, and hysterectomy on women's overall sexual health. METHODS: We used Ovid and PubMed (updated January 2006) to conduct a literature electronic search on MEDLINE that included peer-reviewed English-language articles. We analysed all studies identified that provided any functional outcome data about urogynaecologic surgery for the treatment of stress urinary incontinence, radical cystectomy for bladder cancer, surgery for rectal cancer, and hysterectomy. Because of the substantial heterogeneity of outcome measures and follow-up intervals in case studies, we did not apply meta-analytic techniques to the data. RESULTS: Most studies showed that either urogynaecologic or oncologic pelvic surgery may have a significant impact on women's sexual health. Epidemiology varied widely among the studies and reported either improvement or impairment of postoperative sexual functioning, due to different definitions, study designs, and small cohorts of patients. An increasing number of studies have prospectively examined this issue and have found often controversial findings about the role of pelvic and perineal surgery in women's sexual health. CONCLUSIONS: Although numerous controversies exist, data demonstrate an overall positive impact of the surgical repair for stress urinary incontinence on resolution of coital incontinence, coupled with an improvement of overall sexual life. In contrast, genitourinary and rectal cancers are commonly associated with treatment-related sexual dysfunction, but few studies rigorously assessed women's postoperative sexual function after major oncologic pelvic surgery. Data about the functional outcome after hysterectomy are often contradictory. Adequately powered prospective clinical trials are needed.

Editorial: partner dyspareunia (hispareunia).
Brubaker L
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 4;. Epub

Pilot intervention to enhance sexual rehabilitation for couples after treatment for localized prostate carcinoma.
Seftel A
J Urol. 2006 May;175(5):1825.

Adjuvant radiotherapy is associated with increased sexual dysfunction in male patients undergoing resection for rectal cancer: a predictive model.
Seftel A
J Urol. 2006 May;175(5):1824-5.

10 – MISCELLANEOUS

Normal stem cells and cancer stem cells: the niche matters.
Li L, Neaves WB
Cancer Res. 2006 May 1;66(9):4553-7.
Scientists have tried for decades to understand cancer development in the context of therapeutic strategies. The realization that cancers may rely on "cancer stem cells" that share the self-renewal feature of normal stem cells has changed the perspective with regard to new approaches for treating the disease. In this review, we propose that one of the differences between normal stem cells and cancer stem cells is their degree of dependence on the stem cell niche, a specialized microenvironment in which stem cells reside. The stem cell niche in adult somatic tissues plays an essential role in maintaining stem cells or preventing tumorigenesis by providing primarily inhibitory signals for both proliferation and differentiation. However, the niche also provides transient signals for stem cell division to support ongoing tissue regeneration. The balance between proliferation-inhibiting and proliferation-promoting signals is the key to homeostatic regulation of stem cell maintenance versus tissue regeneration. Loss of the niche can lead to loss of stem cells, indicating the reliance of stem cells on niche signals. Therefore, cancer stem cells may arise from an intrinsic mutation, leading to self-sufficient cell proliferation, and/or may also involve deregulation or alteration of the niche by dominant proliferation-promoting signals. Furthermore, the molecular machinery used by normal stem cells for homing to or mobilizing from the niche may be "hijacked" by cancer stem cells for invasion and metastasis. We hope this examination of the interaction between stem cells and their niche will enhance understanding of the process of cancer development, invasiveness, and metastasis and reveal possible targets for cancer treatment.

Is Pelvic Lymph Node Dissection Necessary in Patients with a Serum PSA<10ng/ml Undergoing Radical Prostatectomy for Prostate Cancer?
Schumacher MC, Burkhard FC, Thalmann GN, Fleischmann A, Studer UE
Eur Urol. 2006 Feb 28;. Epub

Does age matter in the selection of treatment for men with early-stage prostate cancer?
Konski A, Eisenberg D, Horwitz E, Hanlon A, Pollack A, Hanks G
Cancer. 2006 May 8;. Epub
Men age </=55 years who present with localized prostate cancer do not appear to have a worse prognosis. External beam radiation therapy appears to be a viable treatment alternative and should be offered to men age </=55 years who present with organ-confined prostate cancer.

Laparoscopic hysterectomy versus total abdominal hysterectomy: A comparative study.
Vaisbuch E, Goldchmit C, Ofer D, Agmon A, Hagay Z
Eur J Obstet Gynecol Reprod Biol. 2006;.126: 234-38

Intraperitoneal fluid therapy: an alternative to intravenous treatment in a patient with limited vascular access.
Asheim P, Uggen PE, Aasarod K, Aadahl P
Anaesthesia. 2006 May;61(5):502-4.
Summary We describe a 58-year-old female with Crohn's disease and short bowel syndrome after repeated intestinal resections, with only 90 cm of small intestine left. She had been dependent on vascular access for total parenteral nutrition for 16 years. Due to intravascular complications after numerous long-term central venous catheters, her vascular accessibility became limited. During the course of a year she was fed enterally through a gastrostomy, but required supplementary fluid therapy through peripheral venous route. Because of extremely limited venous access, we decided to implant an intraperitoneal catheter for administration of crystalloid fluid. The first intraperitoneal catheter had to be removed because of a postoperative infection, but after antibiotic treatment, a second intraperitoneal catheter was implanted without complications, through which the patient is now fully provided with crystalloid fluid (Ringer's acetate). Abdominal ultrasound examination shows good absorption of the fluid, and for the first time in 16 years the patient does not need intravascular access. We suggest that intraperitoneal administration of fluid may be an alternative for patients with limited vascular access.

Hyperbaric oxygen enhances the efficiency of 5-aminosalicylic acid in acetic acid-induced colitis in rats.
Gorgulu S, Yagci G, Kaymakcioglu N, Ozkara M, Kurt B, Ozcan A, Kaya O, Sadir S, Tufan T
Dig Dis Sci. 2006 Mar;51(3):480-7.

Effective Screening for Bowel Cancer: A United Kingdom Perspective.
Thompson MR, Steele RJ, Atkin WS
Dis Colon Rectum. 2006; 49: 895-908.
Bowel cancer is a major cause of morbidity and death and is a high cost to health care systems. Screening currently offers the best chance of improving outcomes from bowel cancer. When introducing screening, the problems encountered in other cancers need to be avoided to maximize benefits and minimize harms.

Long-Term Results of "Chemical Sphincterotomy" for Chronic Anal Fissure: A Prospective Study.
Lysy J, Israeli E, Levy S, Rozentzweig G, Strauss-Liviatan N, Goldin E
Dis Colon Rectum. 2006; 49: 858-864.
INTRODUCTION: Pharmacologic anal sphincter relaxants promote fissure healing; however, their effect is transient and the risk of late recurrence remains uncertain. METHODS: From August 1997 to August 2002, patients with chronic anal fissure attending our outpatient clinic were treated with a protocol that included: topical isosorbide dinitrate, 2.5 mg, or nifedipine, 0.2 percent t.i.d., or the combination of both. Botulinum toxin 20 units was injected to the internal anal sphincter to those who failed. All the patients were contacted

and interviewed during November to December 2002. RESULTS: Follow-up was a median of 47.43 +/- 13 (range, 4.7-60) months. A total of 455 patients completed the study; 323 patients (71 percent) healed at follow-up ending: 170 of the healed patients had one or more recurrences that responded to further treatment (37.4 percent), whereas 153 patients (33.6 percent) healed and had no recurrences. One hundred thirty-two patients (29 percent) did not heal and were referred to lateral sphincterotomy. Long intervals between symptoms appearance and treatment initiation decreased healing and increased recurrence rates (P = 0.03 and 0.01 respectively). CONCLUSIONS: Topical treatment is effective for patients with chronic anal fissure, at short-term and long-term periods. Because for many patients it is not a definitive treatment, it can be offered to those who are ready to receive repeated treatments. Longer intervals between symptom appearance and treatment initiation negatively affects fissure healing and recurrence rate.

Controlled Dose Delivery in Topical Treatment of Anal Fissure: Pilot Study of a New Paradigm.
Torrabadella L, Salgado G
Dis Colon Rectum. 2006; 49: 865-68.
PURPOSE: Topical nitroglycerin has been widely used as a means for avoiding surgery in patients with anal fissure. However, nitroglycerin has not been universally accepted for this application because of inconsistency of efficacy and side effects. This study compares conventional digital application with precise intra-anal dosing of nitroglycerin using a specialized dose-delivery device and anal cannula. METHODS: Twenty-six consecutive patients (13 males) with chronic anal fissure and no previous treatment were randomly allocated to receive 0.75 ml of 0.3 percent nitroglycerin ointment (2.25 mg nitroglycerin) t.i.d. intra-anal using the cannula (Group A) or perianally with the gloved finger (Group B). Nitroglycerin dosage was controlled in Group A by the dose-delivery device connected to the cannula and by single-dose preloaded syringes in Group B. RESULTS: Anal manometry: pressure reduction after application of nitroglycerin was 47 +/- 18.6 in Group A and 20.7 +/- 13.4 percent in Group B (P < 0.01). Headaches were reported by 1 of 10 patients in Group A and 10 of 12 patients in Group B (P = 0.0027). Seven patients of Group B had to be crossed to intra-anal treatment as a result of intensity of headaches. Pain relief was noted by 8 of 10 and 9 of 12 patients in Groups A and B, respectively (P = 0.6). Sphincterotomy was required in only 13.6 percent of all patients. CONCLUSIONS: Controlled intra-anal dosing of topical nitroglycerin produces a significantly greater reduction in sphincteric pressure and lower incidence of headaches than with perianal administration of the same dose ofointment. These results suggest a new paradigm for increasing safety and efficacy of dose-dependent prescription anal topical medications.