FORUM 2006 03

A trial of disclosing physicians' financial incentives to patients.

Pearson SD, Kleinman K, Rusinak D, Levinson W

Arch Intern Med. 2006 Mar 27;166(6):623-8.

Concern regarding financial conflict of interest for physicians has led to calls for disclosure of financial incentives to patients. However, limited data on the outcomes of disclosure exist to guide policy. METHODS: This randomized trial was conducted among 8000 adult patients at 2 multispecialty group practices based in the Boston, Mass, and Los Angeles, Calif, areas. Intervention patients were mailed a compensation disclosure letter written by the chief medical officer of their physician group, and all patients were surveyed approximately 3 months later. RESULTS: Disclosure patients were significantly more able to identify correctly the compensation model of their primary care physician, in Boston (adjusted odds ratio, 2.30; 95% confidence interval, 1.92-2.75) and in Los Angeles (adjusted odds ratio, 1.37; 95% confidence interval, 1.03-1.82). Disclosure patients also had more confidence in their ability to judge the possible influence of incentives on their health care: in Boston, 32.5% vs 17.8% (P<.001); and in Los Angeles, 31.8% vs 26.4% (P = .20). The disclosure intervention did not change trust in primary care physicians overall. However, of patients who remembered receiving the disclosure, 21.4% in Boston and 24.4% in Los Angeles responded that the disclosure had increased trust either greatly or somewhat, while in both cities less than 5% of patients responded that the information decreased trust. Patients' loyalty to their physician group was higher among disclosure patients in Boston (73.4% vs 70.2%; P = .03) and Los Angeles (74.1% vs 66.9%; P = .08). CONCLUSIONS: Among diverse patient populations, a single mailed disclosure letter from physician groups was associated with improved knowledge of physicians' compensation models. Patients' trust in their physicians was unharmed, and their loyalty to their physician group was strengthened. For physician groups with similar compensation programs, disclosure to patients should be considered an effective method to enhance the patient-physician relationship.

Surgical skills and lessons from other vocations: a personal view.

Kirk RM

Ann R Coll Surg Engl. 2006 Mar;88(2):95-8.

Formerly, a few lucky trainees, attached to talented masters* keen to teach, derived excellent, well-rounded training - but many others struggled alone. Now, formal courses allow experts to teach simple, safe methods, often using simulations. Courses are usually delivered as modules - each unit designed to provide an assessable competence. Simulations are, however, imperfect substitutes for living tissues. Such courses are aids, not substitutes, for operative experience - but this, for many irreversible reasons, is restricted.Successful operators in all specialties and all countries, have in common the combination of good judgement, commitment, intimate knowledge of anatomy and pathology, together with technical skills that are more easily recognised than described. We need to identify good trainers and relieve them of commitments that reduce their ability to pass on their skills. As a trainee, try to identify and copy their characteristics. This advice comes not from a gifted surgeon but from one fortunate to have worked with, and watched, surgical masters - and who is still privileged to teach.

Origin and funding of the most frequently cited papers in medicine: database analysis.

Patsopoulos NA, Analatos AA, Ioannidis JP

BMJ. 2006 Mar 17;.

OBJECTIVE: To evaluate changes in the role of academics and the sources of funding for the medical research cited most frequently over the past decade. DESIGN: Database analysis. DATA SOURCES: Web of Knowledge database. METHODS: For each year from 1994 to 2003, articles in the domain of clinical medicine that had been cited most often by the end of 2004 were identified. Changes in authors' affiliations and funding sources were evaluated. RESULTS: Of the 289 frequently cited articles, most had at least one author with a university (76%) or hospital (57%) affiliation, and the proportion of articles with each type of affiliation was constant over time. Government or public funding was most common (60% of articles), followed by industry (36%). The proportion of most frequently cited articles funded by industry increased over time (odds ratio 1.17 per year, P=0.001) and was equal to the proportion funded by government or public sources by 2001. 65 of the 77 most cited randomised controlled trials received funding from industry, and the proportion increased significantly over time (odds ratio 1.59 per year, P=0.003). 18 of the 32 most cited trials

published after 1999 were funded by industry alone. CONCLUSION: Academic affiliations remain prominent among the authors of the most frequently cited medical research. Such research is increasingly funded by industry, often exclusively so. Academics may be losing control of the clinical research agenda.

Health benefits of physical activity: the evidence.
Warburton DE, Nicol CW, Bredin SS
CMAJ. 2006 Mar 14;174(6):801-9.
The primary purpose of this narrative review was to evaluate the current literature and to provide further insight into the role physical inactivity plays in the development of chronic disease and premature death. We confirm that there is irrefutable evidence of the effectiveness of regular physical activity in the primary and secondary prevention of several chronic diseases (e.g., cardiovascular disease, diabetes, cancer, hypertension, obesity, depression and osteoporosis) and premature death. We also reveal that the current Health Canada physical activity guidelines are sufficient to elicit health benefits, especially in previously sedentary people. There appears to be a linear relation between physical activity and health status, such that a further increase in physical activity and fitness will lead to additional improvements in health status.

Effect of 6-month calorie restriction on biomarkers of longevity, metabolic adaptation, and oxidative stress in overweight individuals: a randomized controlled trial.
Heilbronn LK, de Jonge L, Frisard MI, DeLany JP, Larson-Meyer DE, Rood J, Nguyen T, Martin CK, Volaufova J, Most MM, Greenway FL, Smith SR, Deutsch WA, Williamson DA, Ravussin E
JAMA. 2006 Apr 5;295(13):1539-48.
CONTEXT: Prolonged calorie restriction increases life span in rodents. Whether prolonged calorie restriction affects biomarkers of longevity or markers of oxidative stress, or reduces metabolic rate beyond that expected from reduced metabolic mass, has not been investigated in humans. Our findings suggest that 2 biomarkers of longevity (fasting insulin level and body temperature) are decreased by prolonged calorie restriction in humans and support the theory that metabolic rate is reduced beyond the level expected from reduced metabolic body mass. Studies of longer duration are required to determine if calorie restriction attenuates the aging process in humans.

1 – THE PELVIC FLOOR 2006 03

Highlights from the combined society of urodynamics and female urology and international society of pelvic neuromodulation annual meeting.
Lemack GE, Siegel S, Comiter C, Damaser M, Kobashi K, Payne C, Rodriguez L, Wright EJ
J Urol. 2006 May;175(5):1852-6.

Safety of MRI at 1.5Tesla in Patients with Implanted Sacral Nerve Neurostimulator.
Elkelini MS, Hassouna MM
Eur Urol. 2006 Mar 3;.
OBJECTIVES: Sacral neuromodulation has become an established method to treat voiding dysfunction. Currently the use of implanted sacral nerve stimulators is becoming more popular worldwide. Magnetic resonance imaging (MRI) is an important diagnostic tool for many medical and neurological disorders. Many radiology centers do not perform MRI examinations on patients with implanted sacral nerve stimulator. The basis for this policy is that potential hazards such as motion, dislocation or torquing of the implanted pulse generator (IPG), heating of the leads, and damage to the IPG may occur, resulting in painful stimulation. In contrast, many studies conducted on MRI at 1.5Tesla in patients with implantable devices have found the examination to be safe if the area to be imaged is out of the isocenter of the MRI scanner and other precautions are taken. METHODS: Eight MRI examinations at 1.5Tesla were conducted in areas outside the pelvis on six patients with implanted sacral nerve stimulator (InterStim((R)) neurostimulator; Medtronic, Inc, Minneapolis, MN, USA). Implanted pulse generators were examined before and after MRI procedures. All patients had their parameters recorded; then the IPGs were put to "nominal" status. Patients were monitored continuously during and after the procedure. After the MRI session, the site of the implanted device was examined and changes were reported. Devices were then re-programmed to their previous setup with the use of a programmer (model 7432; Medtronic, Inc). Voiding diaries were collected after MRI procedures and

compared with previous records. RESULTS AND CONCLUSION: During the MRI session, no patient showed symptoms that required stopping the examination. There was no change in perception of the stimulation after re-programming of the implanted sacral nerve stimulator, according to patients' feedback. Devices were functioning properly, and no change in bladder functions was reported after MRI examinations. Finally, we hope that presenting these cases will encourage performance of more comprehensive studies on implanted sacral nerve stimulators on a larger patient population in the near future.

Spontaneous extrusion of sacral nerve implant secondary to massive weight loss.
Nold CJ, McLennan MT
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 11;.
Sacral neuromodulation (Interstim, Medtronic, Minneapolis, Minnesota) is a recognized treatment for refractory urgency, frequency, and urge incontinence. Revision rates range from 10-33% mainly for pain over the implantable pulse generator site (IPG) or lead migration [Hassouna et al. J Urol 163:1849-1854, 2000; Schmidt et al. J Urol 162:352-357, 1999; Spinelli et al. J Urol 166:541-545, 2001; Swinn et al. Eur Urol 38:439-443, 2000; Weil et al. Eur Urol 37:161-171, 2000; Evaraert et al. Int Urogynecol J Pelvic Floor Dysfunct 11:231-236, 2000]. We report a case of spontaneous extrusion of the IPG through the subcutaneous fat and skin secondary to marked weight loss after gastric bypass surgery. Continued weight loss resulted in multiple surgical interventions and eventual removal of the device.

Wound infections in patients with interstim sacral nerve stimulators.
Dinsmore R Jr, Washington B, Hines B
Obstet Gynecol. 2006 Apr;107(4 Suppl):45S.

Childbirth and pelvic floor dysfunction: An epidemiologic approach to the assessment of prevention opportunities at delivery.
Patel DA, Xu X, Thomason AD, Ransom SB, Ivy JS, Delancey JO
Am J Obstet Gynecol. 2006 Mar 28;.
Female pelvic floor dysfunction is integral to the woman's role in the reproductive process, largely because of the unique anatomic features that facilitate vaginal birth and also because of the trauma that can occur during that event. Interventions such as primary elective cesarean delivery have been discussed for the primary prevention of pelvic floor dysfunction; however, existing data about potentially causal factors limit our ability to evaluate such strategies critically. Here we consider the conceptual principles of epidemiologic function and the availability of data that are necessary to make informed recommendations about prevention opportunities for pelvic floor dysfunction at delivery. Available epidemiologic data on pelvic floor dysfunction suggest that there may be substantial opportunities for the primary prevention of pelvic organ prolapse at delivery. Although definitive recommendations await further epidemiologic studies of the potential risk and benefits of obstetric practice change, it is hoped that this discussion will provide a novel, quantitative framework for the assessment of pelvic floor dysfunction prevention opportunities.

Current status of robotics in female urology and gynecology.
Elliott DS, Chow GK, Gettman M
World J Urol. 2006 Mar 24;.
Currently, there has been limited reporting and research in the female urology and gynecological literature concerning the use of robotics. To date, robotics have been utilized only for the treatment of three benign gynecologic conditions: benign hysterectomy; repair of vesicovaginal fistula; and sacrocolpopexy which is a treatment for posthysterectomy vaginal vault prolapse. We describe a novel minimally invasive technique of vaginal vault prolapse repair and present our initial experience. The surgical technique involves placement of five laparoscopic ports: three for the daVinci(R) robot and two for the assistant. A polypropylene mesh is then attached to the sacral promontory and to the vaginal apex using Gortex sutures. Thirty-one patients underwent a robotic-assisted laparoscopic sacrocolpopexy at our institution in the past 24 months for severe symptomatic vaginal vault prolapse. Complications were limited to mild port site infections in two patients, which resolved with oral antibiotic therapy. While our early experience utilizing robotic repairs in female urology and gynecology is encouraging, long-term data are needed to confirm these findings and establish longevity of the repair.

Patients' knowledge of potential pelvic floor changes associated with pregnancy and delivery.
McLennan MT, Melick CF, Alten B, Young J, Hoehn MR
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):22-6. Epub 2005 Jul 8.
Physicians cite pelvic floor injury as a major reason for Cesarean section as their personal preferred delivery mode. This study was undertaken to determine whether patients receive information about possible pelvic floor complications of pregnancy/delivery. Day 1 post-partum women completed a 52-item questionnaire assessing information given during routine antenatal care. Pelvic floor and general questions were intermixed. Of the 232 patients, the mean age was 26.9 years, with 59.5% white, 32.8% African-American and 7.7% other. Most (84.5%) had at least grade 12 education. The following percentage of patients reported receiving no information about: Kegel exercises 46.1%; episiotomy 51.3%; urinary incontinence 46.6%; fecal incontinence 80.6%; change in vaginal caliber 72.8%; neuropathy 84.9%. Counseling on all of these issues occurred significantly less frequently than education on general pregnancy topics. Our results suggest that knowledge and instruction of pelvic floor risks is very much lacking and provide us with an impetus to develop educational tools.

Length of the second stage of labor as a predictor of perineal outcome after vaginal delivery.
Sheiner E, Walfisch A, Hallak M, Harlev S, Mazor M, Shoham-Vardi I
J Reprod Med. 2006 Feb;51(2):115-9.
OBJECTIVE: To evaluate possible risk factors for spontaneous and induced perineal damage during vaginal delivery. STUDY DESIGN: A prospective, observational study was conducted with 300 patients at 37-42 weeks of singleton gestation who presented in active labor. Sociodemographic data, birth circumstances and past medical history were obtained upon admission. Perineal damage was assessed before repair and 24 hours postpartum. A multiple logistic regression model was constructed to investigate independent risk factors for spontaneous perineal lacerations. RESULTS: Of 300 women included, 139 were primiparas. Episiotomy was performed in 32% of the population (62% in primiparas, 6% in multiparas). Spontaneous perineal tears requiring suturing occurred in 28%. Severe perineal tears (grades 3 and 4) occurred in 1%. Risk factors for adverse perineal outcome in the nonepisiotomy group included younger maternal age, non-Israeli ethnic background, use of epidural analgesia, nulliparity, shorter interval since last vaginal delivery, longer active phase and prolonged second stage. Prolonged second stage (> 40 minutes) and low parity were independent risk factors for perineal tears in a multivariable analysis. CONCLUSION: Identifying women in specific subgroups at high risk for perineal lacerations may minimize perineal damage. Women with a prolonged second stage of labor and low parity are prone for spontaneous damage and therefore deserve special attention.

2 – FUNCTIONAL ANATOMY 2006 03

The relationship between anterior and apical compartment support.
Summers A, Winkel LA, Hussain HK, Delancey JO
Am J Obstet Gynecol. 2006 Mar 28;.
OBJECTIVE: The purpose of this study was to determine whether the degree of anterior compartment (bladder) and apical compartment (cervix) prolapse are correlated, and whether 2 anterior compartment elements (urethra and bladder) are related at maximal Valsalva. STUDY DESIGN: Women with a complete spectrum of pelvic support were recruited for a pelvic support study. Dynamic magnetic resonance scans were taken during Valsalva. A convenience sample of 153 women with a mean age of 53.3 +/- 12.5 (SD) years with a uterus in situ was studied. Anterior compartment status was assessed by the most caudal bladder point and the internal urinary meatus. The external cervical os was used to assess the apical compartment. The position of the bladder, urethra, and uterus were determined in 20 nulliparous women to determine their reference locations. The distances of each structure below the reference positions were calculated at maximum Valsalva. RESULTS: Average distances of the bladder base, urethra, and uterus from the reference positions at maximal Valsalva were 4.1 +/- 2.4 cm, 3.1 +/- 1.3 cm, and 4.3 +/- 2.4 cm, respectively. The Pearson correlation coefficient of the relationship between the bladder base and uterine distances was r = 0.73 (r(2) = 0.53). The Pearson correlation coefficient of the bladder distance and urethral distance was r = 0.82 (r(2) = 0.67). CONCLUSION: Half of the observed variation in anterior compartment

support may be explained by apical support.

Changes in the extracellular matrix in the anterior vagina of women with or without prolapse.
Lin SY, Tee YT, Ng SC, Chang H, Lin P, Chen GD
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 18;.
To investigate the changes in the connective tissues located in the upper portion of the anterior vaginal wall, which are associated with anterior vaginal wall prolapse, 23 women with anterior vaginal wall prolapse were included in the study group and 15 women with normal genital support served as control group. The anterior vaginal wall tissue samples were obtained for immunohistochemical staining of collagen (type I, III, IV, V, VI), elastin, and glycoproteins from the extracellular matrix (fibronectin, vitronectin, laminin). The number of capillaries per arteriole and mitochondria numbers per smooth muscle cell were evaluated for demonstrating whether the anatomical prolapse affect on blood supply to these tissues. Collagen III was significantly less in the anterior vaginal wall of patients with anterior vaginal wall prolapse. Quantitative immunoreactivity of collagen I and III had significant positive correlations with ageing.

Effects of an osmotically active agent on colonic transit.
Skoog SM, Bharucha AE, Camilleri M, Burton DD, Zinsmeister AR
Neurogastroenterol Motil. 2006 Apr;18(4):300-6.
It is unknown if sorbitol, a widely used laxative agent, accelerates colonic transit, and if these effects are modified by concomitant meal ingestion. Colonic transit was assessed by (111)In scintigraphy in 40 healthy subjects. After a 24-h scan, subjects received sorbitol (30 mL of 70% solution) or dextrose (30 mL of 70% solution), administered with or without a meal. Colonic transit, breath hydrogen excretion, and symptom scores were recorded for 4 h thereafter. VAS scores for flatulence, but not other symptoms increased ($P = 0.004$) by 13.1 +/- 6.3 mm (mean +/- SEM) on a 100 mm scale after sorbitol alone or sorbitol with a meal (by 18.9 +/- 7.2 mm), but not after dextrose. After adjusting for GC(24), sorbitol accelerated ($P < 0.001$) colonic transit (GC(28) = 3.0 +/- 0.3) compared with dextrose (GC(28) = 2.2 +/- 0.2), regardless of meal ingestion. Breath hydrogen excretion was correlated with the change in colonic transit ($r = 0.52$, $P < 0.01$) and with flatulence ($r = 0.45$, $P = 0.003$) after sugar ingestion. In healthy subjects, sorbitol accelerated colonic transit and increased flatulence but not other symptoms within 4 h, regardless of meal intake.

Functional Correlates of Anal Canal Anatomy: Puborectalis Muscle and Anal Canal Pressure.
Liu J, Guaderrama N, Nager CW, Pretorius DH, Master S, Mittal RK
Am J Gastroenterol. 2006 Apr 6;.
BACKGROUND: Resting and squeeze pressures in the anal canal are thought to reflect the contributions of the internal anal sphincter (IAS) and the external anal sphincter (EAS) respectively. Role of the puborectalis muscle (PRM) in the genesis of anal canal pressure is not known. OBJECTIVES: To determine the functional correlates of anal canal anatomy. METHODS: Seventeen asymptomatic nulliparous women were studied using simultaneous 3D ultrasound images and manometry of the anal canal. Ultrasound images were recorded using a transducer placed at the vaginal introitus and pressures were recorded with a side-hole manometry catheter using a station (every 5 mm) pull-through technique. Pressures were recorded at rest and during voluntary squeeze. RESULTS: Anal canal high pressure zone was 39 +/- 1 mm in length. The IAS, EAS, and PRM were clearly visualized in the ultrasound images. EAS was located in the distal (length 19 +/- 1 mm) and PRM in the proximal part (length 18 +/- 1 mm) of the anal canal. The station pull-through technique revealed increases in pressure with voluntary squeeze in the proximal as well as distal parts of the anal canal. Proximal anal canal pressure, located in the PRM zone, showed greater circumferential asymmetry than the distal anal canal pressure, located in the EAS zone. CONCLUSIONS: (1) PRM contributes to the squeeze pressure in the proximal part of the anal canal and EAS to the distal anal canal. (2) PRM squeeze-related increase in anal canal pressure might be important in the anal continence mechanism.

Intestinal gases and flatulence: Possible causes of occurrence.
Kurbel S, Kurbel B, Vcev A
Med Hypotheses. 2006 Mar 27;.
All gases entrapped in closed body cavities are destined to be partially or completely absorbed. Intestinal

gases often accumulate and cause flatulence. This paper proposes a simple concept of intestinal gas occurrence based on our knowledge on gas resorption in other body cavities. Compliance of intestinal and abdominal walls makes pressure in the liquid chyme bubbles near 760mmHg. Intestinal gases are from three sources. Air can be swallowed, CO(2) come from the gastric acid neutralisation and from intestinal bacterial colonies that also produce hydrogen and methane. In continuously mixed liquid chyme, the total pressure of blood gases is similar or lower than in the venous blood (706), well below the bubble forming pressure (760mmHg). Some local production of bacterial gases with partial pressure of more than 90mmHg is required, so the resulting small bowel bubbles would contain less than 20% of bacterial gases. If peristaltic mixing of chyme is prevented by an obstacle, local pressures of bacterial gases build up, form bubbles that fuse and finally make X-ray visible aeroliquid levels. Bacterial gases make almost 3/4 of the flatulence. Formation of bubbles destined to become flatulence might depend on altered rheological condition of the large bowel content, with local abundant production of bacterial gases near bacterial colonies. Gases are unable to diffuse rapidly through the dense liquid content and local accumulation allows formation of bubbles mainly of bacterial gases. Their pressure can be higher 760mmHg, since they are stretching the thick content. Poor diffusion of gases keeps them almost free of blood gases and their entrance makes them bigger. As the content moves along the colon, the content is becoming more solid and gases are becoming entrapped in large bubbles. Some blood and bacterial gases are absorbed and exhaled, but the remaining quantity has no other escape except flatulence. Flatulence rich in bacterial gases might be the price for the large bowel water reabsorption. It seems that beside the peroral use of antibiotics active in the colon, little can be done to reduce flatulence.

3 – DIAGNOSTICS 2006 03

The rectovaginal examination: physician attitudes and practice patterns.
Davisson L, Clark K, Powers R, Hobbs G
South Med J. 2006 Mar;99(3):212-5.
BACKGROUND: The value of screening with the rectovaginal examination (RVE) has not been validated. This study describes physician attitudes and practice patterns regarding the RVE. METHODS: Cross-sectional survey of residents and faculty in general internal medicine and obstetrics/gynecology (OB/GYN) at a university hospital. RESULTS: Thirty-four percent of physicians surveyed reported routinely performing the RVE. More OB/GYN than internal medicine physicians reported doing the RVE routinely (60% versus 27%, P = 0.02), and felt it provided additional information (80% versus 44%, P = 0.01). More respondents believed that it provides additional information to the routine pelvic examination (53%) than agreed with its routine inclusion (42%) or that reported routinely performing it (34%). (P = 0.0001) CONCLUSIONS: More OB/GYN than internal medicine physicians routinely perform the RVE and believe it adds additional information to the routine pelvic examination. Additional research is indicated to determine if frequent omission of the RVE impacts women's health.

Assessment of voluntary pelvic floor muscle contraction in continent and incontinent women using transperineal ultrasound, manual muscle testing and vaginal squeeze pressure measurements.
Thompson JA, O'sullivan PB, Briffa NK, Neumann P
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 11;.
The aims of the study were: (1) to assess women performing voluntary pelvic floor muscle (PFM) contractions, on initial instruction without biofeedback teaching, using transperineal ultrasound, manual muscle testing, and perineometry and (2) to assess for associations between the different measurements of PFM function. Sixty continent (30 nulliparous and 30 parous) and 60 incontinent (30 stress urinary incontinence (SUI) and 30 urge urinary incontinence (UUI)) women were assessed. Bladder neck depression during attempts to perform an elevating pelvic floor muscle (PFM) contraction occurred in 17% of continent and 30% of incontinent women. The UUI group had the highest proportion of women who depressed the bladder neck (40%), although this was not statistically significant (p=0.060). The continent women were stronger on manual muscle testing (p=0.001) and perineometry (p=0.019) and had greater PFM endurance (p<0.001) than the incontinent women. There was a strong tendency for the continent women to have a greater degree of bladder neck elevation than the incontinent women (p=0.051). There was a moderate

correlation between bladder neck movement during PFM contraction measured by ultrasound and PFM strength assessed by manual muscle testing (r=0.58, p=0.01) and perineometry (r=0.43, p=0.01). The observation that many women were performing PFM exercises incorrectly reinforces the need for individual PFM assessment with a skilled practitioner. The significant correlation between the measurements of bladder neck elevation during PFM contraction and PFM strength measured using MMT and perineometry supports the use of ultrasound in the assessment of PFM function; however, the correlation was only moderate and, therefore, indicates that the different measurement tools assess different aspects of PFM function. It is recommended that physiotherapists use a combination of assessment tools to evaluate the different aspects of PFM function that are important for continence. Ultrasound is useful to determine the direction of pelvic floor movement in the clinical assessment of pelvic floor muscle function in a mixed subject population.

The reproducibility of urodynamic finding in health female volunteers: results of repeated studies in the same setting and after short-term follow-up.
Wein AJ
J Urol. 2004 Dec;172(6 Pt 1):2493-4.

Impending or pending? The national bowel cancer screening programme.
Atkin WS
BMJ. 2006 Apr 1;332(7544):742. Epub 2006 Mar aistom3 22.

Review in depth and meta-analysis of controlled trials on colorectal cancer screening by faecal occult blood test.
Heresbach D, Manfredi S, D'halluin PN, Bretagne JF, Branger B
Eur J Gastroenterol Hepatol. 2006 Apr;18(4):427-433.
BACKGROUND: Several randomized studies have shown that colorectal cancer (CRC) screening by faecal occult blood test (FOBT) reduces CRC mortality. These trials have different designs, especially concerning FOBT frequency and duration, as well as the length of follow-up after stopping FOBT campaigns. AIMS: To review the effectiveness of screening for CRC with FOBT, to consider the reduction in mortality during or after screening or to identify factors associated with a significant mortality reduction. METHODS: A systematic review of trials of FOBT screening with a meta-analysis of four controlled trials selected for their biennial and population-based design. The main outcome measurements were mortality relative risk (RR) and 95% confidence interval (CI) of biennial FOBT during short (10 years, i.e. five or six rounds) or long-term (six or more rounds) screening periods, as well as after stopping screening and follow-up during 5-7 years. The meta-analysis used the Mantel-Haenszel method with fixed effects when the heterogeneity test was not significant, and used 'intent to screen' results. RESULTS: Although the quality of the four trials was high, only three were randomized, and one used rehydrated biennial FOBT associated with a high colonoscopy rate (28%). A meta-analysis of mortality results showed that subjects allocated to screening had a reduction of CRC mortality during a 10-year period (RR 0.86; CI 0.79-0.94) although CRC mortality was not decreased during the 5-7 years after the 10-year (six rounds) screening period, nor in the last phase (8-16 years after the onset of screening) of a long-term (16 years or nine rounds) biennial screening. Whatever the design of the period of ongoing FOBT, CRC incidence neither decreased nor increased, although it was reduced for 5-7 years after the 10-year screening period. Neither the design nor the clinical or demographic parameters of these trials were independently associated with CRC mortality reduction. CONCLUSION: Biennial FOBT decreased CRC mortality by 14% when performed over 10 years, without evidence-based benefit on CRC mortality when performed over a longer period. No independent predictors of CRC mortality reduction have been identified in order to allow a CRC screening programme in any subgroups of subjects at risk.

Flexible Sigmoidoscopy Performed by Nurses.
Goodfellow PB
Endoscopy. 2006 Feb 3;.

Projected national impact of colorectal cancer screening on clinical and economic outcomes and health services demand.
Zarchy T

Gastroenterology. 2006 Mar;130(3):1012; author reply 1012.

A novel model used to compare water-perfused and solid-state anorectal manometry.
Florisson JM, Coolen JC, Bissett IP, Plank LD, Parry BR, Menzi E, Merrie AE
Tech Coloproctol. 2006 Mar 15;.
BACKGROUND: Anal pressures are commonly measured using water-perfused and solid-state manometers. We constructed a dynamic model of the anus to compare the agreement and reproducibility of the two types of manometers. METHODS: The model system was constructed using a pig anorectum together with an inflatable bowel sphincter. The pig anorectum was mounted on a jig and the sphincter was inserted external to the internal sphincter. The sphincter pressure was adjusted over the range 20 to 185 mmHg. At each of 24 constant sphincter pressures, triplicate readings were carried out with both manometers. The first measurement by each method was used for the comparison. The replicate measurements were used to calculate measures of repeatability for each method. RESULTS: Measurements by the two manometers were highly correlated (r=0.97). Measurements by the solid state manometer were higher than the water-perfused manometer by 8.1+/-12.2 mmHg (mean+/-SD). Precision (coefficient of variation) for the solid-state manometer (2.8%) was better than for the water-perfused manometer (8.3%). CONCLUSIONS: The new model of the anal canal shows promise as a tool for assessing physiological interventions. The solid-state manometer has many advantages over the water-perfused manometer, providing more consistent measurements at clinically relevant pressures.

4 – PROLAPSES 2006 03

Obturator hernia as a cause of chronic pain after inguinal hernioplasty: elective management using tomography and ambulatory total extraperitoneal laparoscopy.
Moreno-Egea A, la Calle MC, Torralba-Martinez JA, Morales Cuenca G, Girela Baena E, del Pozo P, Aguayo-Albasini JL
Surg Laparosc Endosc Percutan Tech. 2006 Feb;16(1):54-7.
Obturator hernia is a rare variety of pelvic hernia. Preoperative diagnosis is still uncommon and influences treatment and prognosis. Clinical suspicion and tomography are fundamental for establishing a preoperative diagnosis. Subsequently, elective treatment via the total extraperitoneal laparoscopic approach seems to offer the best results for both the patient and the hospital. This management might reduce the high rates of associated morbidity and mortality. We present the case of a patient with chronic pelvic pain after hernia surgery in whom tomography confirmed the existence of a bilateral obturator hernia. Details are given of diagnostic and therapeutic management using ambulatory total extraperitoneal laparoscopy. We recommend ruling out obturator hernia as a possible cause of chronic pain after hernia repair.

Skeletal muscle heavy-chain polypeptide 3 and myosin binding protein H in the pubococcygeus muscle in patients with and without pelvic organ prolapse.
Hundley AF, Yuan L, Visco AG
Am J Obstet Gynecol. 2006 Mar 28;.
OBJECTIVE: The purpose of this study was to compare gene expression of skeletal muscle heavy-chain polypeptide 3 (MYH3) and myosin binding protein H (MyBP-H) in the pubococcygeus muscle of patients with pelvic organ prolapse and controls. STUDY DESIGN: Genes previously identified by microarray genechip analysis of pubococcygeus muscle biopsies were examined using real-time quantitative reverse transcriptase polymerase chain reaction (RT-PCR) analysis. Specimens were obtained from 17 patients with stage III or IV pelvic organ prolapse and 23 controls with minimal to no prolapse. Glyceraldehyde 3-phosphate dehydrogenase (GAPDH) was used as the housekeeping gene. Samples and controls were run in triplicate in separate wells, and the levels of gene expression were analyzed quantitatively using the comparative critical threshold (Ct) method. Differences in gene expression were analyzed using Wilcoxon rank-sum testing. RESULTS: Significant differences in gene expression were observed between patients with prolapse and controls for both genes. Skeletal muscle myosin heavy-chain polypeptide 3 was 6.5 times underexpressed in patients with pelvic organ prolapse compared to controls (P = .028). Similarly, myosin binding protein H was 3.2 times underexpressed in patients with prolapse (P = .042). Overall, patients had a

mean age of 62.4 +/- 6.5 years compared with controls with a mean age of 45.3 +/- 7.4 years (P < .001), so analysis was also performed on an age-matched subset of 8 patients and controls (mean ages of 58.1 +/- 5.4 years and 53.3 +/- 5.0 years, respectively, P = .02) with similar results. Prolapse patients in this subset were similar in parity and race to controls but had lower body mass index (23.2 vs 29.9, P = .04). MYH3 was 10.9 times underexpressed in patients with pelvic organ prolapse compared to controls (P = .027). MyBP-H was 10.4 times underexpressed in patients with prolapse (P = .036). CONCLUSION: These findings suggest that the differences between patients with advanced pelvic organ prolapse and controls may be related to differential gene expression of structural proteins related to myosin. Specifically, advanced pelvic organ prolapse may be related to down-regulation of skeletal muscle heavy-chain polypeptide 3 and myosin binding protein H.

Can pelvic floor muscle training prevent and treat pelvic organ prolapse?
Bo K
Acta Obstet Gynecol Scand. 2006;85(3):263-8.
BACKGROUND AND METHODS: Pelvic floor muscle dysfunction may cause urinary and fecal incontinence, pelvic organ prolapse (POP), pain, and sexual disturbances. The aim of the present study is to review the literature on the effectiveness of pelvic floor muscle training (PFMT) to prevent and treat POP, and the possible theories and mechanisms on how PFMT could prevent or reverse prolapse. RESULTS: No studies were found on prevention of POP. One uncontrolled study and one low-quality RCT were found in the treatment of prolapse. The results showed a positive effect of PFMT in severe, but not in mild prolapse. A review is presented of the main hypothesis of mechanisms on how PFMT may be effective. The two mechanisms are morphological changes occurring after strength training and use of a conscious contraction during increase in abdominal pressure in daily activities. CONCLUSIONS: In addition to the theory of functional anatomy and exercise science, one randomized controlled trial (RCT) is supportive for a positive effect of PFMT in the treatment of POP. There is an urgent need for more RCT with high methodological quality, use of valid and reproducible methods to assess degree of prolapse, and appropriate training protocols to evaluate the effect of PFMT in the prevention and treatment of POP.

Levator plate angle in women with pelvic organ prolapse compared to women with normal support using dynamic MR imaging.
Hsu Y, Summers A, Hussain HK, Guire KE, Delancey JO
Am J Obstet Gynecol. 2006 Mar 28;.
OBJECTIVE: The purpose of this study was to determine whether the levator plate is (1) horizontal in women with normal support, (2) different between women with and without prolapse, (3) related to levator hiatus and perineal body descent. STUDY DESIGN: Cohorts of cases with prolapse at least 1 cm below the hymen and normal controls with all points 1 cm or more above the hymen were prospectively enrolled in a study of pelvic organ support to be of similar age, race, and parity. Subjects underwent supine midsagittal dynamic magnetic resonance imaging (MRI) during Valsalva. Levator plate angle (LPA) was measured relative to a horizontal reference line. Levator hiatus length (LH) and perineal body location (PB) were also measured. Student t tests and Pearson correlation coefficients (r) were performed. RESULTS: Sixty-eight controls and 74 cases were analyzed. During Valsalva, controls had a mean LPA of 44.3 degrees . Cases, compared to controls, had 9.1 degrees (21%) more caudally directed LPA (53.4 degrees vs 44.3 degrees , P < .01), 15% larger LH length (7.8 cm vs 6.8 cm, P < .01), and 24% more caudal PB location (6.8 cm vs 5.5 cm, P < .01). Increases in LPA were correlated with increased LH length (r = 0.42, P < .0001) and PB location (r =.51, P < .0001). CONCLUSION: The measured levator plate angle in women with normal support is 44.3 degrees . During Valsalva, women with prolapse have a modest (9.1 degrees) though statistically greater levator plate angle compared to controls. This larger angle showed moderate correlation with larger levator hiatus length and greater displacement of the perineal body in women with prolapse compared to controls.

Stapled Transanal Rectal Resection Under Laparoscopic Surveillance for Rectocele and Concomitant Enterocele.
Petersen S, Hellmich G, Schuster A, Lehmann D, Albert W, Ludwig K
Dis Colon Rectum. 2006 Apr 5;.
PURPOSE: Stapled transanal rectal resection recently became a recommended surgical procedure for

obstructed defecation syndrome. One problem when using a transanal stapling device for rectal surgery is the potential threat to structures located in front of the anterior rectal wall. We decided to perform a combined procedure of transanal rectal resection with a simultaneous laparoscopy for patients with obstructed defecation syndrome and an enterocele. METHODS: Between November 2002 and May 2005 a total of 41 patients were treated surgically for obstructed defecation syndrome. Four patients with concomitant enterocele underwent stapled transanal rectal resection under laparoscopic surveillance. Before surgery all patients underwent preoperative assessment, including clinical examination, colonoscopy, conventional video defecography, dynamic magnetic resonance imaging defecography, gynecology examinations, and psychologic evaluation. RESULTS: The mean operative time was 50 (+/-16.5) minutes for the conventional stapled transanal rectal resection and 67 (+/-14.1) minutes for combined laparoscopy and stapled transanal rectal resection ($P < 0.01$). Three major complications were observed: two had bleeding in the staple line (one from each group) and one had a late abscess in the staple line. CONCLUSIONS: The combination of the stapled transanal rectal resection procedure and laparoscopy provides the opportunity to perform transanal rectal resection without the threat of intra-abdominal lesions caused by enterocele.

Posterior vaginal sling experience in elderly patients yields poor results.
Mattox TF, Moore S, Stanford EJ, Mills BB
Am J Obstet Gynecol. 2006 Mar 28;.
OBJECTIVE: The objective of the study was to evaluate our experience with the posterior vaginal sling in an elderly population. STUDY DESIGN: Elderly patients with significant vaginal prolapse underwent a posterior vaginal sling using the IVS Tunneller device (Tyco Healthcare, United States Surgical, Norwalk, CT). Primary failure was defined as a postoperative pelvic organ prolapse quantitative point C (the apex of the vagina) within 2 cm of the preoperative value. Secondary failure was defined as any portion of the anterior or posterior vaginal walls protruding to or beyond the hymeneal ring (pelvic organ prolapse quantitative points Aa or Ap equal to or greater than 0). RESULTS: Twenty-one patients underwent the procedure; 19 were seen for follow up. The average age was 70 years (range 60-78). Twelve patients had primary or secondary failures (12 of 19, 63%). There were 5 primary failures (5 of 19, 26%) and 7 secondary failures (7 of 19, 37%). The mean time to failure was 7 weeks (range 1-18). CONCLUSION: In our elderly population, the posterior vaginal sling has a high failure rate, occurring early in the postoperative period.

Surgery for vaginal prolapse: a review.
Francis SL, Stager R
J Reprod Med. 2006 Feb;51(2):75-82.
This article reviews clinical trials of surgery for the repair of apical vaginal prolapse. The procedures include those from the abdominal, laparoscopic and transvaginal approach. When considering new surgical devices or procedures, it is essential to be aware of clinical data. The use of tension-free tape devices for apical support is promising, but a large trial is needed to demonstrate its efficacy and safety.

Surgical management of posterior vaginal wall prolapse: an evidence-based literature review.
Maher C, Baessler K
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):84-8. Epub 2005 Apr 19.
The aim of this review is to summarize the available literature on gynecological management of posterior vaginal wall prolapse. A MEDLINE search and a hand search of conference proceedings of the International Continence Society and International Urogynecological Association was performed. Two randomized trials demonstrated that the transvaginal approach to rectocele is superior to the transanal repair in terms of recurrent prolapse. The traditional posterior colporrhaphy with levator ani plication was largely superceded by fascial repairs with similar anatomic success rates but favorable functional outcome. The midline fascial plication may offer a superior anatomic and functional outcome compared to the discrete site-specific fascial repair. Controlled studies are necessary to evaluate whether a sacrocolpopexy combined with posterior mesh interposition is an effective alternative to the transvaginal repair. There is currently no evidence to recommend the routine use of any graft and complications such as mesh erosion, infection, and rejection have to be considered.

Concomitant pelvic organ prolapse surgery with TVT procedure.

Huang KH, Kung FT, Liang HM, Chen CW, Chang SY, Hwang LL
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):60-5. Epub 2005 Jun 18.
The aim of this study is to evaluate the efficacy and feasibility of concomitant pelvic reconstructive surgery with tension-free vaginal tape (TVT) procedure to treat pelvic organ prolapse women with urodynamic stress incontinence (USI) or occult USI. Seventy-five women with pelvic organ prolapse and diagnosed as USI or occult USI were enrolled in this study. All patients with USI or occult USI underwent TVT treatment under general anesthesia, combined with transvaginal total hysterectomy (VTH), anterior-posterior colporrhaphy (APC), and/or right sacrospinous ligament suspension (SSS) reconstructive surgeries. The subjective assessment was evaluated by using a visual analog scale (VAS) score and a urinary symptomatic questionnaire. The objective assessment was carried out with a 1-h pad test, cough stress test, and urodynamic examination. Of the 75 patients, 35 patients with grade III uterine prolapse underwent VTH and APC, 30 patients with grade IV uterine prolapse underwent VTH, SSS, and APC, and the other 10 patients who had previous hysterectomy with total vaginal vault prolapse underwent SSS and APC. The mean follow-up interval was 25 months (12-42 months). The mean hospitalization was 5.9 days and the mean catheterization time was 3.8 days. The subjective success rate for the treatment of urine incontinence was 88%, and the objective complete cure rate was 84%. The rate of postoperative complications with persistent urinary urgency, de novo detrusor overactivity, dysfunctional voiding, and tape erosion were 50, 8, 12, and 1.3%, respectively. There were no bladder perforations during the TVT procedure and no perioperative complications requiring conversion to laparotomy. Pelvic organ prolapse women with USI or occult USI can be treated by reconstructive surgeries combined with a TVT procedure to treat and prevent postoperative USI.

A comparison of preoperative and intraoperative evaluation of patients undergoing pelvic reconstructive surgery for pelvic organ prolapse using the Pelvic Organ Prolapse Quantification System.
Vierhout ME, Stoutjesdijk J, Spruijt J
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):46-9. Epub 2005 Jul 29.
OBJECTIVE: To compare the pre- and intraoperative situation using the POP-Q system during optimally standardized conditions of both examinations. STUDY DESIGN: In a prospective observational study, 108 women were compared. The POP-Q in the outpatient department (preoperative) was compared with the situation just prior to surgery after full anesthesia was reached (intraoperative). During the intraoperative measurement, traction with 0.5 kg force was applied on all relevant places. RESULTS: The pre- and intraoperative measurements were all significant correlated with the R-values between 0.43 and 0.85. All six points, which are measured during the POP-Q, were more prolapsed in the intra- as compared with the preoperative situation. The points Bp, C, and D were significantly more prolapsed, but for the points Aa, Ba, and Ap this was not significant. Fifteen patients were upstaged by the intraoperative measurements and five patients were downstaged in the overall POP-Q grading system. CONCLUSIONS: Intraoperative evaluation of the prolapse can reveal significant changes as compared with the preoperative situation. In general, the prolapse is more pronounced especially in the middle and posterior compartment.

Cystocele-vaginal approach to repairing paravaginal fascial defects.
Viana R, Colaco J, Vieira A, Goncalves V, Retto H
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 10;.
The objective of this study is to determine the efficacy and safety of vaginal approach to repair paravaginal defects in patients with symptomatic cystocele. This was a retrospective study of 66 women with a diagnosis of symptomatic cystocele grade 2 to 4, referred to our unit between January 2002 and March 2005. A clinical evaluation was carried out using the Baden-Walker classification before and after the surgery. The same surgical team performed every surgery. The repair of paravaginal fascial defects was carried out through a vaginal approach, exposing the arcus tendineus. The paravaginal fascial defects were corrected through suspension of vesicovaginal fascia to the arcus tendineus with nonreabsorbable Ethibond 0 sutures. Women were seen for follow-up at 3, 6, and 12 months. The presence of well-demarcated vaginal lateral sulci at grade 0, firmly apposed to the lateral pelvic sidewalls and no anterior relaxation with Valsalva maneuver, were used as criteria for cure. Grade 2 cystocele was diagnosed preoperatively in most women. The mean duration of complaints due to prolapse was 64.6 months. There were no major intraoperative complications.

Mean time of inpatient stay was of 4.9 days. The cure rate at 12 months was 91.6%. There were five cases of recurrence of cystocele 6 months after surgery. Surgical repair of symptomatic cystocele through a paravaginal approach is a safe and efficacious technique. Vaginal approach to repair paravaginal fascia defects had a low postoperative morbidity and high cure rate at 12 months (91.6%).

Validation of a simplified technique for using the POPQ pelvic organ prolapse classification system.
Swift S, Morris S, McKinnie V, Freeman R, Petri E, Scotti RJ, Dwyer P
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 6;.
Our objective was to determine the inter-examiner agreement of a simplified pelvic organ prolapse quantification (POPQ) exam and to assess its correlation with the standard POPQ exam. This study consists of two parts; both were preformed in a prospective, randomized, blinded fashion on women presenting with complaints attributed to pelvic organ support defects. The first study was done to determine the inter-examiner reliability of a simplified POPQ exam. The simplified POPQ exam is based on the POPQ with similar ordinal staging but with only four points measured instead of nine. Forty-eight women underwent exams by five different investigators. The order of exams was randomized and the examiners were blinded to the results of each other's findings. The results of these two exams were compared using weighted kappa statistics. The second part of the study was done to determine the inter-system agreement between the simplified vs standard POPQ exam. A group of 49 women were examined by four different investigators: one using the simplified and the other using standard POPQ exams. The order of the exams was randomized and the examiners were blinded to the results of each other's exam. Kendall's tau-b statistics were used to determine the inter-system agreement. For the inter-examiner reliability of the POPQ exam, the average age was 60+/-13 years. The weighted kappa statistics for the inter-examiner reliability of the simplified prolapse classification system were 0.86 for the overall stage, 0.89 and 0.86 for the anterior and posterior vaginal walls, respectively, 0.82 for the apex/cuff, and 0.72 for the cervix. All demonstrate significant agreement. For the inter-system association between the simplified POPQ and standard POPQ, the average age was 61+/-15 year. The Kendall's tau-b value for overall stage was 0.90, 0.83, and 0.87 for the anterior and posterior walls respectively, and 0.78 for the cuff/apex and 0.98 for the cervix. There is good inter-examiner agreement of a simplified POPQ classification system and it appears to have good inter-system association with the POPQ.

[Efficacy and safety of Pelvicol in the vaginal treatment of prolapse]
Doumerc N, Mouly P, Thanwerdas J, Vazzoler N, Khedis M, Huyghe E, Soulie M, Plante P
Prog Urol. 2006 Feb;16(1):58-61.
OBJECTIVES: To evaluate the efficacy and safety of a porcine biomaterial (Pelvicol) in the transvaginal surgical treatment of urogenital prolapse. MATERIAL AND METHOD: Prospective study from June 2001 to February 2004 based on 132 patients with a mean age of 67.6 +/- 9.89 years presenting major urogenital prolapse: 132 cystoceles and 84 rectoceles with 100% and 63.4% of grade 2 or 3, respectively. Patients were evaluated by questionnaire and clinical examination at 1 month, 6 months, 12 months and 24 months after the operation. Two hundred and sixteen Pelvicol implants were inserted via a vaginal approach: 132 anterior implants and 84 posterior implants. RESULTS: The mean follow-up was 21 months [range: 6-24]. No intraoperative complication was observed. The postoperative complication rate was 11.3% (15/132) including 1 prosthetic exposure with a favourable outcome. After 6 months, 1 recurrence of cystoceles and 1 recurrence of rectoceles were found in 132 patients. Out of the 117 patients followed up for 12 months, 6 presented with grade 2 cystoceles and 1 grade 2 rectoceles. After 24 months, out of the 107 patients evaluated, 18 cystoceles and 9 rectoceles of grade 2 or 3 were found. Globally, 83.1% of patients did not present with grade 2 or 3 recurrences after 24 months. Safety was considered to be good with 10% of moderate pelvic pain and 6% of de novo dyspareunia at 12 months. The overall satisfaction rate was 94%. CONCLUSION: These preliminary results demonstrate an efficacy of 83.1% at 24 months and the good safety of Pelvicol in the transvaginal surgical treatment of urogenital prolapse.

Long-term outcome of abdominal sacrocolpopexy using xenograft compared with synthetic mesh.
Altman D, Anzen B, Brismar S, Lopez A, Zetterstrom J
Urology. 2006 Mar 24;.
OBJECTIVES: To assess the clinical outcome after abdominal sacrocolpopexy using a porcine dermal graft

compared with a synthetic mesh. METHODS: Patients with vaginal vault prolapse Stage II or worse (Baden-Walker staging), underwent sacrocolpopexy using a synthetic mesh (n = 25) or porcine collagen graft (n = 27). The subjective outcome was measured using validated questionnaires. RESULTS: The mean clinical follow-up from surgery was 7.1 months for the xenograft compared with 7.4 months for the synthetic cohort. At clinical follow-up, vaginal vault prolapse Stage II was present in 8 (29%) of 27 patients in the xenograft cohort and 6 (24%) of 25 patients in the synthetic mesh cohort (no significant difference). The mean follow-up from surgery to survey was 2.5 years in the xenograft cohort and 4.3 years in the synthetic cohort. None of the patients in either cohort had undergone a secondary sacrocolpopexy. No significant differences were found between the cohorts regarding surgical morbidity other than more patients experiencing fever for 1 to 3 days in the xenograft cohort (P <0.001). No significant differences were found in lower urinary tract symptoms, anorectal symptoms, or quality-of-life variables between the two cohorts. CONCLUSIONS: Abdominal sacrocolpopexy using a porcine dermal graft was comparable to synthetic mesh in terms of subjective and anatomic outcomes at mid to long-term follow-up.

Solitary rectal ulcer: another view of the management algorithm.
Daniel F, Siproudhis L, Tohme C, Sayegh R
Gastrointest Endosc. 2006 Apr;63(4):738-9.

Experience of 3711 stapled haemorrhoidectomy operations (Br J Surg 2006; 93: 226-230).
Basso L, Cavallaro G, Polistena A
Br J Surg. 2006 Apr;93(4):507.

Impact of New Technologies on the Clinical and Functional Outcome of Altemeier's Procedure: A Randomized, Controlled Trial.
Boccasanta P, Venturi M, Barbieri S, Roviaro G
Dis Colon Rectum. 2006 Apr 4;.
PURPOSE: A randomized study was performed to assess whether new technologies offer advantages over the conventional technique on the clinical and functional outcome of patients with full-thickness rectal prolapse and fecal incontinence, submitted to Altemeier's procedure with levatorplasty. METHODS: Between January 1999 and December 2003, 58 patients (55 females; mean age, 70.9 +/- 11.3 years) with full-thickness rectal prolapse were evaluated with continence score, colonoscopy, anorectal manometry, anal electromyography, and sacral reflex latency; 40 of them were selected and randomly assigned to two groups: 20 patients (Group 1; 19 females, 73.4 +/- 10.4 years) were submitted to a conventional operation with monopolar electrocautery and handsewn anastomosis, and 20 (Group 2; 18 females, 71.5 +/- 12.2 years) using harmonic scalpel and circular stapler. Patients were followed up with clinical examination, anorectal manometry, and anal electromyography, with mean follow-up 29.3 +/- 8.5 and 27.5 +/- 9.2 months in Groups 1 and 2, respectively. RESULTS: Operative time, blood loss, and hospital stay were significantly reduced in Group 2 (P < 0.001), whereas no differences were found in pain score, time to return to normal activity, morbidity, and mortality. Complications were two (10 percent) stenosis in Group 1. Fecal continence score significantly improved in both groups (P < 0.01), whereas anorectal manometry and neurophysiologic data were not significantly modified by the operation. Recurrence rates were 15 and 10 percent in Groups 1 and 2, respectively (P= not significant). CONCLUSIONS: The clinical and functional long-term results of perineal rectosigmoidectomy with levatorplasty are not influenced by surgical instruments and type of coloanal anastomosis. The clinical relevance of the short-term results in high-risk patients should be specifically investigated.

Biofeedback therapy for rectal intussusception.
Hwang YH, Person B, Choi JS, Nam YS, Singh JJ, Weiss EG, Nogueras JJ, Wexner SD
Tech Coloproctol. 2006 Mar 15;.
BACKGROUND: Surgery for isolated internal rectal intussusception is controversial due to high morbidity. Therefore, there is interest in other forms of treatment that are safe and effective. The aim of this study was to determine outcome and identify predictors for success of biofeedback therapy in patients with rectal intussusception. METHODS: We retrospectively evaluated the results of electromyography (EMG)-based biofeedback in 34 patients with rectal intussusception without any other major pelvic floor or colonic

physiologic disorder. RESULTS: A total of 34 patients (7 men) had undergone at least 2 biofeedback sessions. The patients had a mean age of 68.5 years (SD=11.4 years). In the 27 patients with constipation, the frequency of weekly spontaneous bowel movements (mean+/-SD) was 2.0+/-6.8 before and 4.1+/-4.6 after biofeedback ($p<0.05$). The frequency of weekly assisted bowel movements decreased from 3.8+/-3.5 before to 1.5+/-2.2 after therapy ($p<0.005$). The number of patients who experienced incomplete evacuation decreased from 17 (63%) to 9 (33%) ($p<0.05$). Thirty-three percent of patients had complete resolution of the symptoms, 19% had partial improvement, and 48% had no improvement. Patients with constipation lasting less than nine years had a 78% success rate vs. 13% in patients who were consti- pated more than 9 years ($p<0.01$). In seven patients with incontinence, the frequency of daily incontinence episodes decreased from 1.0+/-0.7 before to 0.07+/-0.06 after biofeedback ($p<0.05$). The fecal incontinence score decreased from 13.1+/-4.2 before to 4.6+/-3.6 after treatment ($p<0.005$). Two patients (29%) were completely continent following biofeedback, 2 had partial improvement, and 3 (43%) had no significant improvement. There was no mortality in either group. CONCLUSIONS: Biofeedback is a safe and effective treatment option for constipation and fecal incontinence due to rectal intussusception in patients who are willing to complete the course of treatment. Long-standing constipation is less effectively cured by biofeedback.

5 – RETENTIONS 2006 03

Postoperative urinary retention after surgery for benign anorectal disease: potential risk factors and strategy for prevention.

Toyonaga T, Matsushima M, Sogawa N, Jiang SF, Matsumura N, Shimojima Y, Tanaka Y, Suzuki K, Masuda J, Tanaka M

Int J Colorectal Dis. 2006 Mar 22;.

PURPOSE: This study was undertaken to determine the incidence of and risk factors for urinary retention after surgery for benign anorectal disease. METHODS: We reviewed 2,011 consecutive surgeries performed under spinal anesthesia for benign anorectal disease from January through June 2003 to identify potential risk factors for postoperative urinary retention. In addition, we prospectively investigated the preventive effect of perioperative fluid restriction and pain control by prophylactic analgesics on postoperative urinary retention. RESULTS: The number of procedures and the urinary retention rates were as follows: hemorrhoidectomy, 1,243, 21.9%; fistulectomy, 349, 6.3%; incision/drainage, 177, 2.3%; and sliding skin graft/lateral subcutaneous internal sphincterotomy, 64, 17.2%. The overall urinary retention rate was 16.7%. With hemorrhoidectomy, female sex, presence of preoperative urinary symptoms, diabetes mellitus, need for postoperative analgesics, and more than three hemorrhoids resected were independent risk factors for urinary retention as assessed by multivariate analysis. With fistulectomy, female sex, diabetes mellitus, and intravenous fluids >1,000 ml were independent risk factors for urinary retention. Perioperative fluid restriction, including limiting the administration of intravenous fluids, significantly decreased the incidence of urinary retention (7.9 vs 16.7%, $P<0.0001$). Furthermore, prophylactic analgesic treatment significantly decreased the incidence of urinary retention (7.9 vs 25.6%, $P=0.0005$). CONCLUSIONS: Urinary retention is a common complication after anorectal surgery. It is linked to several risk factors, including increased intravenous fluids and postoperative pain. Perioperative fluid restriction and adequate pain relief appear to be effective in preventing urinary retention in a significant number of patients after anorectal surgery.

Has the true prevalence of voiding difficulty in urogynecology patients been underestimated?

Haylen BT, Krishnan S, Schulz S, Verity L, Law M, Zhou J, Sutherst J

Int Urogynecol J Pelvic Floor Dysfunct. 2006 Apr 5;.

Voiding difficulty has been relatively overlooked as a diagnosis. Previous estimates of its prevalence have generally been no more than 14% with one exception at 24%. The aim of this study is to determine the true prevalence and associations of voiding difficulty using a validated definition [urine flow rate under 10th centile of the Liverpool Nomograms and/or residual urine volume (by transvaginal ultrasound) more than 30 ml]. This study involved 592 women referred for an initial urogynecological assessment including urodynamics. Data were separated according to the presence or absence of voiding difficulty. The prevalence of voiding difficulty was 39%, far higher than previous estimates. It is the third most common urodynamic diagnosis behind urodynamic stress incontinence (USI-72%) and uterine/vaginal prolapse (61%) and ahead of the overactive bladder (13%). Voiding difficulty significantly increased in prevalence with age and increasing grades of all types of uterine/vaginal prolapse. Prolapse appeared to be the main factor in the age

deterioration. Other significant positive relationships with voiding difficulty were prior hysterectomy and prior continence surgery, whilst USI and the symptom and sign of stress incontinence had significant inverse relationships.

Biofeedback is superior to laxatives for normal transit constipation due to pelvic floor dyssynergia.
Chiarioni G, Whitehead WE, Pezza V, Morelli A, Bassotti G
Gastroenterology. 2006 Mar;130(3):657-64.
BACKGROUND & AIMS: Uncontrolled trials suggest biofeedback is an effective treatment for pelvic floor dyssynergia (PFD), a type of constipation defined by paradoxical contraction, or inability to relax, pelvic floor muscles during defecation. The aim was to compare biofeedback to laxatives plus education. METHODS: Patients with chronic, severe PFD were first treated with 20 g/day fiber plus enemas or suppositories up to twice weekly. Nonresponders were randomized to either 5 weekly biofeedback sessions (n = 54) or polyethylene glycol 14.6-29.2 g/day plus 5 weekly counseling sessions in preventing constipation (n = 55). Satisfaction with treatment, symptoms of constipation, and pelvic floor physiology were assessed 6 and 12 months later. The biofeedback group was also assessed at 24 months. Laxative-treated patients were instructed to increase the dose of polyethylene glycol from 14.6 to 29.2 g/day after 6 months. RESULTS: At 6 months, major improvement was reported by 43 of 54 (80%) biofeedback patients vs 12 of 55 (22%) laxative-treated patients (P < .001). Biofeedback's benefits were sustained at 12 and 24 months. Biofeedback also produced greater reductions in straining, sensations of incomplete evacuation and anorectal blockage, use of enemas and suppositories, and abdominal pain (all P < .01). Stool frequency increased in both groups. All biofeedback-treated patients reporting major improvement were able to relax the pelvic floor and defecate a 50-mL balloon at 6 and 12 months. CONCLUSIONS: Five biofeedback sessions are more effective than continuous polyethylene glycol for treating PFD, and benefits last at least 2 years. Biofeedback should become the treatment of choice for this common and easily diagnosed type of constipation.

Does the MONARC transobturator suburethral sling cause post-operative voiding dysfunction? A prospective study.
Barry C, Naidu A, Lim Y, Corsitaans A, Muller R, Rane A
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):30-4. Epub 2005 Aug 11.
The aim of this study was to compare pre-operative and post-operative voiding parameters following insertion of the MONARC transobturator tape (TOT), for treating women with urodynamic stress incontinence. This prospective observational study was conducted at a tertiary referral urogynaecology unit, in North Queensland, involving 83 women who were prospectively assessed pre-operatively and at 6-8 weeks following the procedure. Information collected included patient demographics, concomitant surgery, pre-operative and post-operative symptomatology (using validated questionnaires), and pre-operative and post-operative urodynamic parameters. Parameters used to assess voiding function included symptoms of voiding difficulty (incomplete emptying and irritative symptoms) as well as objective parameters including maximum flow rate (Qmax), adjusted maximum flow rate (Qmaxadj) using the Liverpool nomogram (LN), maximal urethral pressure, and post-void residual (PVR). Pre-operative average Qmax was 23.7 ml/s compared to 21.1 ml/s post-operatively (p=0.064). When the Qmax was adjusted for voided volume using the LN, Qmaxadj was seen to decrease significantly from 26 ml/s to 18 ml/s (p<0.05). Women with PVR>50 ml did not differ significantly pre-operatively and post-operatively, 5/83(6%) vs 7/83 (8.4%) (p=0.75). The number of women with a flow rate <10th centile on LN was 22 (26.5%) pre-operatively vs 29 (34.9%) post-operatively (p=0.21). One (1.2%) post-operatively had voiding dysfunction diagnosed by an abnormal voiding pattern (p=0.728), which was not statistically significant. Objective voiding dysfunction as determined by adjusted flow rates <10th centile LN and >50 ml PVR was seen in four women (4.8%). Adjusted free flow rates are significantly reduced following insertion of the MONARC TOT, as are some symptoms related to voiding dysfunction. Despite this, satisfaction rates remain high with observed voiding dysfunction or objective measures of voiding dysfunction showing no statistical change in the short term. Long-term follow-up is planned at 1 year.

6 – INCONTINENCES 2006 03

Anal sphincter defects and bowel symptoms in women with and without recognized anal sphincter trauma.

Nichols CM, Nam M, Ramakrishnan V, Lamb EH, Currie N
Am J Obstet Gynecol. 2006 Mar 28;.

OBJECTIVE: The purpose of this study was to determine the rate of new bowel symptoms and anal sphincter defects in primiparous women with and without recognized anal sphincter (AS) injury. STUDY DESIGN: One hundred seventeen primiparous women classified with increasing degrees of perineal trauma and 21 controls delivered by cesarean section were enrolled immediately postpartum and demographic and delivery data were collected. At 6 weeks' postpartum, subjects completed a bowel function questionnaire and endoanal ultrasonography was performed. Logistic regression, chi-square, and 2-sample t tests were used for statistical analysis. RESULTS: A significant difference in new bowel symptoms was reported in women with (39%) and without (11%) recognized AS injury (P = .002). AS defects were present in 0%, 15%, 23%, 37%, and 67% of women with C/S, first-, second-, third-, and fourth-degree lacerations, respectively. Combined defects of the internal and external AS were associated with the greatest risk of new bowel symptoms (OR 32.1 [95% CI 9.6-107], P < .001). CONCLUSION: In women with and without recognized AS trauma, new bowel symptoms were strongly correlated with the presence of anatomic AS defects postpartum.

The ability of history and a negative cough stress test to detect occult stress incontinence in patients undergoing surgical repair of advanced pelvic organ prolapse.

Kleeman S, Vassallo B, Segal J, Hungler M, Karram M
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):27-9. Epub 2005 Aug 11.

To determine if a negative preoperative reduction cough stress test is a viable method of detecting occult stress incontinence or urge incontinence in women undergoing surgical repair of advanced pelvic organ prolapse. A retrospective chart review was done on all patients who denied any urinary complaints and had repair of advanced pelvic organ prolapse, grade two or greater, without the addition of an anti-incontinence procedure. Additionally patients had a simple office filling study done at the time of initial examination that failed to show the sign of stress incontinence or detrusor instability. Any urinary dysfunction that developed postoperatively was noted. A total of 53 patients met the inclusion criteria. Of these patients, one patient (1.9%) developed genuine stress incontinence, and one patient complained of urgency (1.9%). Patients without urinary complaints and a negative office filling study, who were present for surgical correction of advanced pelvic organ prolapse, have a low incidence of developing occult stress incontinence. Further work-up would not be cost effective.

Validity of the incontinence severity index: comparison with pad-weighing tests.

Sandvik H, Espuna M, Hunskaar S
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 18;.

The incontinence severity index (ISI) consists of two questions, regarding frequency and amount of leakage. It categorizes urinary incontinence (UI) into slight, moderate, severe, and very severe. The purpose of this study was to test its validity. The index was compared with the results of pad-weighing tests performed by 200 incontinent women referred to a hospital clinic and 103 at a primary care incontinence clinic. Inconvenience was scored by a six-level Likert scale. Mean pad-weighing results (grams per 24 hours, 95% confidence intervals) were 7 (4-10) for slight, 39 (26-51) for moderate, 102 (75-128) for severe, and 200 (131-268) for very severe UI. Spearman's correlation coefficient for pad-weighing results and severity index was 0.58 ($p<0.01$), and inconvenience increased significantly with increasing severity. The ISI demonstrated good criterion validity against 24-h pad tests. Good construct validity was indicated by a clear link between ISI and inconvenience.

Postpartum urinary incontinence: a comparison of vaginal delivery, elective, and emergent cesarean section.

Chin HY, Chen MC, Liu YH, Wang KH

Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 28;.
The aim of this study was to assess the impact of delivery on the pelvic floor and whether cesarean section (C/S) can prevent pelvic floor injury. Five hundred thirty nine women were divided into three groups according to the delivery method adopted: elective C/S, emergent C/S, and vaginal delivery. A urinary incontinence questionnaire survey was conducted around 1 year postpartum. Emergent C/S may be a major risk factor for postpartum urinary incontinence and interfere with the benefit of elective C/S for preventing pelvic floor injury. Hence, not all C/S deliveries can reduce the likelihood of postpartum urinary incontinence. The key lies in whether the C/S is performed before labor.

Complications associated with transobturator sling procedures.
Boyles SH, Edwards R, Gregory W, Clark A
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 28;.
This study aims to determine the complications associated with trans-obturator slings as reported to a national database. We required "MAUDE", a database that collects reports of complications associated with medical devices and which is maintained by the Food and Drug Administration. We searched for complications associated with three different, commercially available trans-obturator slings. We then tabulated the results by type of complication, by date of occurrence, and by type of sling. Between January 2004 and July 2005, 140 reports of 173 complications associated with trans-obturator tapes were reported to the MAUDE database. Previously unreported injuries, such as obturator nerve injuries, large blood losses (>/=600cc), and ischiorectal fossa abscesses, were documented. Serious complications occur with the trans-obturator tape systems, but the rates are unknown due to database limitations. The type of complication appears to differ between devices and this may reflect different implantation systems and different polypropylene mesh formulations. Improved tracking of device complications is necessary to maximize patient safety.

Impact of stress urinary incontinence and overactive bladder on micturition patterns and health-related quality of life.
Oh SJ, Ku JH
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 31;.
We examined the impact of stress urinary incontinence (SUI) and overactive bladder (OAB) on micturition habits and health-related quality of life (QOL). A total of 250 Korean women were included in the study. The Medical Outcomes Study Short Form (SF-36) and the King's Health Questionnaire (KHQ) were used to assess QOL in the patient (SUI, n=158 and OAB, n=92) and control (n=70) groups. A control group was recruited at the Health Promotion Center of our hospital. Each of the dimension scores in the SF-36 represents better health, while that of the KHQ does worse health perception. On the frequency-volume charts, patients with OAB had more nighttime voids than those with SUI (P=0.001). Of the eight domains in the SF-36 questionnaire, four domains were significantly different between the control and OAB groups. Patients with SUI had a significantly lower score on one domain than the controls. Between the SUI and OAB groups, only one domain showed a significant difference. Regarding the KHQ, all domain scores in control subjects were significantly lower than those in the SUI and OAB groups. Between the SUI and OAB groups, the OAB group had higher scores on 'general health perception' and 'sleep/energy disturbances', while the scores of 'physical limitations' and 'severity measures' were higher in the SUI group. Women with OAB have a higher number of nocturic episodes than those with SUI, but the QOL is not less affected by SUI than by OAB. Furthermore, simultaneous disease-specific QOL instruments should be used in the evaluation of urinary incontinence because the generic QOL instrument is not a sensitive tool for measuring QOL in this population.

Trans-obturator surgery for stress urinary incontinence: 1-year follow-up of a cohort of 52 women.
Dobson A, Robert M, Swaby C, Murphy M, Birch C, Mainprize T, Ross S
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 31;.
This study was a 1-year follow-up of a cohort of 52 women who underwent trans-obturator tape (TOT) procedures using Obtape. Follow-up information was available for 45/52 (87%) women. The rate of erosions was 8/52 (15%). Among 34 women examined, 26% experienced tenderness on palpation of operative site, and 72% were objectively cured on pad test. Forty women completed questionnaires (median Incontinence

Impact Questionnaire-7, 0; median Urogenital Distress Inventory-6, 17) and of those, 93% would recommend TOT to a friend. We found a high rate of erosions among our cohort. Our high rate of erosions may be a result of our review of the majority of the cohort, and it is likely related to the specific device used (Obtape). The majority of women were satisfied with the outcome. Before introducing new procedures into widespread clinical practice, it is important to rigorously investigate their outcomes.

Understanding the burden of stress urinary incontinence in Europe: a qualitative review of the literature.
Wein AJ
J Urol. 2004 Dec;172(6 Pt 1):2499.

The "costs" of urinary incontinence for women.
Subak LL, Brown JS, Kraus SR, Brubaker L, Lin F, Richter HE, Bradley CS, Grady D
Obstet Gynecol. 2006 Apr;107(4):908-16.
OBJECTIVE: To estimate costs of routine care for female urinary incontinence, health-related quality of life, and willingness to pay for incontinence improvement. METHODS: In a cross-sectional study at 5 U.S. sites, 293 incontinent women quantified supplies, laundry, and dry cleaning specifically for incontinence. Costs were calculated by multiplying resources used by national resource costs and presented in 2005 United States dollars (2005). Health-related quality of life was estimated with the Health Utilities Index. Participants estimated willingness to pay for 25-100% improvement in incontinence. Potential predictors of these outcomes were examined using multivariable linear regression. RESULTS: Mean age was 56 +/- 11 years; participants were racially diverse and had a broad range of incontinence severity. Nearly 90% reported incontinence-related costs. Median weekly cost (25%, 75% interquartile range) increased from 0.37 dollars (0, 4 dollars) for slight to 10.98 dollars (4, 21 dollars) for very severe incontinence. Costs increased with incontinence severity (P < .001). Costs were 2.4-fold higher for African American compared with white women (P < .001) and 65% higher for women with urge compared with those having stress incontinence (P < .001). More frequent incontinence was associated with lower Health Utilities Index score (mean 0.90 +/- 0.11 for weekly and 0.81 +/- 0.21 for daily incontinence; P = .02). Women were willing to pay a mean of 70 dollars +/- 64 dollars per month for complete resolution of incontinence, and willingness to pay increased with income and greater expected benefit. CONCLUSION: Women with severe urinary incontinence pay 900 dollars annually for incontinence routine care, and incontinence is associated with a significant decrement in health-related quality of life. Effective incontinence treatment may decrease costs and improve quality of life. LEVEL OF EVIDENCE: aistom finco III.

Factors impacting self-care for urinary incontinence.
Milne JL, Moore KN
Urol Nurs. 2006 Feb;26(1):41-51.
INTRODUCTION: Behavioral strategies such as pelvic floor muscle exercises (PFME), bladder retraining, and dietary modifications are generally considered to be the first line of treatment for urinary incontinence (UI). Yet little is understood about the client's abilities/motivation to manage their UI in the home setting. Self-care, the ability of clients to act on their own behalf to achieve and maintain health, is a fundamental component of these strategies. Despite the frequently chronic nature of UI, there is growing evidence that such maintenance of behavioral therapies is sporadic at best. OBJECTIVE: The purpose of this study was to enhance understanding of self-care strategies that individuals with UI employ, the perceived benefits of these strategies, the factors that influence their self-care choices, and the factors that impede or facilitate maintenance of behavioral therapies. METHOD: In this qualitative descriptive study, individual and focus group interviews with community-dwelling participants were conducted to enhance understanding regarding the participants' management of UI at home and why they maintain certain strategies and not others. Data were collected via loosely constructed individual (n=25) and focus group (n=3) interviews to facilitate open discussion of participants' perceptions. RESULTS: Thirty-eight individuals (33 women and 5 men) participated in the study. Analysis of data resulted in a major category of self-care strategies related to UI that was further subcategorized into factors that facilitated PFME and barriers to PFME performance. Factors that facilitated PFME included: (a) realistic goals and expectation, (b) positive affirmation, (c) follow up, and (d) maintaining an exercise routine. Barriers noted were: (a) insufficient information, (b) characteristics of the

exercises, (c) competing interests, (d) financial cost, and (e) minor psychosocial impact. CONCLUSIONS: This study described the self-care strategies that participants with UI had initiated and maintained and additionally explored the perceived facilitators and barriers to self-care choices. Two major themes emerged: (a) self-care efforts were motivated by desire for a normal daily lifestyle and (b) participants were motivated to maintain strategies by the ability to visualize progress and by knowledge that they were progressing. These findings support the need for client-focused teaching that is grounded in the individual's daily realities and goals.

Efficacy of sacral neuromodulation for symptomatic treatment of refractory urinary urge incontinence.
Latini JM, Alipour M, Kreder KJ Jr
Urology. 2006 Mar;67(3):550-3; discussion 553-4.
OBJECTIVES: To determine the efficacy and complications of sacral neuromodulation as therapy for refractory urinary urge incontinence. METHODS: Forty-one patients (mean age 54.3 +/- 15.8 years) with urge incontinence refractory to conservative therapy (ie, pharmacologic, behavioral, biofeedback therapy) were retrospectively evaluated. The patients included those who received permanent one-staged or two-staged InterStim implants. Surgical implantation of the InterStim was performed in patients who experienced a greater than 50% reduction in urge incontinence symptoms, as documented by voiding diaries during a 3 to 7-day test stimulation period. RESULTS: Ninety percent of patients had 50% or greater improvement in presenting symptoms and quality-of-life parameters after InterStim implantation, with a median follow-up of 12 months (interquartile range 12 to 26.5) for single-stage and 4.5 months (interquartile range 1.5 to 12) for staged implants (P = 0.0003 Wilcoxon rank-sum test). Patients with urge incontinence had a significant reduction in mean leaking episodes (from 8.8 to 2.3 per day, P = 0.0001), with a significant decrease in the mean number of pads used (from 4.7 to 0.82 per day, P < 0.0001). No patient experienced operative complications, and postoperative complications were encountered in 29% of patients. CONCLUSIONS: Our results have demonstrated that sacral neuromodulation is a safe and effective approach for the treatment of urinary urge incontinence that is refractory to other more conservative forms of treatment.

Translating overactive bladder questionnaires in 14 languages.
Acquadro C, Kopp Z, Coyne KS, Corcos J, Tubaro A, Choo MS
Urology. 2006 Mar;67(3):536-40.
OBJECTIVES: Overactive bladder (OAB) affects millions of people worldwide. Identifying patients and measuring OAB's impact on symptom severity and patients' health-related quality-of-life is necessary to ensure proper treatment and facilitate communication among patients, clinicians, and caregivers. To accomplish this, the Overactive Bladder questionnaire (OAB-q) and its subsets instruments, the OAB-q Short-Form and the OAB-V8, were developed in U.S. English. To measure the impact of OAB cross-culturally, we performed the linguistic validation of these instruments in Danish, English (Canada), French (Canada and France), Italian (Switzerland), German (Switzerland), Korean, Norwegian, Polish, Portuguese (Brazil), Romanian, Swedish, and Turkish. The linguistic validation was conducted following a rigorous method to ensure conceptual equivalence between the original and its translations. METHODS: In each country, a specialist monitored the process, which included six steps: (1) two forward translations; (2) comparison and reconciliation of the translations; (3) back-translation; (4) comparison of the source and back-translation; (5) review by one urologist or gynecologist; and (6) a comprehension test using patients. RESULTS: The translation of symptom-related adjectives such as "uncomfortable," "sudden," "accidental," "uncontrollable" proved challenging. The subtle differences in the meaning of symptomatic items increased the difficulties to find equivalents. Issues regarding the appropriateness of certain concepts and idiomatic terms emerged during cognitive debriefing. The terms "urge," "desire," "urination," "commute," "drowsy," and "escape routes" were not retained literally and were replaced by colloquial expressions. CONCLUSIONS: The 14 versions of the OAB-q, OAB-q Short-Form, and OAB-V8 were successfully validated linguistically to facilitate data collection cross-culturally and the international comparison of symptom bother and health-related quality of life in patients with OAB.

Artificial Urinary Sphincter: 11-Year Experience in Adolescents with Congenital Neuropathic Bladder.
Lopez Pereira P, Somoza Ariba I, Martinez Urrutia MJ, Lobato Romero R, Jaureguizar Monroe E

Eur Urol. 2006 Mar 3;.
OBJECTIVE: We assess our experience over the last 11 years in the use of an artificial urinary sphincter (AUS) to treat urinary incontinence in children with neuropathic bladders. MATERIALS AND METHODS: Between 1994 and 2005 an AUS was implanted in 35 patients (mean age 14.4; range 11.5-18). Upper urinary tract (UUT) evaluations and urodynamic studies were performed in all patients pre- and post-AUS implantation. Thirteen patients underwent enterocystoplasty combined with AUS placement and 22 underwent AUS implantation alone. RESULTS: An AUS was implanted in 35 patients. Mean follow-up is 5.5 years (range 0.4-11 years). Nine mechanical malfunctions occurred in seven patients (20%). Of the 22 patients who underwent AUS implantation alone, seven (31.2%) eventually required an enterocystoplasty because of unexpected bladder behaviour changes, usually within three years of AUS implantation. In seven patients (20%), a continent catheterisable stoma was made (before or during the follow-up) because of problems with clean intermittent catheterisation (CIC) through the urethra. Three AUS (8.6%) were removed because of sphincter erosion at the bladder neck. All 32 patients (91.4%) with the AUS currently in place are dry, three void their bladders spontaneously, and 29 need CIC. CONCLUSIONS: AUS must be considered as an elective treatment in the surgical management of these patients because it produces better continence rates than other methods. However, these patients need long-term follow-up because their bladder behaviour may undergo unexpected clinically asymptomatic changes that could negatively affect their UUT and require bladder augmentation.

Neosphincter surgery for fecal incontinence: a critical and unbiased review of the relevant literature.
Belyaev O, Muller C, Uhl W
Surg Today. 2006;36(4):295-303.
Up until about 15 years ago the only realistic option for end-stage fecal incontinence was the creation of a permanent stoma. There have since been several developments. Dynamic graciloplasty (DGP) and artificial bowel sphincter (ABS) are well-established surgical techniques, which offer the patient a chance for continence restoration and improved quality of life; however, they are unfortunately associated with high morbidity and low success rates. Several trials have been done in an attempt to clarify the advantages and disadvantages of these methods and define their place in the second-line treatment of severe, refractory fecal incontinence. This review presents a critical and unbiased overview of the current status of neosphincter surgery according to the available data in the world literature.

Prevalence of anal incontinence according to age and gender: a systematic review and meta-regression analysis.
Pretlove SJ, Radley S, Toozs-Hobson PM, Thompson PJ, Coomarasamy A, Khan KS
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Mar 30;.
CONTEXT: Anal incontinence is increasingly being recognised as a significant cause of physical and psychological morbidity with implications for healthcare provision within the community. There is controversy about which population groups are most disadvantaged by this chronic condition. OBJECTIVES: The aim of this study was to evaluate the prevalence of this condition in the community according to age and gender, a systematic review was performed. Data sources: Data were from Embase, Medline, bibliographies of known articles and contact with experts. STUDY SELECTION: Studies were selected if data on anal incontinence could be extracted for participants over 15 years of age and living in the community. DATA EXTRACTION: Data were extracted using a piloted form on participants' characteristics, study quality and incontinence rates. DATA SYNTHESIS: Meta-analysis was used to combine data from multiple studies, and meta-regression evaluated the variation in rates according to age and gender in an analysis adjusted for study quality. RESULTS: There were 29 studies (69,152 participants), of which 5 met over half of the high quality criteria. The rate of solid and liquid faecal incontinence among people aged 15-60 years was 0.8% [95% confidence interval (CI) 0.3-1.9] in men and 1.6% (95% CI 0.8-3.1) in women. In those aged over 60, this increased to 5.1% (95% CI 3.4-7.6) in men and 6.2% (95% CI 4.9-8.0) in women. Meta-regression showed that age had a significant influence on rates of solid and liquid faecal incontinence (p=0.007), but not gender (p=0.368) or study quality (p=0.085). CONCLUSIONS: The rate of solid and liquid faecal incontinence in older people is significantly higher than their younger counterparts. Gender differences in rates did not reach statistical significance.

Diagnosis and management of obstetric anal sphincter injury.
Eogan M, O'herlihy C
Curr Opin Obstet Gynecol. 2006 Apr;18(2):141-146.
PURPOSE OF REVIEW: The purpose of this review is to outline optimum practice in diagnosis and management of obstetric anal sphincter injury. The review focuses briefly on prevention of the problem before outlining diagnosis of sphincter injury as well as immediate and long-term management of patients who have sustained such injuries. RECENT FINDINGS: Increasing vigilance is vital in order that sphincter injury is not overlooked; immediate radiological assessment may play a role in diagnosis. Optimum anal sphincter repair should be followed by oral laxative administration to maintain sphincter integrity. Biofeedback physiotherapy and sacral nerve stimulation show great promise in treatment of persistent symptoms. Optimum mode of delivery in future pregnancies is not clearly defined, and decisions should be individualized. SUMMARY: Because obstetric injury to the anal sphincter mechanism cannot always be prevented, efforts must focus on limiting its occurrence, documenting its severity and providing optimum therapy to women who have sustained it. Management includes routine postnatal review of at-risk women and antenatal assessment in future pregnancies to limit deterioration in continence after future deliveries.

Endoanal ultrasound compared to anorectal manometry for the evaluation of fecal incontinence: a study of the effect these tests have on clinical outcome.
Hill K, Fanning S, Fennerty MB, Faigel DO
Dig Dis Sci. 2006 Feb;51(2):235-40.
Tests for evaluating incontinence include endoanal ultrasound (EUS) and anorectal manometry. We hypothesized that EUS would be superior to anorectal manometry in identifying the subset of patients with surgically correctable sphincter defects leading to an improvement in clinical outcome in these patients. The purpose of this study was to compare these 2 techniques to determine which is more predictive of outcome for fecal incontinence. Thirty-five unselected patients with fecal incontinence were prospectively studied with EUS and anorectal manometry to evaluate the internal anal sphincter (IAS) and external anal sphincter (EAS). EUS was performed with Olympus GFUM20 echoendoscope and a hypoechoic defect in the EAS or IAS was considered a positive test. Anorectal manometry was performed with a standard water-perfused catheter system. A peak voluntary squeeze pressure of < 60 mm Hg in women and 120 mm Hg in men was considered a positive test. All patients were administered the Cleveland Clinic Continence Grading Scale at baseline and at follow-up. Improvement in fecal control was defined as a 25% or greater decrease in continence score. EUS versus manometry were compared with subsequent surgical treatment and outcome. P-values were calculated using Fisher's exact test. Patients (n = 32; 31 females) were followed for a mean 25 months (range 13-46). Sixteen patients had improved symptoms (50%). There was no correlation between EUS or anorectal manometry sphincter findings and outcome. Seven of 14 (50%) patients who subsequently underwent surgery versus 9 of 18 (50%) without surgery improved (P = .578). In long-term follow-up, approximately half of patients improve regardless of the results of EUS or anorectal manometry, or whether surgery is performed.

The Utility of Pudendal Nerve Terminal Motor Latencies in Idiopathic Incontinence.
Ricciardi R, Mellgren AF, Madoff RD, Baxter NN, Karulf RE, Parker SC
Dis Colon Rectum. 2006 Apr 10;.
PURPOSE: Pudendal nerve terminal motor latency testing has been used to test for pudendal neuropathy, but its value remains controversial. We sought to clarify the relationship of pudendal nerve terminal motor latency to sphincter pressure and level of continence in a cohort of patients with intact anal sphincters and normal pelvic floor anatomy. METHODS: We reviewed 1,404 consecutive patients who were evaluated at our pelvic floor laboratory for fecal incontinence. From this group, 83 patients had intact anal sphincters on ultrasound and did not have internal or external rectal prolapse during defecography. These patients were evaluated by pudendal nerve terminal motor latency testing, a standardized questionnaire, and anorectal manometry, which measured resting and squeeze anal pressures. Incontinence scores were calculated by using the American Medical Systems Fecal Incontinence Score. Values were compared by using the Fisher's exact test and Wilcoxon's rank-sum test; and significance was assigned at the P < 0.05 level. RESULTS: 1) Using a 2.2-ms threshold, 28 percent of patients had prolonged pudendal nerve terminal motor latency unilaterally and 12 percent bilaterally. 2) At a 2.4-ms threshold, 18 percent of patients had prolonged

pudendal nerve terminal motor latency unilaterally and 8 percent bilaterally. 3) Bilaterally prolonged pudendal nerve terminal motor latency was significantly associated with decreased maximum mean resting pressure and increased Fecal Incontinence Score, but not decreased maximum mean squeeze pressure, at both 2.2-ms and 2.4-ms thresholds. 4) Unilaterally prolonged pudendal nerve terminal motor latency was not associated with maximum mean resting pressure, maximum mean squeeze pressure, or fecal incontinence score at either threshold. CONCLUSIONS: The majority of incontinent patients with intact sphincters have normal pudendal nerve terminal motor latency. Bilaterally but not unilaterally prolonged pudendal nerve terminal motor latency is associated with poorer function and physiology in the incontinent patient with an intact sphincter.

Relationship Between External Anal Sphincter Atrophy at Endoanal Magnetic Resonance Imaging and Clinical, Functional, and Anatomic Characteristics in Patients With Fecal Incontinence.
Terra MP, Deutekom M, Beets-Tan RG, Engel AF, Janssen LW, Boeckxstaens GE, Dobben AC, Baeten CG, de Priester JA, Bossuyt PM, Stoker J
Dis Colon Rectum. 2006 Apr 5;.
PURPOSE: External anal sphincter atrophy at endoanal magnetic resonance imaging has been associated with poor outcome of anal sphincter repair. We studied the relationship between external anal sphincter atrophy on endoanal magnetic resonance imaging and clinical, functional, and anatomic characteristics in patients with fecal incontinence. METHODS: In 200 patients (mean Vaizey score, 18 (+/-2.9 standard deviation)) magnetic resonance images were evaluated for external anal sphincter atrophy (none, mild, or severe) by radiologists blinded to anorectal functional test results and details from medical history. Subgroups of patients with and without atrophy were compared for medical history, anal manometry, pudendal nerve latency testing, anal sensitivity testing, external anal sphincter thickness, and external anal sphincter defects. Whenever significant differences were detected, we tested for differences between patients with mild and severe atrophy. RESULTS: External anal sphincter atrophy was demonstrated in 123 patients (62 percent): graded as mild in 79 (40 percent), and severe in 44 patients (22 percent). Patients with atrophy were more often female ($P < 0.001$) and older ($P = 0.003$). They had a lower maximal squeeze ($P = 0.01$) and squeeze increment pressure ($P < 0.001$). Patients with severe atrophy had a lower maximal squeeze ($P = 0.003$) and squeeze increment pressure ($P < 0.001$) than patients with mild atrophy. These effects were not attenuated by potential confounding variables. Patients with atrophy could not be identified a priori by other characteristics. CONCLUSIONS: External anal sphincter atrophy at endoanal magnetic resonance imaging was depicted in 62 percent of patients, varying from mild to severe. Because increasing levels of atrophy were associated with impaired squeeze function, further studies are needed to evaluate whether grading atrophy is clinically valuable in selecting patients for anal sphincter repair.

The effects of low-frequency endo-anal electrical stimulation on faecal incontinence: a prospective study.
Healy CF, Brannigan AE, Connolly EM, Eng M, O'sullivan MJ, McNamara DA, Cusack C, Deasy JM
Int J Colorectal Dis. 2006 Mar 17;.
BACKGROUND AND AIMS: Faecal incontinence is a distressing problem that is often not amenable to surgical correction. Chronic low-frequency electrical stimulation of damaged axons is thought to reduce synaptic resistance, increase the size of motor units by axonal sprouting and increase the rate of conduction of the pudendal nerve. The aim of this study was to prospectively evaluate the effect of chronic low-frequency endo-anal electrical stimulation on faecal incontinence using a home-based unit and hospital-supervised therapy. MATERIALS AND METHODS: Forty-eight patients with faecal incontinence completed a prospective randomised trial. Patients were allocated randomly to one of two groups; group 1 was exposed to endo-anal pudendal nerve stimulation daily at home with a portable home unit, group 2 attended the physiotherapy department for endo-anal electrical stimulation under supervision. RESULTS: Continence scores improved significantly after treatment in both groups ($p<0.001$). Both groups showed improved manometric scores, although only group 1 showed significant improvement in both resting and squeeze pressures (mean total resting pressure 184-224 mmHg, $p<0.001$; mean total squeeze pressure 253-337 mmHg, $p<0.001$). This was also reflected by an improvement in quality of life in both groups. CONCLUSIONS: Low-frequency endo-anal electrical stimulation significantly improves continence scores and quality of life in patients with faecal incontinence not amenable to surgical correction. It leads to

improved manometric values when carried out on a daily basis with a portable home unit.

Silence masks prevalence of fecal incontinence.
Kuehn BM
JAMA. 2006 Mar 22;295(12):1362-3. aistom

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Endorectal Ultrasonography in Predicting Rectal Wall Infiltration in Patients With Deep Pelvic Endometriosis: A Modern Tool for an Ancient Disease.
Bahr A, de Parades V, Gadonneix P, Etienney I, Salet-Lizee D, Villet R, Atienza P
Dis Colon Rectum. 2006 Apr 5;.
PURPOSE: This study evaluated the validity of endorectal ultrasonography in predicting rectal infiltration in patients with deep pelvic endometriosis. METHODS: Patients were recruited consecutively in the Department of Surgical Gynecology of Diaconesses Hospital from April 1996 to July 2003. Inclusion criteria were the suspicion of deep pelvic endometriosis on the basis of outpatient history and/or clinical symptoms with a mass palpable on bimanual examination that might infiltrate the rectal wall. There were no exclusion criteria. Endorectal ultrasonography wasperformed by the same investigator with a 7.5-MHz to 10-MHz rigid probe, producing a 360 degrees view of the rectal wall and adjacent areas. We used surgical and histopathologic findings as the "gold standard" to evaluate the validity of endorectal ultrasonography. RESULTS: This study was based on 37 patients (mean age, 35.8 (range, 26-46) years) who underwent surgery. The time between endorectal ultrasonography and surgery ranged from 4 to 529 (mean, 88.7) days. Eight patients had endometriosis nodules penetrating the rectal wall. Endorectal ultrasonography showed sensitivity, specificity, a positive predictive value, and a negative predictive value of 87.5, 97, 87.5, and 97 percent, respectively, in the diagnosis of infiltration of the rectal wall by endometriosis. CONCLUSIONS: Endorectal ultrasonography is a reliable technique for visualizing rectal infiltration in patients with deep pelvic endometriosis. It should be more widely used by gynecologists because knowing about rectal infiltration before surgery is fundamental to defining the best possible surgical approach.

Chronic pain couples: Perceived marital interactions and pain behaviours.
Newton-John TR, Williams AC
Pain. 2006 Mar 22;.
Patient adjustment to chronic pain is well known to be influenced by the spouse and his or her response to patient expressions of pain. However, these responses do not occur in a vacuum, and the aim of the present study was to investigate patient-spouse interactions in chronic pain in detail. Ninety-five patient-spouse dyads completed questionnaires relating to mood, marital satisfaction and communication, and 80 couples also took part in semi-structured interviews. Data were analysed using quantitative and qualitative methods. Results showed that spouses of chronic pain patients reported engaging in a far wider repertoire of responses to pain behaviours than has been recognised to date. New response categories of 'hostile-solicitous' and 'observe only' were identified. Patients generally interpreted solicitous responses less favourably than spouse responses which encouraged task persistence. Male spouses identified fewer pain-related situations than female spouses but were more likely to report responding solicitously to patient pain behaviours. Marital satisfaction was significantly higher in patients who rated themselves as talking more frequently about their pain. Spouse perceived frequency of pain talk was not related to spouse marital satisfaction. There were no gender differences in marital satisfaction. The results of this study challenge some of the assumptions that have been held regarding chronic pain patient-spouse interactions.

Caecocystoplasty for intractable interstitial cystitis: long-term results.
Wein AJ
J Urol. 2004 Dec;172(6 Pt 1):2495-6.

What is the pain of interstitial cystitis like?
FitzGerald MP, Brensinger C, Brubaker L, Propert K
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):69-72. Epub 2005 Jul 2.

To describe the characteristics of pain experienced by patients with interstitial cystitis (IC) in terms of pain site, severity, and character, we performed a secondary analysis of data from the IC database (ICDB), which was a prospective, longitudinal, cohort study of IC patients. We analyzed the cross-sectional baseline data from 629 patients who had a completed baseline symptom questionnaire. Patients answered questions about whether they had pain or discomfort associated with urinary symptoms over the past 4 weeks and if so, about the location, characteristics, intensity, and frequency of their pain. Logistic regression examined associations between pain location and the presence of urinary symptoms. Analyses were performed using SAS version 8.2 (SAS Institute, Cary, NC, USA) and considered significant at the 5% level. Five hundred and eighty-nine (94%) patients with a mean age of 45 years (SD 14 years) reported baseline pain or discomfort associated with their urinary symptoms. The most common baseline pain site was lower abdominal (80%), with urethral (74%) and low back pain (65%) also commonly reported. The majority of patients described their pain as intermittent, regardless of the pain site. Most patients reported moderate pain intensity, across all pain sites. There was a statistically significant link between pain in the urethra, lower back, and lower abdomen, and urinary symptoms. Patients with IC report pain at several sites other than the bladder, possibly arising from the previously well-described myofascial abnormalities of pelvic floor and abdominal wall present in patients with IC and other chronic pelvic pain syndromes.

In situ methotrexate injection for treatment of recurrent endometriotic cysts.
Agostini A, De Lapparent T, Collette E, Capelle M, Cravello L, Blanc B
Eur J Obstet Gynecol Reprod Biol. 2006 Mar 9;.
OBJECTIVE: Ovarian endometrioma recurrence is frequent. Conventional treatment of ovarian endometrioma is by surgical cystectomy. We proposed an alternative medical treatment for recurrent ovarian endometrioma: cyst aspiration followed by in situ methotrexate injection. STUDY DESIGN: From January 2002 to May 2003, 14 patients with recurrent homolateral ovarian endometrioma underwent transvaginal ultrasound guided cyst puncture and aspiration followed by methotrexate injection, whilst under general anasthesia. Recurrence rate during follow up was evaluated. RESULTS: No complication was reported. After a mean follow up of 20+/-5 month (min: 13, max: 29), four recurrences were diagnosed (28.6%). Two asymptomatic recurrences were not treated and two painful recurrences underwent a second cyst drainage with methotrexate injection. CONCLUSIONS: In situ methotrexate injection is a simple, effective and an interesting alternative to surgical treatment in women with recurrent homolateral ovarian endometrioma.

Endometriosis in Patients with Chronic Pelvic Pain: Is Staging Predictive of the Efficacy of Laparoscopic Surgery in Pain Relief?
Milingos S, Protopapas A, Kallipolitis G, Drakakis P, Loutradis D, Liapi A, Antsaklis A
Gynecol Obstet Invest. 2006 Mar 15;62(1):48-54.
Background/Aims: Endometriosis is considered an important cause of chronic pelvic pain. Despite its high prevalence, controversy still exists regarding the true association between the extent of endometriosis and the severity of symptoms. We conducted this prospective study to investigate the association between the stage of endometriosis and type and severity of pain, and to evaluate the efficacy of laparoscopic surgery in pain relief. Methods: Ninety-five patients complaining of chronic pain were diagnosed with endometriosis and were treated with laparoscopic surgery. The severity of pain was assessed in patients with an endometriosis AFS (American Fertility Society) score less than 16 (group 1) and those with an AFS score greater than or equal to 16 (group 2), preoperatively and 6 months after surgery, using a visual pain scale. Any reduction in pain scores by 2 points or more was considered to be an improvement. Results: Dysmenorrhea and deep dyspareunia, were significantly more frequent in patients of group 2. Preoperative pain scores were significantly higher for dysmenorrhea ($p = 0.0022$) and deep dyspareunia ($p < 0.0001$) but not for non-menstrual pain in group 2. Deep dyspareunia was correlated with the presence of dense pelvic adhesions. After surgery, dysmenorrhea improved in 43% of cases in group 1, vs. 66% of cases in group 2 ($p = 0.0037$). For deep dyspareunia, improvement was reported by 33% in group 1, vs. 67% in group 2 ($p = 0.074$). Improvement in non-menstrual pain was not significantly different between the two groups (67% vs. 56%). Conclusions: Advanced endometriosis is more frequently related to dysmenorrhea and deep dypareunia in comparison to early disease. Laparoscopic surgery may offer relief or improvement in the majority of patients with endometriosis and chronic pelvic pain. Cases with advanced disease seem to benefit the most.

Measuring health-related quality of life in patients with irritable bowel syndrome: can less be more?
Lackner JM, Gudleski GD, Zack MM, Katz LA, Powell C, Krasner S, Holmes E, Dorscheimer K
Psychosom Med. 2006 Mar-Apr;68(2):312-20.
OBJECTIVE: This study assessed the ability of a brief, well-validated generic health-related quality of life (HRQOL) measure to characterize the symptom burden of patients with irritable bowel syndrome (IBS) with reference to a large survey of U.S. community-living adults. METHODS: One hundred four Rome II diagnosed patients with IBS completed measures of pain, psychological dysfunction (neuroticism, somatization, distress, abuse), and HRQOL (SF-36, IBS-QOL, CDC HRQOL-4) during baseline assessment of a National Institutes of Health-funded clinical trial. The four-item CDC HRQOL-4 assesses global health and the number of days in the past 30 days resulting from poor physical health, poor mental health, and activity limitation. RESULTS: Patients with IBS averaged 15 of 30 days with poor physical or mental health. These average overall unhealthy days exceeded those of respondents with arthritis, diabetes, heart disease/stroke, cancer, and class III obesity (body mass index > or =40 kg/m2) from the U.S. survey. Fifteen percent of patients identified musculoskeletal disorders, not IBS symptoms, as the major cause of their activity limitation. Overall unhealthy days among patients with IBS varied directly with IBS symptom severity, abuse, pain, and psychological distress. Controlling for personality variables that influence perception and reporting HRQOL did not diminish the statistical significance of associations between the CDC HRQOL-4 and other study measures. CONCLUSIONS: The CDC HRQOL-4 is a psychometrically sound, rapid, and efficient instrument whose HRQOL profile reflects the symptom burden of moderate-to-severe IBS, is sensitive to treatment effects associated with cognitive behavior therapy, and is not a proxy for personality variables identified as potential confounders of HRQOL. HRQOL is related to but not redundant with psychological distress.

Quality of life of patients with irritable bowel syndrome is low compared to others with chronic diseases.
Ten Berg MJ, Goettsch WG, van den Boom G, Smout AJ, Herings RM
Eur J Gastroenterol Hepatol. 2006 May;18(5):475-81.
BACKGROUND: Irritable bowel syndrome (IBS) is a prevalent functional gastrointestinal dysmotility disorder. This study aimed to estimate the burden of illness of a Dutch population of community dwelling patients suffering from IBS. METHODS: Patients identified at community pharmacies, using mebeverine as a proxy for IBS, were administered a questionnaire regarding (1) the Rome II criteria for IBS, (2) predominant type of stool during complaints, (3) severity of symptoms (abdominal pain and discomfort), (4) generic and disease-specific quality of life, (5) current health status (utilities), and (6) loss of productivity. RESULTS: Three hundred and seventy-five users of mebeverine were identified of which 169 patients met the Rome II criteria for IBS, and were included in the study. More than half (58%) of the IBS patients reported severe abdominal pain and complaints. Generic and disease-specific quality of life outcomes showed impairment on all dimensions. Current health status in IBS patients, calculated on the basis of the EQ-5D VAS, was perceived on 62% of full health (95% CI, 60-66%). A calculation of health status in these patients based on the SF-6D algorithm showed a comparable score of 0.67 (1 is full health; 95% CI, 0.65-0.68). The loss in productivity of IBS patients was 1.8 days (95% CI, 1.1-2.5) per month. CONCLUSIONS: This study confirmed that the burden of illness of IBS in the Netherlands is substantial. IBS patients treated with mebeverine experienced low quality of life and suffered from severe pain. Based on these results, more attention for the diagnosis and treatment of IBS seems to be justified.

8 – FISTULAE 2006 03
Vesicovaginal fistula: obstetric causes.
Ramphal S, Moodley J
Curr Opin Obstet Gynecol. 2006 Apr;18(2):147-51.
PURPOSE OF REVIEW: Obstetric fistula has a devastating impact on the lives of women in poor countries. Currently, there is an international campaign by the World Health Organisation, United Nations Population Fund and other bodies to address this problem. This article reviews recent literature and highlights the paucity of evidence-based data. RECENT FINDINGS: Articles on the pathophysiology, co-morbidities and sequelae including physical injury to 'multiorgan systems' and social consequences associated with obstetric

fistula, are discussed. In particular, the devastating social, economic and psychological effects on the health and well-being, reintegration and rehabilitation are addressed. There is a need for prevalence and incidence studies to measure the extent of this problem. The creation of well-equipped fistula centres with multidisciplinary teams to evaluate patients should be the aim. Expert surgeons and optimal databases with personnel to do research will benefit patients. SUMMARY: Prevention should involve alleviation of poverty and improvement in education, maternity services and health. Research on issues such as persistent stress incontinence following fistula closure, management of reduced bladder capacity, best technique for fistula repair, role of vaginoplasty, role of early repair in selective obstetric fistula, future reproductive function, dermatological management, and social and cultural issues must be done to improve women's health.

Rectovaginal fistula after Posterior Intravaginal Slingplasty and polypropylene mesh augmented rectocele repair.
Hilger WS, Cornella JL
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):89-92. Epub 2005 Jul 29.
Posterior Intravaginal Slingplasty and mesh augmented rectocele repairs are procedures promoted for correction of vaginal relaxation. There is little data on the complications of these procedures alone or in combination. The first report of rectovaginal fistula after Posterior Intravaginal Slingplasty with graft augmented rectocele repair is presented. A 60-year-old female developed a rectovaginal fistula 3 months after undergoing a Posterior Intravaginal Slingplasty and mesh augmented rectocele repair for prolapse. Two attempts at correcting the fistula failed and there was a recurrence of her vault prolapse. She may now require diverting colostomy and repeat repair of her vault prolapse. The case report highlights the difficulties in treating a rectovaginal fistula that developed after Posterior Intravaginal Slingplasty and mesh augmented rectocele repair for vaginal vault prolapse. More data regarding complications associated with use of these procedures is needed prior to widespread use.

Imaging of fistula in ano.
Halligan S, Stoker J
Radiology. 2006 Apr;239(1):18-33.
Fistula in ano is a common condition that often recurs despite seemingly adequate surgery, usually because of infection that was missed at surgery. It is now increasingly recognized that preoperative imaging can help identify infection that would have otherwise gone unidentified. In particular, magnetic resonance (MR) imaging findings have been shown to influence surgery and markedly diminish the chance of recurrence; thus, preoperative imaging will become increasingly routine in the future. In this article, the authors describe the pathogenesis, classification, and imaging of fistula in ano, with an emphasis on MR imaging. Most important, the authors describe how the radiologist is well placed to answer the surgical riddles that must be solved for treatment to be effective.

Etanercept: effective in the management of hidradenitis suppurativa.
Cusack C, Buckley C
Br J Dermatol. 2006 Apr;154(4):726-9.
BACKGROUND: Hidradenitis suppurativa (HS) is a chronic suppurative condition which is poorly responsive to treatment and is characterized by significant morbidity. Successful treatment of HS in patients treated with infliximab for concomitant Crohn's disease has been reported. More recent reports of positive responses to infliximab [an antitumour necrosis factor (TNF)-alpha agent] in patients who have HS but not Crohn's disease are encouraging. OBJECTIVES: TNF-alpha is implicated in many inflammatory disorders and we wished to determine the efficacy of subcutaneous etanercept, a competitive inhibitor of TNF-alpha in the control of HS symptoms. METHODS: We commenced six patients with severe, recalcitrant HS on etanercept (25 mg subcutaneously twice weekly in all cases). All patients had a normal chest X-ray and negative purified protein derivative test prior to treatment and were closely monitored throughout the treatment period for signs of infection. Patients self-assessed their disease activity and completed Dermatology Life Quality Index (DLQI) questionnaires immediately before the introduction of therapy and 24 weeks later in the case of four patients, and 12 weeks later in the case of two others. All patients were asked to estimate the time lapse between commencement of treatment and initial response. RESULTS: Treatment was well tolerated by all patients with no reported adverse reactions. A marked reduction in self-reported disease activity (mean reduction of

61% at 24 weeks), in DLQI scores (mean reduction of 64% at 24 weeks) and in relapse rates occurred. All patients rated etanercept as their most effective treatment to date. CONCLUSIONS: Our results show the effectiveness of etanercept in this group of patients with particularly challenging disease. Etanercept, unlike infliximab, may be administered subcutaneously, rendering costly day-case admissions unnecessary.

Microbiological analysis and endoanal ultrasonography for diagnosis of anal fistula in acute anorectal sepsis.
Toyonaga T, Matsushima M, Tanaka Y, Shimojima Y, Matsumura N, Kannyama H, Nozawa M, Hatakeyama T, Suzuki K, Yanagita K, Tanaka M
Int J Colorectal Dis. 2006 Apr 7;.
BACKGROUND AND AIMS: Treatment of anorectal sepsis requires prompt surgical drainage, but it is important to identify any associated anal fistula for preventing recurrence. We evaluated whether microbiological analysis and/or endoanal ultrasonography could be used to predict anal fistula in patients with acute anorectal sepsis. METHODS: Five hundred fourteen consecutive patients with acute anorectal sepsis were studied. Clinical data, digital examination findings, endosonographic findings, and results of microbiological analysis were compared with definitive surgical findings of the presence or absence of anal fistula. RESULTS: Anorectal abscess with anal fistula was found in 418 patients, and anorectal abscess without anal fistula was found in 96 patients. Microbiological examination showed that Escherichia coli, Bacteroides, Bacillus, and Klebsiella species were significantly more prevalent in patients with fistula ($P<0.01$), and coagulase-negative Staphylococci and Peptostreptococcus species were significantly more prevalent in patients without fistula ($P<0.01$). Results of endoanal ultrasonography were concordant with the definitive surgical diagnosis in 421 (94%) of 448 patients studied. CONCLUSION: Acute anorectal sepsis due to colonization of "gut-derived" microorganisms rather than "skin-derived" organisms is more likely to be associated with anal fistula. When the microbiological analysis yields gut-derived bacteria, but no fistula has been found in the initial drainage operation, repeat examinations during a period of quiescence, including careful digital assessment and meticulous endosonography, are warranted to identify a potentially missed anal fistula.

Long-term outcome following mucosal advancement flap for high perianal fistulas and fistulotomy for low perianal fistulas Recurrent perianal fistulas: failure of treatment or recurrent patient disease?
van der Hagen SJ, Baeten CG, Soeters PB, van Gemert WG
Int J Colorectal Dis. 2006 Mar 15;.
BACKGROUND: In this study, we determined the long-term outcome of perianal fistulas treated with mucosal advancement flap (MF) or fistulotomy (FT). METHODS: One hundred three patients with perianal fistulas were treated by MF for high fistulas or FT for low fistulas and were retrospectively assessed by case-note review and examined at the out-patient clinic. The localization and time of recurrence of the fistula were recorded. RESULTS: Forty-one patients [median follow-up of 72 months (range 48-99)] were treated by an MF, and 62 patients [median follow up of 75 months (range 48-99)] were treated by FT. After 12, 48, and 72 months, the fistula had recurred in 9 (22%), 26 (63%), and 26 (63%) patients of the MF group and in 4 (7%), 16 (26%), and 24 (39%) patients of the FT group, respectively. Eighteen (69%) of the recurrences in the MF group and ten (33%) of the FT group occurred within 24 months after surgery ($p=0.01$). Four (15%) of the recurrences in the MF group and 13 (54%) of the recurrences in the FT group were present in a different localization ($p=0.007$). CONCLUSION: The success rate of both FT and MF techniques decreases with time. Recurrence appears to be caused by failure of treatment and by recurrent patient disease.

Mucinous adenocarcinoma associated with fistula in ano: report of a case.
Sierra EM, Villanueva Saenz E, Martinez PH, Rocha JR
Tech Coloproctol. 2006 Mar 15;.
We present a case of the rare occurrence of a mucus-secreting adenocarcinoma originating in an anal gland. A 37-year-old diabetic man had an anal fistulotomy 16 years before. He had four ischiorectal abscesses in a 6- month period. A seton was inserted in a complex fistula tract in the left anterior lateral aspect. Due to delayed healing, a new surgical exploration was carried out; pathological analysis of the curetted mucinous tissue revealed a mucoid adenocarcinoma. Surgical resection is the first choice of curative treatment, and additional treatments include chemotherapy, radiotherapy and brachytherapy.

9 – BEHAVIOUR 2006 03

Autonomic response to standardized stress predicts subsequent disease activity in ulcerative colitis.
Maunder RG, Greenberg GR, Nolan RP, Lancee WJ, Steinhart AH, Hunter JJ
Eur J Gastroenterol Hepatol. 2006 Apr;18(4):413-20.
OBJECTIVES: Prospective studies of the role of psychological stress in ulcerative colitis are inconsistent or show a modest relationship. We tested the hypothesis that individual differences in autonomic function are associated with differences in the disease course of ulcerative colitis. METHODS: The spectral power of heart rate variability, an indirect marker of autonomic function, was measured during a standardized stress protocol in 93 ulcerative colitis patients. Patients were categorized as typical or atypical by an increase or decrease, respectively, in the high frequency band of heart rate variability from a period of acute stress to recovery 5 min later. Disease activity was measured at baseline (time 1) and a second time point (time 2) 7-37 months later. RESULTS: An atypical pattern of heart rate variability at time 1, present in 29% of patients, was associated with lower mean disease activity at time 2 (atypical, 0.56+/-0.93; typical, 2.27+/-2.56, P=0.001). The contribution of heart rate variability pattern to explaining time 2 disease activity was independent of the contributions of other factors that differed between groups, including time 1 disease activity and lifetime corticosteroid use. DISCUSSION: An atypical pattern of autonomic reactivity may be a marker of individual differences in stress regulation that has prognostic significance in ulcerative colitis.

Analysis of 649 cases of sexual assault.
Eyvazzadeh AD, Wong G
Obstet Gynecol. 2006 Apr;107(4 Suppl):103S-4S.

Women's health 18 years after rupture of the anal sphincter during childbirth: II. Urinary incontinence, sexual function, and physical and mental health.
Otero M, Boulvain M, Bianchi-Demicheli F, Floris LA, Sangalli MR, Weil A, Irion O, Faltin DL
Am J Obstet Gynecol. 2006 Mar 28;.
OBJECTIVE: We studied maternal health 18 years postpartum in women having sustained an anal sphincter tear and controls. STUDY DESIGN: We assessed symptoms with the short form of the urogenital distress inventory, the female sexual function index, and physical and mental health with the Short Form-12 summary scales. RESULTS: Women with a sphincter tear had no increased risk of urinary symptoms (54 of 251, 22%, versus 51 of 273, 19%, risk ratio 1.2, 95% confidence interval 0.8 to 1.6) or sexual symptoms (84 of 223, 38%, versus 90 of 230, 39%, risk ratio 1.0, 95% confidence interval 0.8 to 1.2). Their physical health was also similar to controls (mean score +/- SD, 47 +/- 7 versus 47 +/- 6), whereas their mental health was slightly lower (score 45 +/- 6 versus 46 +/- 6, difference 1, 95% confidence interval 0 to 2, P = .05). CONCLUSION: Women who sustained an anal sphincter tear have no more urinary or sexual symptoms 18 years after delivery.

Psychobiologic Correlates of the Metabolic Syndrome and Associated Sexual Dysfunction.
Corona G, Mannucci E, Schulman C, Petrone L, Mansani R, Cilotti A, Balercia G, Chiarini V, Forti G, Maggi M
Eur Urol. 2006 Mar 13;.
OBJECTIVES: The association of low testosterone level and erectile dysfunction (ED) with metabolic syndrome (MS) is receiving increasing attention. The present study determined the psychobiologic characteristics of sexual dysfunction (SD) associated with MS (as defined by the National Cholesterol Education Program's Adult Treatment Panel III criteria) in a series of 803 consecutive male outpatients. METHODS: Several hormonal, biochemical, and instrumental (penile Doppler ultrasound [PDU]) parameters were studied, along with general psychopathology scores (Middlesex Hospital Questionnaire modified [MHQ]). The Structured Interview on Erectile Dysfunction (SIEDY) was also applied. RESULTS: Among the 236 patients (29.4%) diagnosed as having a MS, 96.5% reported ED, 39.6% hypoactive sexual desire (HSD), 22.7% premature ejaculation, and 4.8% delayed ejaculation. Patients with MS were characterised by greater subjective (as assessed by SIEDY) and objective (as assessed by PDU) ED and by greater somatised anxiety than the rest of the sample. The prevalence of overt hypogonadism (total testosterone

<8nM) was significantly higher in patients with MS. Among MS components, waist circumference and hyperglycaemia were the best predictors of hypogonadism. Hypogonadal patients with MS showed higher gonadotropin and lower free testosterone levels, suggesting a primary hypogonadism. Among patients with MS, hypogonadism was present in 11.9% and 3.8% in the rest of the sample (p<0.0001) and was associated with typical hypogonadism-related symptoms, such as hypoactive sexual desire, low frequency of sexual intercourse, and depressive symptoms. CONCLUSIONS: Our data suggest that MS is associated with a more severe ED and induces somatisation. Furthermore, MS is associated with a higher prevalence of hypogonadism in patients with SD. The presence of hypogonadism can further exacerbate the MS-associated sexual dysfunction, adding the typical hypogonadism-related symptoms (including HSD, 66.7%). Recognising MS associated with hypogonadism is important for both sexual and general health and its serious potential associated risks.

Impact of tension-free vaginal tape on sexual function: results of a prospective study.
Ghezzi F, Serati M, Cromi A, Uccella S, Triacca P, Bolis P
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):54-9. Epub 2005 Jun 23.
The purpose of this study was to prospectively assess the impact of a TVT insertion for the treatment of stress urinary incontinence (SUI) on coital incontinence and overall sexual life. Sexually active women with pure SUI and without concomitant pelvic organ prolapse scheduled for TVT procedure completed a sexual function questionnaire at baseline and 6 months after surgery. Fifty-three patients were enrolled. Preoperatively 23 (43.4%) women experienced urine leakage during intercourse, 21 (91%) during penetration and 2 (9%) on orgasm. The objective cure rate for SUI was 98%. Coital incontinence was cured in 20 of 23 patients (87%). Thirty-three (62.2%) women reported no change in sexual function after surgery and 18 (34%) reported an improvement. Of the latter, 17 (94%) were of those cured from coital incontinence. No significant difference in the incidence of dyspareunia was found postoperatively. Two patients (3.8%) reported intercourse to be worse following surgery, one because of a vaginal erosion and one cited de novo anorgasmia as the main reason.

The impact of pelvic organ prolapse on sexual function in women with urinary incontinence.
Ozel B, White T, Urwitz-Lane R, Minaglia S
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):14-7. Epub 2005 Jun 22.
The aim of the study is to evaluate the impact of pelvic organ prolapse (POP) on sexual function in women with urinary incontinence (UI). In this retrospective, case-cohort study, we reviewed the medical records of all women evaluated for UI between March and November 2003. All patients completed the short forms of the Urogenital Distress Inventory, Incontinence Impact Questionnaire, and Pelvic Organ Prolapse/Urinary Incontinence Sexual Questionnaire. Women with stage two or greater POP, as determined by the pelvic organ prolapse quantification (POPQ) system, were compared to women with stage 0 or 1 POP. Sixty-nine women with POP and 47 women without POP were included. Patient demographics did not differ between the two groups. Women with POP were significantly more likely to report absence of libido (53% versus 30%, P=0.02), lack of sexual excitement during intercourse (46% versus 27%, P=0.05), and that they rarely experienced orgasm during intercourse (49% versus 30%, P=0.05). In conclusion, women with POP in addition to UI are more likely to report decreased libido, decreased sexual excitement, and difficulty achieving orgasm during intercourse when compared to women with UI alone.

Sexual activity and lower urinary tract symptoms.
Moller LA, Lose G
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):18-21. Epub 2005 Jul 29.
Lower urinary tract symptoms (LUTS) have a profound impact on women's physical, social, and sexual well being. The LUTS are likely to affect sexual activity. Conversely, sexual activity may affect the occurrence of LUTS. The aims of the study were to elucidate to which extent LUTS affect sexual function and to which extent sexual function affect LUTS in an unselected population of middle-aged women in 1 year. A questionnaire was sent to 4,000 unselected women aged 40-60 years. All 2,284 women (57.1%) who completed a baseline questionnaire and a similar questionnaire 1-year later were included. Data comprised age, occurrence of LUTS, hormonal status, and sexual activity. A multiple conditional logistic regression model was used to analyze the relationship between sexual activity and LUTS adjusted for age and

hormonal status. At baseline and 1-year later, 49 women (2.2%) had no sexual intercourse, and 298 women (13.0%) either ceased or resumed sexual relationship. Compared to women having sexual relationship, a statistically significant three to sixfold higher prevalence of LUTS was observed in women with no sexual relationship. In women who ceased sexual relationship an increase, although not statistically significant, in the de novo occurrence of most LUTS was observed. In women who resumed sexual relationship an insignificantly decrease in LUTS was observed. In women whose sexual activity was unchanged no change in the occurrence of LUTS was observed. Our study confirms a close association between sexual activity and the occurrence of LUTS. A hypothesis that sexual inactivity may lead to LUTS and vice versa cannot be rejected.

Female sexual dysfunction: principles of diagnosis and therapy.
Pauls RN, Kleeman SD, Karram MM
Obstet Gynecol Surv. 2005 Mar;60(3):196-205.
Female sexual dysfunction is a common health problem, affecting approximately 43% of women. Female sexual dysfunction is defined as disorders of libido, arousal, orgasm, and sexual pain that lead to personal distress or interpersonal difficulties. It is frequently multifactorial in etiology, with physiological and psychologic roots. Approaching female sexual dysfunction involves an open discussion with the patient, followed by a thorough physical examination and laboratory testing. Therapy consists of patient and partner education, behavior modification, and may include individualized pharmacotherapy. Ultimately, as awareness and research in the field grows, it is hoped that a better understanding of the physiology and pharmacology of the female sexual response will be achieved.

Sexual activity and function in middle-aged and older women.
Addis IB, Van Den Eeden SK, Wassel-Fyr CL, Vittinghoff E, Brown JS, Thom DH
Obstet Gynecol. 2006 Apr;107(4):755-64.
OBJECTIVE: Data on the sexual activity of middle-aged and older women are scant and vary widely. This analysis estimates the prevalence and predictors of sexual activity and function in a diverse group of women aged 40-69 years. METHODS: The Reproductive Risk Factors for Incontinence Study at Kaiser (RRISK) was a population-based study of 2,109 women aged 40-69 years who were randomly selected from long-term Kaiser Permanente members. Women completed self-report questionnaires on sexual activity, comorbidities, and general quality of life. Logistic and linear regression and proportional odds models were used when appropriate to identify correlates of sexual activity, frequency, satisfaction, and dysfunction. RESULTS: Mean age was 55.9 (+/- 8) years and nearly three fourths of the women were sexually active. Of the sexually active women, 60% had sexual activity at least monthly, approximately two thirds were at least somewhat satisfied, and 33% reported a problem in one or more domains. Monthly or more frequent sexual activity was associated with younger age, higher income, being in a significant relationship, a history of moderate alcohol use, and lower body mass index (BMI) (all $P < .05$). Satisfaction with sexual activity was associated with African-American race, lower BMI, and higher mental health score (all $P < .05$). More sexual dysfunction was associated with having a college degree or greater, poor health, being in a significant relationship, and a low mental health score (all $P < .05$). CONCLUSION: Middle-aged and older women engage in satisfying sexual activity, and one third reported problems with sexual function. Demographic factors as well as some issues associated with aging can adversely affect sexual frequency, satisfaction, and function. LEVEL OF EVIDENCE: II-3.

When does a "less than perfect" sex life become female sexual dysfunction?
Gierhart BS
Obstet Gynecol. 2006 Apr;107(4):750-1.

10 – MISCELLANEOUS 2006 03
Current antibiotic therapy for isolated urinary tract infections in women.
Kallen AJ, Welch HG, Sirovich BE
Arch Intern Med. 2006 Mar 27;166(6):635-9.
BACKGROUND: Sulfa antibiotics, such as a combination product of trimethoprim and sulfamethoxazole,

have traditionally been the drugs of choice for urinary tract infections (UTIs) and remained the most common treatment as recently as a decade ago. However, increasing sulfa resistance among Escherichia coli may have led to changes in prescribing practices. METHODS: We used the 2000-2002 National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey to obtain nationally representative data on antibiotics prescribed for women with isolated outpatient UTIs following visits to physicians' offices, hospital clinics, and emergency departments (n = 2638). Logistic regression was used to determine predictors of quinolone use. RESULTS: Quinolones were more commonly prescribed than sulfa antibiotics in each year evaluated. In the most recent year of data, quinolones were prescribed in 48% and sulfas in 33% of UTI visits (P<.04). Quinolones were significantly more likely to be prescribed to older patients and in visits occurring in the Northeast; however, no difference in quinolone prescribing was seen when evaluating insurance status, setting, race, ethnicity, health care provider type, and year. Approximately one third of the quinolones used were broader-spectrum agents. CONCLUSIONS: Quinolones have surpassed sulfas as the most common class of antibiotic prescribed for isolated outpatient UTI in women. Few significant predictors of quinolone use exist, suggesting that the increase is not confined to a certain subset of patients. This pervasive growth in quinolone use raises concerns about increases in resistance to this important class of antibiotics.

Robotic Radical Prostatectomy with the "Veil of Aphrodite" Technique: Histologic Evidence of Enhanced Nerve Sparing.
Savera AT, Kaul S, Badani K, Stark AT, Shah NL, Menon M
Eur Urol. 2006 Mar 9;.

Positive Surgical Margins in Robotic-Assisted Radical Prostatectomy: Impact of Learning Curve on Oncologic Outcomes.
Atug F, Castle EP, Srivastav SK, Burgess SV, Thomas R, Davis R
Eur Urol. 2006 Mar 10;.

Soluble Fas-A promising novel urinary marker for the detection of recurrent superficial bladder cancer.
Svatek RS, Herman MP, Lotan Y, Casella R, Hsieh JT, Sagalowsky AI, Shariat SF
Cancer. 2006 Apr 15;106(8):1701-7.

Urethral adenocarcinoma mimicking urethral caruncle.
Cimentepe E, Bayrak O, Unsal A, Koc A, Ataoglu O, Balbay MD
Int Urogynecol J Pelvic Floor Dysfunct. 2006 Jan;17(1):96-8. Epub 2005 Apr 15.

Lower urinary tract dysfunction in ambulatory patients with incomplete spinal cord injury.
Patki P, Woodhouse J, Hamid R, Shah J, Craggs M
J Urol. 2006 May;175(5):1784-7.
PURPOSE: We evaluated urinary tract dysfunction in individuals with spinal injury who remained able to ambulate. We observed changes with time in urological management. MATERIALS AND METHODS: All patients attending outpatient clinics with traumatic, incomplete (American Spinal Injury Association grades D and E) spinal cord injury during a 2-year period were identified. All patients had their hospital notes reviewed retrospectively and salient urological data extracted. RESULTS: A total of 43 men and 21 women were identified during this period. Mean age was 46 years (range 18 to 70). Mean followup was 7 years (range 1 to 18). At the time of inpatient discharge 40 of the 64 patients (62.5%) could void spontaneously, 20 required CSIC and 4 had a suprapubic catheter. In 19 of these 40 patients (47.5%) who had been initially assessed as having a bladder that was safe to void spontaneously the condition deteriorated, such that CSIC was required. Conversely 5 of 20 patients (25%) who initially required CSIC improved, such that it became redundant. At last followup 68.7% of the patients had abnormal urodynamics and 24 of the 64 (37.5%) required a change in urological management despite no appreciably detectable neurological change. CONCLUSIONS: Despite relatively near total neurological recovery patients with incomplete SCI have neuropathic bladder unless proved otherwise. Salient deterioration in bladder dysfunction is not uncommon. Regular urological monitoring and appropriate treatment changes are required in the long term.

Robot-assisted laparoscopic hysterectomy: technique and initial experience.
Reynolds RK, Advincula AP
Am J Surg. 2006 Apr;191(4):555-60.
BACKGROUND: Our study objective was to develop a technique for robot-assisted laparoscopic hysterectomy and to evaluate feasibility of the technology to address the technical limitations of conventional laparoscopy. METHODS: The study design was a case series analysis in a university hospital. Sixteen consecutive patients underwent robot-assisted laparoscopic hysterectomy and were assessed for outcomes. Robot-assisted hysterectomy technique was refined and is described. RESULTS: There were no conversions to laparotomy. The mean uterine weight was 131.5 g (range 30 to 327 g). Median operating time was 242 minutes (range 170 to 432). Average estimated blood loss was 96 mL (range 50 to 300 mL). One patient experienced a delayed thermal bowel injury, 2 developed postoperative infections, and 1 developed a vaginal cuff hematoma that was managed expectantly. The median length of hospital stay was 1.5 days. CONCLUSIONS: Robot-assisted laparoscopic hysterectomy is a feasible and promising new technique that may overcome surgical limitations seen with conventional laparoscopy.

Can the clinical history distinguish between organic and functional dyspepsia?
Moayyedi P, Talley NJ, Fennerty MB, Vakil N
JAMA. 2006 Apr 5;295(13):1566-76.
CONTEXT: Upper gastrointestinal symptoms occur in 40% of the population. An accurate diagnosis would help rationalize investigation and treatment. OBJECTIVE: To systematically review the literature of the accuracy of primary care physicians, gastroenterologists, or computer models in diagnosing organic dyspepsia. DATA SOURCES: A search of Cochrane Controlled Trials Register (December 2003), MEDLINE (1966-December 2003), EMBASE (1988-December 2003), and CINAHL (1982-December 2003) for studies that reported on cohorts of patients attending for endoscopy that had symptoms, clinical opinion, or both recorded before investigation. STUDY SELECTION: Studies that prospectively compared the diagnosis reached by a clinician, computer model, or both with results of upper gastrointestinal endoscopy in adult patients with upper gastrointestinal symptoms. DATA EXTRACTION: Two authors independently assessed studies (n = 79) for eligibility and abstracted data for estimating likelihood ratios (LRs) of clinical opinion, computer models, or both in diagnosing an organic cause for dyspepsia. DATA SYNTHESIS: Fifteen studies were identified that evaluated 11 366 patients, with 4817 patients (42%) classified as having organic dyspepsia. The computer models performed similarly to the clinician; therefore, the 2 approaches were combined. The diagnosis reached by the clinician or computer model suggesting organic dyspepsia had an LR of 1.6 (95% confidence interval [CI], 1.4-1.8), and a negative result decreased the likelihood of organic dyspepsia (LR, 0.46; 95% CI, 0.38-0.55). A diagnosis of peptic ulcer disease performed similarly with an LR of 2.2 (95% CI, 1.9-2.6), but an evaluation that suggested the absence of peptic ulcer disease had an LR of 0.45 (95% CI, 0.38-0.53). A clinical history suggesting esophagitis had an LR of 2.4 (95% CI, 1.9-3.0) vs a negative history that had an LR of 0.50 (95% CI, 0.42-0.60). CONCLUSION: Neither clinical impression nor computer models that incorporated patient demographics, risk factors, history items, and symptoms adequately distinguished between organic and functional disease in patients referred for endoscopic evaluation of dyspepsia.

Follow-up of anorectal anomalies: the Italian parents' and patients' perspective.
Aminoff D, La Sala E, Zaccara A
J Pediatr Surg. 2006 Apr;41(4):837-41.
BACKGROUND: Several studies addressed the long-term follow-up of anorectal anomalies (ARM) in relation to clinical issues (eg, continence) and quality of life. However, most of these studies are based upon questionnaires designed by physicians and/or health-care professionals, which may be sources of bias. METHODS: To investigate whether parents of children (patients themselves or older children or adults) who were born with ARM had the perception that they received appropriate care and follow-up, a survey was carried out in Italy, in 2003, among families with children with ARM. A 20-item questionnaire was mailed to 425 patients and parents listed in the AIMAR (Italian association for anorectal malformation) database and was returned by 209 families. The questionnaire covered different aspects of ARM: type of malformations and surgery, associated anomalies, fecal and urinary continence, as well as aspects about information given

to the parents and satisfaction of care and follow-up received. RESULT: The patients and parents demonstrated a good understanding of distribution of malformations and their anatomical classification; nevertheless, 67% of responders had to travel outside their living area for surgery. Bowel management (BM) was commonly used among subjects; however, a significant percentage of patients using regular enemas were still soiling (58 patients were clean and 116 soiled). Urinary continence problems were mostly found in females with cloaca; nevertheless, 21 male patients reported occasional dribbling of difficult interpretation. Most subjects were provided with a good explanation about their or their child's malformation at time of reconstructive surgery, but the same level of information was missing about functional prognosis later in life when the need of an appropriate psychologic support was also felt. CONCLUSIONS: Patients and parents born with ARM are generally satisfied with the information received and with the short-term postreconstructive follow-up care. At longer follow-up, although more than a quarter of patients are completely clean, there is a significant percentage of subjects who still soil while following a BM program. This is explained by the small number of nurses and BM specialists who are involved in the rehabilitation process and by the lack of appropriate information about functional prognosis that are conveyed to the parents. In this respect, psychologic support in bridging the gap between cure and care may be critical.

Colostomy in anorectal malformations: a procedure with serious but preventable complications.
Pena A, Migotto-Krieger M, Levitt MA
J Pediatr Surg. 2006 Apr;41(4):748-56; discussion 748-56.
PURPOSE: Colostomy for patients with anorectal malformations decompresses an obstructed colon, avoids fecal contamination of the urinary tract, and protects a future perineal operation. The procedure is associated with several significant complications. MATERIALS AND METHODS: The medical records of 1700 cases of anorectal malformations were retrospectively reviewed. A total of 230 patients underwent reconstruction without a colostomy. Of the remaining 1470 patients, 1420 had their colostomy performed at another institution (group A) and 50 did at our institution (group B) using a specific technique with separated stomas in the descending colon. RESULTS: There were 616 complications identified in 464 patients of group A and in 4 patients in group B, an incidence of 33% vs 8% ($P < .01$). Complications in group A were classified into several groups. The first group was mislocation (282 cases), including 116 with stomas too close to each other, 97 with stomas located too distally in the rectosigmoid (which interfered with the pull-through), 30 with inverted stomas, 21 with stomas too far apart from each other, and 18 with right upper sigmoidostomies. The second largest group was prolapse (119 cases), which occurred mainly in mobile portions of the colon. The third group was composed of general surgical complications after colostomy closure (82 cases), such as intestinal obstruction (47 cases), wound infection (13 cases), incisional hernia (11 cases), anastomotic dehiscence (7 cases), sepsis (3 cases), and bleeding (1 case). Two of the septic patients died. Another group included 62 patients who received a Hartmann's procedure, which we considered to be contraindicated in anorectal malformations. A total of 42 patients suffered from stenosis of the stoma; 29, from retraction. CONCLUSIONS: Most colostomy complications are preventable using separated stomas in the descending colon. Mislocated stomas lead to problems with appliance application, interference with the pull-through, megasigmoid, distal fecal impaction, and urinary tract infections. Loop colostomies lead to urinary tract infections, distal fecal impaction, and prolapse. Prolapse is a potentially dangerous complication that mostly occurs when the stoma is placed in a mobile portion of the colon. Recognizing this makes the complication preventable by trying to create colostomies in fixed portions of the colon or by fixing the bowel to the abdominal wall when necessary. The trend to avoid colostomies is justified; however, colostomy is the best way to prevent complications in anorectal surgery and, when indicated, should be done with a meticulous technique following strict rules to avoid complications.

Evaluation of the Risk of a Nonrestorative Resection for the Treatment of Diverticular Disease: The Cleveland Clinic Diverticular Disease Propensity Score.
Aydin HN, Tekkis PP, Remzi FH, Constantinides V, Fazio VW
Dis Colon Rectum. 2006 Apr 10;.
PURPOSE: The choice of operation for diverticular disease is a contentious issue, particularly in patients with acute symptoms. This study compares early outcomes between primary resection and anastomosis and Hartmann's resection and describes a propensity score for the selection of patients for nonrestorative procedures. METHODS: Data were collected from 731 patients undergoing primary resection and

anastomosis (Group 1) and 123 patients undergoing primary Hartmann's resection (Group 2) for diverticular disease in a single tertiary referral center from January 1981 to May 2003. Multifactorial logistic regression was used to develop a propensity score for estimating the likelihood of performing a nonrestorative procedure. RESULTS: Operative 30-day mortality and surgical or medical complications were 0.7 percent, 26.0 percent, and 4.8 percent for primary resection and anastomosis and 12 percent, 43.9 percent, and 14.6 percent for Hartmann's resection, respectively (P < 0.001). There was no difference in the readmission rates between primary resection and anastomosis and Hartmann's resection (7.6 percent vs. 9.9 percent, P = 0.428). Laparoscopy was used for 32.7 percent of primary resection and anastomosis vs. 1.6 percent for Hartmann's resection (P < 0.001). Independentpredictors in favor for Hartmann's resection were body mass index >/=30 kg/m(2) (odd's ratio = 2.32), Mannheim peritonitis index >10 (odd's ratio = 6.75), operative urgency (emergency, urgent vs. elective surgery, odd's ratio = 16.08vs. 13.32), and Hinchey stage >II (odd's ratio = 27.82). The area under the receiver operating characteristic curve for the choice of operative procedure was 93.9 percent. CONCLUSIONS: Although Hartmann's resection was associated with a higher incidence of postoperative adverse events, the choice of operation was dependent on the patient presentation and intra-abdominal contamination, which can be quantified in the preoperative setting by the Cleveland Clinic diverticulitis propensity score.

Results of Lateral Internal Sphincterotomy for Chronic Anal Fissure With Particular Reference to Quality of Life.
Mentes BB, Tezcaner T, Yilmaz U, Leventoglu S, Oguz M
Dis Colon Rectum. 2006 Apr 7;.
PURPOSE: The aim of this study was to investigate the effects of lateral internal sphincterotomy on quality of life in patients with chronic anal fissure using the Gastrointestinal Quality of Life Index and the Fecal Incontinence Quality of Life Scale. METHODS: Adult patients with chronic anal fissure underwent lateral internal sphincterotomy with the open technique. Two hundred forty-four patients completed the Gastrointestinal Quality of Life Index questionnaire at admission and at 12 months postoperatively. The Fecal Incontinence Severity Index score was calculated preoperatively and at 2 and 12 months postoperatively. The Fecal Incontinence Quality of Life Scale was administered to any patient who had a Fecal Incontinence Severity Index score greater than 0 at 12 months postoperatively. RESULTS: The mean preoperative Gastrointestinal Quality of Life Index score was 118.34 +/- 6.33, which developed to 140.74 +/- 2.38 postoperatively (P< 0.001). At the two-month follow-up, 18 patients (7.38 percent) had a Fecal Incontinence Severity Index score greater than 0. By 12 months, the number of patients with Fecal Incontinence Severity Index score greater than 0 was reduced to seven (2.87 percent). These seven patients had a Gastrointestinal Quality of Life Index score similar to that of the group with postoperative Fecal Incontinence Severity Index score of 0, and only three patients (1.22 percent) had evident deterioration in the Fecal Incontinence Quality of Life Scale. The 12-month total Gastrointestinal Quality of Life Index score of the three patients who developed anal abscess/fistula after sphincterotomy (139.33 +/- 3.21) was similar to the Gastrointestinal Quality of Life Index score of those without complications. However, the Gastrointestinal Quality of Life Index score of the recurrent cases (111.53 +/- 3.53) was apparently low. CONCLUSION: The gastrointestinal quality of life improved significantly following lateral internal sphincterotomy, regardless of the surgical complications or postoperative disturbances of continence. Only 1.2 percent of the patients experienced deterioration in Fecal Incontinence Quality of Life Scale.

Morbidity of Temporary Loop Ileostomy in Patients With Colorectal Cancer.
Thalheimer A, Bueter M, Kortuem M, Thiede A, Meyer D
Dis Colon Rectum. 2006 Apr 7;.
PURPOSE: This study was designed to quantify the temporary loop ileostomy-related morbidity in patients with colorectal cancer and contrast the morbidity rates after ileostomy closure before, during, and after the start of adjuvant therapy. METHODS: Between 1997 and 2004, 120 patients with colorectal carcinoma underwent colorectal resection and creation of a temporary loop ileostomy to protect the low anastomosis. Stoma-related complications and perioperative morbidity after ileostomy closure were assessed retrospectively by reviewing the medical records. RESULTS: Sixteen of the 120 patients (13.3 percent) suffered stoma-related complications, requiring early ileostomy closure in three. After ileostomy closure, anastomotic leakage of the ileoileostomy occurred in 3 of the 120 patients (2.5 percent), 2 of them died

postoperatively (1.7 percent). The rate of minor complications (16.7 percent in all patients) was much higher in patients undergoing adjuvant chemotherapy or radiochemotherapy (25.5 percent) than in patients receiving no additional therapy (9.2 percent). In the former patients, there was a trend toward fewer complications when ileostomy closure was performed before (12.5 percent), rather than during (42.9 percent) or after (21.2 percent), the start of adjuvant therapy. CONCLUSIONS: The morbidity following closure of a temporary loop ileostomy in colorectal cancer patients is much higher in patients receiving adjuvant chemotherapy or radiochemotherapy. The morbidity, however, might possibly be lowered to the level of patients receiving no additional therapy if ileostomy closure is performed before the start of adjuvant therapy.

Impact of Functional Results on Quality of Life After Rectal Cancer Surgery.
Vironen JH, Kairaluoma M, Aalto AM, Kellokumpu IH
Dis Colon Rectum. 2006 Apr 5;.
PURPOSE: Quality of life is an important outcome measure that has to be considered when deciding treatment strategy for rectal cancer. The aim of this study was to find out the impact of surgery-related adverse effects on quality of life. METHODS: The RAND-36 questionnaire and questionnaires assessing urinary, sexual, and bowel dysfunction were administered to 94 patients with no sign of recurrence a minimum of one year after curative surgery. Results were compared with age-matched and gender-matched general population. RESULTS: Eighty-two (87 percent) patients answered the questionnaires. Major bowel dysfunction was as common after high anterior resection as after low anterior resection. Urinary complaints occurred as often after anterior resection as after abdominoperineal resection, but sexual dysfunction was more common after abdominoperineal resection. Overall, the patients reported better general health perception but poorer social functioning than population controls. In particular, elderly patients reported a significantly better quality of life in many dimensions than their population controls. There was no significant difference in quality of life between treatment groups. Major bowel dysfunction after anterior resection impaired social functioning compared with that of patients without such symptoms. Urinary dysfunction impaired social functioning and impotence impaired physical and social functioning. CONCLUSIONS: Quality of life after rectal cancer surgery is not worse than that of the general population. The major adverse impact of bowel and urogenital dysfunction is on social functioning. These adverse effects need to be discussed with the patient and preoperative function needs to be taken into account when choosing between treatment options. Permanent colostomy is not always the factor that disrupts a person's quality of life most.

Predictors of Crohn's disease.
Beaugerie L, Seksik P, Nion-Larmurier I, Gendre JP, Cosnes J
Gastroenterology. 2006 Mar;130(3):650-6.
BACKGROUND & AIMS: Early intensive therapy in Crohn's disease should be considered only in patients with disabling disease. The aim of our study was to identify at diagnosis factors predictive of a subsequent 5-year disabling course. METHODS: Among the 1526 patients seen at our unit with Crohn's disease diagnosed between 1985 and 1998, we excluded patients operated on within the first month of the disease, patients with inadequate data, and patients with severe chronic nondigestive disease. In the 1188 remaining patients, Crohn's disease course within the first 5 years of the disease was categorized as disabling when at least 1 of the criteria of clinical severity, conventionally predefined, was present. RESULTS: Among the 1123 patients with follow-up data allowing full 5-year course classification, the rate of disabling disease was 85.2%. Independent factors present at diagnosis and significantly associated with subsequent 5-year disabling were the initial requirement for steroid use (OR 3.1 [95% CI: 2.2-4.4]), an age below 40 years (OR 2.1 [95% CI: 1.3-3.6]), and the presence of perianal disease (OR 1.8 [95% CI: 1.2-2.8]). The positive predictive value of disabling disease in patients with 2 and 3 predictive factors of disabling disease was 0.91 and 0.93, respectively. These values were 0.84 and 0.91, respectively, when tested prospectively in an independent group of 302 consecutive patients seen at our institution from 1998. CONCLUSIONS: At diagnosis of Crohn's disease in a referral center, factors predictive of subsequent 5-year disabling course are an age below 40 years, the presence of perianal disease, and the initial requirement for steroids.

Subspecialisation and its effect on the management of rectal cancer.
Ng VV, Tytherleigh MG, Fowler L, Farouk R
Ann R Coll Surg Engl. 2006 Mar;88(2):181-4.

INTRODUCTION: To assess the impact of subspecialisation on surgical and oncological outcomes after rectal cancer surgery in a single surgical unit within a district general hospital.PATIENTS AND METHODS: A total of 207 patients with rectal cancer treated surgically by two colorectal surgeons and four experienced general surgeons at the Royal Berkshire Hospital, Reading, England between January 1995 and December 1999 were studied. A retrospective case-note review of each patient's personal details, operative and histological findings, their subsequent clinical progress and oncological outcomes, including 5-year survival were recorded.RESULTS: In the study group, 127 patients were treated by a colorectal surgeon and 80 by general surgeons. Pre-operative radiotherapy was more likely to be given to patients treated by a colorectal surgeon. Fewer permanent stomas were performed by colorectal surgeons. Postoperative morbidity, transfusion requirements, anastomotic leak rates and 30-day mortality were not significantly different. Tumour-involved circumferential resection margins, local recurrence rates and risk of distant metastases were similar between the two groups of surgeons.CONCLUSIONS: Colorectal subspecialisation has resulted in an increased use of pre-operative radiotherapy and fewer permanent stomas. No significant improvement in surgical or oncological outcomes after rectal cancer surgery have been observed.

Associations between the age at diagnosis and location of colorectal cancer and the use of alcohol and tobacco: implications for screening.
Zisman AL, Nickolov A, Brand RE, Gorchow A, Roy HK
Arch Intern Med. 2006 Mar 27;166(6):629-34.
BACKGROUND: Individualizing recommendations for colorectal cancer (CRC) screening intervals and modalities requires accurate risk assessment. Although hereditary predisposition is commonly used, the effect of exogenous risk factors has remained largely unexplored. To address this, we analyzed the age at presentation and location of CRC in relation to alcohol and tobacco use. METHODS: We queried the IMPAC Medical Registry Services Cancer Information Resource File for CRCs diagnosed between June 1, 1993, and December 31, 2003. Subjects were classified as current, past, or never users of alcohol and tobacco. A logistic regression model for location of CRC and a linear regression model for age at diagnosis were constructed using these explanatory variables along with gender, race, and insurance status. RESULTS: Our data set consisted of 161 172 patients with CRC. Current drinking, smoking, and smoking plus drinking were associated with younger ages at onset of CRC (adjusted age difference, 5.2, 5.2, and 7.8 years, respectively; P<.001 for all). A distal location of CRC was more likely to occur in current drinkers (odds ratio, 1.192; 95% confidence interval, 1.15-1.23) and smokers (odds ratio, 1.164; 95% confidence interval, 1.12-1.21). Colorectal cancer in men tended to occur earlier (adjusted age difference, 1.9 years; P<.001) and have a distal predominance (odds ratio, 1.42; P<.001) compared with women. The smoking but not the drinking effect size was greater in women than in men (adjusted age difference, 2.6 years; P<.001). CONCLUSIONS: Alcohol use, tobacco use, and male gender were associated with earlier onset and a distal location of CRC. If confirmed, these factors should guide recommendations regarding initiation of CRC screening and, possibly, choice of techniques.