

## FORUM

### **The tools and techniques of evidence-based medicine.**

Abalos E, Carroli G, Mackey ME

Best Pract Res Clin Obstet Gynaecol 2005 Feb;19(1):15-26. Epub 2004 Dec 13.

Evidence-based medicine is the conscientious, explicit and judicious use of the current best evidence in making decisions about the care of individual patients. Along with individual clinical expertise, it is a required core skill for clinical problem solving and it is considered to be a comprehensive component of the medical curricula. This chapter is a general overview of the steps to be followed by clinicians to search, identify and appraise the best-available evidence that could help them to resolve a particular clinical problem. It includes the principles for the identification of a clinical problem and its translation into a question, and the main sources for searching and locating the best-available evidence. References for guidelines designed for appraisal of the methods used in the original papers and for the interpretation of its results are also provided.

## **1 – THE PELVIC FLOOR**

### **Pelvic floor trauma in childbirth - Myth or reality?**

Dietz HP, Schierlitz L

Aust N Z J Obstet Gynaecol 2005 Feb;45(1):3-11.

Abstract The issue of traumatic damage to the pelvic floor in childbirth is attracting more and more attention amongst obstetric caregivers and laypersons alike. This is partly due to the fact that elective Caesarean section, as a potentially preventative intervention, is increasingly available and perceived as safe. As there are a multitude of emotive issues involved, including health economics and the relative roles of healthcare providers, the discussion surrounding pelvic floor trauma in childbirth has not always been completely rational. However, after 25 years of urogynaecological research in this field it should be possible to determine whether pelvic floor trauma in childbirth is myth or reality. On reviewing the available evidence, it appears that there are sufficient grounds to assume that vaginal delivery (or even the attempt at vaginal delivery) can cause damage to the pudendal nerve, the caudal aspects of the levator ani muscle, fascial pelvic organ supports and the external and internal anal sphincter. Risk factors for such damage have been defined and variously include operative vaginal delivery, a long second stage, and macrosomia. It is much less clear, however, whether such trauma is clinically relevant, and how important it is in the aetiology of pelvic floor morbidity later in life.

### **Pelvic floor morbidity at 3 years after instrumental delivery and cesarean delivery in the second stage of labor and the impact of a subsequent delivery.**

Bahl R, Strachan B, Murphy DJ

Am J Obstet Gynecol 2005 Mar;192(3):789-94.

Objective To compare pelvic floor symptoms at three years following instrumental delivery and cesarean section in the second stage of labor and to assess the impact of a subsequent delivery. Study design We conducted a prospective cohort study of 393 women with term, singleton, cephalic pregnancies who required instrumental vaginal delivery in theatre or cesarean section at full dilatation between February 1999 and February 2000. 283 women (72%) returned postal questionnaires at three years. Results Urinary incontinence at three years post delivery was greater in the instrumental delivery group as compared to the cesarean section group (10.5% vs 2.0%), OR 5.37 (95% CI, 1.7, 27.9). There were no significant differences in ano-rectal or sexual symptoms between the two groups. Pelvic floor symptoms were similar for women delivered by cesarean section after a failed trial of instrumental delivery compared to immediate cesarean section. A subsequent delivery did not increase the risk of pelvic floor symptoms at three years in either group. Conclusion An increased risk of urinary incontinence persists up to three years following instrumental vaginal delivery compared to cesarean section in the second stage of labor. However, pelvic floor symptoms are not exacerbated by a subsequent delivery.

### **Reliability of health-related quality-of-life measures 1 year after surgical procedures for pelvic floor disorders.**

Wren PA, Janz NK, Brubaker L, Fitzgerald MP, Weber AM, Laporte FB, Wei JT

Am J Obstet Gynecol 2005 Mar;192(3):780-8.

Objective The purpose of this study was to assess the reliability and validity of condition-specific health-related quality-of-life measures in women who are treated surgically for pelvic organ prolapse and urinary incontinence. Study design The study used the cross-sectional telephone interview-based administration of a health-related quality-of-life measure, with a 2-week follow-up interview for test-retest reliability. Results Initial and follow-up interviews were completed by 88 women (mean age, 65.7 +/- 11.6 years) approximately 1 year after surgical procedures. Condition-specific measures demonstrated acceptable reliability with test-

retest correlation coefficients that approached or exceeded 0.6 and Cronbach's alpha that exceeded 0.8 in most domains. Validity was demonstrated with significant correlations of the urinary domains of the Pelvic Floor Distress Inventory and Pelvic Floor Impact Questionnaire, with continence defined by the medical, epidemiologic, and social aspects of aging and Hunskaar severity measures (all  $P < .001$ ). Conclusion The condition-specific health-related quality-of-life assessment is reliable and valid in women after surgical procedures for pelvic floor disorders. These findings support the inclusion of condition-specific health-related quality-of-life measures in clinical trials for women with pelvic floor disorders.

## 2 – FUNCTIONAL ANATOMY

### **Effect of vaginal distension on anorectal function: identification of the vagino-anorectal reflex.**

Shafik A, Shafik I, El-Sibai O

Acta Obstet Gynecol Scand 2005 Mar;84(3):225-9.

**Background.** Sexual stimulation produces not only reflex changes in the female external and internal reproductive organs but also extragenital reactions. A mention of the response of the anal sphincters and the rectum to penile thrusting could not be traced in the literature. We investigated the hypothesis that the anal sphincters and the rectum respond to penile thrusting in a way that prevents gas and fecal leakage during sexual intercourse. **Methods.** The response of the external anal sphincter (EAS) and the internal anal sphincter (IAS) and the rectum to vaginal balloon (condom) distension was recorded in 23 healthy women (age: 33.7 +/- 7.3 years). The vaginal condom was inflated with air in increments of 50-300 ml, and the electromyographic (EMG) activity of the EAS and the IAS, as well as rectal pressure, was recorded. The test was repeated after separate anesthetization of the vagina, the rectum, the EAS and the IAS and after the use of normal saline instead of lidocaine. **Results.** Vaginal distension reduced the rectal pressure in the ratio of expansion of the vaginal volume up to a certain volume, beyond which the rectal pressure ceased to decline when more distending volume was added. Similarly, the internal sphincter EMG activity increased progressively on incremental vaginal distension increase until the 150-ml distension was reached after which more vaginal distension caused no further increase of the EMG activity; external sphincter EMG activity showed no response. Vaginal distension, while the vagina, the rectum, the EAS, and the IAS had been separately anesthetized, produced no significant change, but saline did. **Conclusions.** Vaginal balloon distension appears to effect rectal wall relaxation and increase of the internal sphincter tone. This seems to provide a mechanism to avoid rectal contents leakage during coitus. Rectal and internal sphincter response to vaginal distension is suggested to be mediated through a reflex we term 'vagino-anorectal reflex', which seems to be evoked by vaginal distension during penile thrusting. The reflex may prove of diagnostic significance in sexual disorders; further studies are needed in order to investigate this point.

### **Treatment of Chronic Anal Fissure by Application of L: -Arginine Gel: A Phase II Study in 15 Patients.**

Gosselink MP, Darby M, Zimmerman DD, Gruss HJ, Schouten WR

Dis Colon Rectum 2005 Mar 2;.

**PURPOSE:** Local application of exogenous nitric oxide donors, such as isosorbide dinitrate and glyceryl trinitrate, promotes fissure healing by reducing anal resting pressure and improving anodermal blood flow. The major drawback of these nitric oxide donors is headache. The overall incidence of this side effect is approximately 40 percent. Recently we have shown in healthy volunteers that L: -arginine, being an intrinsic precursor of nitric oxide, reduces anal resting pressure without headache as a side effect. The aim of the present study was to evaluate the effect of L: -arginine on anal resting pressure, anodermal blood flow, and fissure healing in patients with chronic anal fissure. **METHODS:** Fifteen patients with a chronic anal fissure were included in the present study. Before entering the study 10 patients were unsuccessfully treated by local application of isosorbide dinitrate. Six of these patients experienced severe headache during treatment with isosorbide dinitrate. All patients were treated for at least 12 weeks by local application of a gel containing L: -arginine 400 mg/ml five times a day. In patients with a persistent fissure, treatment was continued until 18 weeks. Anal manometry and laser Doppler flowmetry of the anoderm were performed before treatment, 20 minutes after local application of the first dose, and after 12 weeks of treatment. A visual analog scale was used to assess fissure-related pain and headache. **RESULTS:** One patient dropped out after one day of treatment, and one was excluded because of violation of the study protocol. After 12 weeks of treatment complete fissure healing was observed in 3 of 13 (23 percent) patients, and after 18 weeks the healing rate was 8 of 13 (62 percent) patients. None of the 13 patients experienced typical nitric oxide-induced headache. The pressure recordings showed a significant reduction of maximum anal resting pressure (mean +/- SD): pretreatment 89 +/- 17 mmHg; 20 minutes after application of the first dose 67 +/- 17 mmHg; 12 weeks after treatment 74 +/- 14 mmHg ( $P < 0.005$ ). Recordings of anodermal blood flow showed a significant increase in flow: pretreatment 0.36 +/- 0.25 volts; 20 minutes after application of the first dose 0.59 +/- 0.27; 12 weeks after treatment 0.64 +/- 0.33 ( $P < 0.005$ ). **CONCLUSIONS:** Local application of L: -arginine promotes fissure healing without headache as a side effect, and L: -arginine is effective even in patients not responding to isosorbide dinitrate treatment.

### 3 – DIAGNOSTICS

#### **Telemedical wound care using a new generation of mobile telephones: a feasibility study.**

Braun RP, Vecchiotti JL, Thomas L, Prins C, French LE, Gewirtzman AJ, Saurat JH, Salomon D  
Arch Dermatol 2005 Feb;141(2):254-8.

**BACKGROUND:** Leg ulcers are an important cost factor in health care systems. It has been shown that a telemedical wound care consultation can improve quality of care and help reduce costs. In this study, we evaluated the feasibility of telemedical wound care using a new generation of mobile telephones with integrated cameras. **OBSERVATIONS:** Three physicians separately evaluated 61 leg ulcers for the following 9 variables: epithelialization, fibrin, necrosis, and granulation tissue at the center and normal border, erythema, cyanosis, eczema, and hyperpigmentation at the periphery. One physician performed the face-to-face consultation (gold standard), and 2 others performed the remote evaluation. The image was obtained with the mobile telephone and immediately sent via e-mail. To measure the agreement of the evaluation among the 3 physicians, we used Cohen kappa statistics. Overall, the agreement between the remote and face-to-face evaluations was very good, with kappa values of up to 0.94. The image quality was judged to be good in 36 cases (59%) and very good in 12 (20%). The participants felt comfortable making a diagnosis based on the pictures in 50 cases (82%). **CONCLUSION:** Although this study was performed with the first generation of these devices, we were able to demonstrate the feasibility of such a telemedical wound care consultation.

#### **Do cystometric findings predict the results of intravesical hyaluronic Acid in women with interstitial cystitis?**

Daha LK, Riedl CR, Lazar D, Hohlbrugger G, Pfluger H  
Eur Urol 2005 Mar;47(3):393-7. Epub 2004 Dec 18.

**INTRODUCTION AND OBJECTIVES:** According to National Institute of Health (NIH) criteria, a bladder capacity of less than 350cc is an automatic exclusion for a diagnosis of Interstitial Cystitis (IC). In the present study, patients, showing symptoms of IC and with bladder capacities of <350 and  $\geq$ 350cc were tested as to their response to a intravesical hyaluronic acid therapy. **METHODS:** The study included 48 patients with clinical symptoms of IC and a positive 0.4M potassium sensitivity test. Maximum bladder capacity (C(max)) was assessed for the 0.9% NaCl solution first and then for the 0.2M KCl solution. After the NaCl cystometry, patients were separated into two groups: Group I with a C(max) of <350cc and Group II with a C(max) of  $\geq$ 350cc. Both groups were again separated in two further groups as to the respective percentage reduction of C(max) with the 0.2M KCl solution: Group Ia/IIa ( $\geq$ 30%) and Group Ib/IIb (<30%). Patients were treated with weekly instillations of 40mg hyaluronic acid for 10 consecutive weeks. Pre- and post-treatment bladder symptoms were evaluated through their visual analog scale (VAS) scores. **RESULTS:** With the saline solution, 32 patients had a C(max) of <350cc (Group I), while 16 patients had a C(max) of  $\geq$ 350 cc (Group II). Evaluation of VAS scores confirmed a positive response, i.e. symptom relief, to hyaluronic acid therapy, irrespective of bladder capacity. The improvement was particularly evident in patients with a C(max) reduction of  $\geq$ 30% versus those with a reduction of <30% with the 0.2M KCl solution ( $p=0.003$ ). **CONCLUSION:** The present study demonstrates that patients with typical IC symptoms and a cystometric bladder capacity of  $\geq$ 350cc, may have increased potassium sensitivity as a sign of IC and show symptom improvement after hyaluronic acid instillation therapy.

#### **Colonoscopy in the very old: why bother?**

Yoong KK, Heymann T

Postgrad Med J 2005 Mar;81(953):196-7.

**OBJECTIVES:** To evaluate the use of colonoscopy in patients aged at least 85 years. Does the ideal of an ageism free service apply? **DESIGN:** A retrospective audit. **SETTING:** Department of gastroenterology that carries out about 1000 colonoscopies annually in a district general hospital serving a population of about 320 000. **SUBJECTS:** All patients aged at least 85 years who underwent colonoscopy over five years to 2003. **MAIN OUTCOME MEASURES:** The indications for colonoscopy and its findings. The outcome of patients found to have colonic cancers. **RESULTS:** Colonoscopy was completed in 219 cases (69%). The main reasons for failure were poor bowel preparation and severe diverticular disease. Normal findings occurred in 65 (30%) of the 219 cases that had had a complete examination. Colonoscopy identified a problem that explained the patient's symptoms in 116 (37%) cases. Polyps were found in 45 (14.2%) cases and malignancy in 28 (8.8%). **CONCLUSIONS:** The absence of significant complications and comparatively high yield of colonic malignancies and polyps reinforces the value of colonoscopy as a diagnostic tool even after 85 years of age and despite the technical challenges of the procedure in this age group that limited completion. Increasing age alone should not preclude a patient from colonoscopy.

**Functional anorectal imaging.**

Bartram CI

Abdom Imaging 2005 Feb 23;.

**Role of pelvicography and colpocystodefecography in diagnosis of outlet obstructive constipation.**

Liu BH, Fang SW, Tong WD, Gong SG, Zhang SB

Int J Colorectal Dis 2005 Feb 16;.

AIMS: The aim was to research the changes in pelvic floor morphology and corresponding viscera in patients with outlet obstructive constipation (OOC). PATIENTS AND METHODS: Thirty-eight patients with OOC and 12 healthy volunteers were enrolled in this study. With simultaneous pelvicography and colpocystodefecography (PCCD), including pelvicography, vaginal opacification, voiding cystography and defecography, pelvic floor morphology was observed and the anorectal angle, the level of the perineum, peritoneum and bladder were measured. RESULTS: Thirty-seven cases of internal rectal prolapse (IRP), 5 cases of rectocele (RC) and 5 cases of spastic pelvic floor syndrome SPFS were diagnosed by PCCD. 12 IRP, 4 RC and 1 SPFS were detected by common physical examination. All of these were confirmed by PCCD. Moreover, PCCD found 9 pelvic floor hernia or peritoneoceles, 6 cystoceles, 3 descending perineum syndromes and 10 uterine prolapses. Compared with controls, OOC patients had a significantly large anorectal angle during defecation, abnormal descending of the perineum at rest and during defecation, and a deep pouch of Douglas during defecation. Some patients with urinary system symptoms may have had an abnormal descent of the bladder during rest and defecation. CONCLUSION: Simultaneous PCCD has a higher positive ratio than the common physical examination in diagnosing IRP and RC, and provides information for the diagnosis of pelvic floor hernia or peritoneocele, cystocele or uterine prolapse. PCCD is helpful in the selection of a proper surgical procedure.

**Intraoperative ultrasonography: a tool for localizing small colonic polyps.**

Greif F, Belenky A, Aranovich D, Yampolski I, Hannanel N

Int J Colorectal Dis 2005 Feb 11;.

BACKGROUND AND AIMS: Small colonic polyps are difficult to palpate and thus difficult to localize during surgery. Preoperative injection of dyes and "on-the-table colonoscopy" are some of the methods used to allow the surgeon to find the polyps. The aim of the present study was to evaluate the value of intraoperative ultrasound as a tool that may allow detection of small colonic polyps during surgery. RESULTS: The study population consisted of nine consecutive patients referred to surgery for polyps of the large bowel that were not amenable to endoscopic removal. At surgery, the colon was filled with saline and then scanned by linear ultrasound probe. In 8 out of 9 patients, intraoperative ultrasound successfully detected all polyps, even those smaller than 0.5 cm. In one patient with two polyps, one in the right colon was easily localized, but a second flat, 0.4-cm tubular adenoma at the splenic flexure was missed. In three patients, intraoperative ultrasound showed penetration into the muscular coat. These polyps were found on pathology to be invasive cancer. CONCLUSION: Intraoperative ultrasound makes it possible for surgeons to easily localize small nonpalpable polyps of the large bowel. Furthermore, it can determine the aggressive potential of these lesions with great accuracy.

**Post colon surgery complications: imaging findings.**

Scardapane A, Brindicci D, Fracella MR, Angelelli G

Eur J Radiol 2005 Mar;53(3):397-409.

Several standardized types of colonic resections are available in the clinical practice. All of them may produce early and late complications. Diagnostic imaging plays a pivotal role in the recognition of post-operative colorectal complications and provides fundamental information for therapeutic planning. In this paper we review the imaging findings of early and late post-operative complications of colorectal surgery.

**Radiographic findings of post-operative double stapled trans anal rectal resection (STARR) in patient with obstructed defecation syndrome (ODS).**

Grassi R, Romano S, Micera O, Fioroni C, Boller B

Eur J Radiol 2005 Mar;53(3):410-6.

Longo's procedure of double stapled trans anal rectal resection (STARR) has been evocated as surgical treatment of the obstructed defecation syndrome (ODS) in patients with rectal mucosal prolapse. The aim of this study was to investigate the post-interventional findings of this technique, to help radiologist in knowledge of the changed morphology of the rectal lumen, also in attempt to recognize some potential related complications.

**Volume Measurements of the Anal Sphincter Complex in Healthy Controls and Fecal-Incontinent Patients With a Three-Dimensional Reconstruction of Endoanal Ultrasonography Images.**

West RL, Felt-Bersma RJ, Hansen BE, Schouten WR, Kuipers EJ  
Dis Colon Rectum 2005 Feb 23;

**OBJECTIVES:** The aim of this study was to determine sphincter volume, length, and external anal sphincter thickness in healthy controls and fecal incontinent patients by use of a three-dimensional reconstruction of endoanal ultrasonography images. **METHODS:** Forty-four controls (15 males, 15 females, and 14 parous females) and 28 incontinent parous females (with and without a sphincter defect) were studied. Internal anal sphincter, external anal sphincter and puborectalis volume, sphincter length, and external anal sphincter thickness were measured. Intraobserver and interobserver variability were assessed. Anal pressure profile was also determined. **RESULTS:** Internal anal sphincter and external anal sphincter volumes were larger in males than in females ( $P = 0.001$  and  $P = 0.04$ ), and external anal sphincter volume was smaller in parous females but this was not significant ( $P = 0.084$ ). Anterior sphincter length was longer in males ( $P = 0.004$ ) and shorter in parous females ( $P = 0.06$ ). Males had a larger anterior external anal sphincter thickness ( $P = 0.018$ ); parity made no difference. Sphincter volumes were not smaller in incontinent females. Incontinent females with a sphincter defect had a shorter anterior sphincter length than that of continent ( $P = 0.001$ ) and incontinent females without a sphincter defect ( $P < 0.001$ ). Anterior external anal sphincter thickness was smaller in incontinent females with a sphincter defect ( $P = 0.006$ ), and posterior and right external anal sphincter thickness was smaller in incontinent females without a sphincter defect ( $P = 0.02$  and  $P = 0.03$ ). Intraobserver variability was seen for internal anal sphincter volume and sphincter length, but there was no interobserver variability. Correlation between anal pressures and endoanal ultrasonography measurements was poor. **CONCLUSIONS:** Differences in anal sphincter volumes are seen for gender but not for parity. Fecal incontinence is not associated with loss of sphincter volume. However, anterior sphincter length and external anal sphincter thickness are smaller.

#### **Relationship of colonoscopy completion rates and endoscopist features.**

Harewood GC

Dig Dis Sci 2005 Jan;50(1):47-51.

The success rate for reaching the cecum has been widely discussed as an indicator of technical expertise for colonoscopy. However, few studies have addressed the impact of endoscopist-specific parameters on cecal intubation rates. The aim of this study was to characterize the relationship between endoscopist-specific parameters (age, gender, experience level, annual procedure volume, insertion and withdrawal times) and cecal intubation rates for colonoscopy. Procedural data from all colonoscopies performed by gastroenterologists at the outpatient endoscopy unit of Rochester Methodist Hospital, Minnesota, between January and December 2003 were reviewed. Procedural data of 45 endoscopists who performed 17,100 colonoscopies over the study period were analyzed. The average cecal intubation rate was 93.9% (SD, 2.9%). Higher experience level (>9 years [median]) was significantly predictive of a cecal intubation rate >94% (OR = 3.43; 95% CI, 1.03-12.29;  $P = 0.04$ ). Although higher procedure volume was not predictive of higher colonoscopy completion rates overall, when analysis was confined to the junior faculty members (<5 years' experience), completion rates for those endoscopists doing >200 per year (92.5%) was significantly higher than for those doing <200 per year (88.5%;  $P = 0.04$ ). Our observations suggest that cecal intubation rates increase with increasing endoscopist experience. Moreover, among junior endoscopists, an annual volume of at least 200 procedures appears to be required to maintain adequate competence. Future prospective studies should provide data to support consensus guidelines recommending minimum annual procedure numbers required for maintenance of endoscopic competence among trained endoscopists.

#### **MR colonography: baseline appearance of the unprepared rectosigmoid.**

Jardine VL, Sala E, Lomas DJ

Br J Radiol 2005 Mar;78(927):202-6.

A retrospective review of 100 routine pelvic MR examinations was conducted to evaluate the appearance of the unprepared rectosigmoid colon, with the aim of informing future strategies for minimal preparation MR colonography. All examinations were reviewed by two observers in consensus, and included matched-location axial T(1) weighted and T(2) weighted fat suppressed fast spin echo (FSFSE) images. Analysis revealed that the overall appearance of the faecal material in the colon could simulate tumour in 80% of T(1) weighted and 17% of T(2) weighted images. By matching the images from the two sequences for each patient the faeces had an overall appearance that would mimic tumour in only 7% of cases. However, luminal tumour-mimicking foci of signal occurred frequently, present in 91% of T(1) weighted and 85% of T(2) weighted studies. The results indicate that if bowel-cleansing regimens are to be avoided for MR colonography, effective strategies such as dietary restriction and use of oral contrast agents will be required to reduce luminal signal on T(2) weighting and eliminate polyp-mimicking foci. The results also suggest that T(2) weighted strategies should be further investigated and that combination with T(1) weighted imaging may improve discrimination of lesions from normal faecal material.

#### 4 – PROLAPSES

##### **Patient satisfaction and changes in prolapse and urinary symptoms in women who were fitted successfully with a pessary for pelvic organ prolapse.**

Albertsen PC

J Urol 2005 Mar;173(3):942-3.

##### **Surgery for pelvic organ prolapse in women of 80 years of age and older.**

Schweitzer KJ, Vierhout ME, Milani AL

Acta Obstet Gynecol Scand 2005 Mar;84(3):286-9.

Background. To investigate the long-term results of women over 80 years of age following surgery for pelvic organ prolapse. Design. Retrospective, descriptive study. Methods. We reviewed all records of women of 80 years and older operated for pelvic organ prolapse; all patients alive were contacted through a postal questionnaire. Results. A total of 2058 operations for pelvic organ prolapse were performed in the study period. One hundred and twenty-eight patients were 80 years and older with the mean age of 83 years (range 80-92 years). In three cases, serious complications occurred, and one of them died shortly after the operation. Follow-up was done with a postal questionnaire. Eighty-eight percent of patients who were alive at the time of data analysis returned the questionnaire. The mean duration of follow-up was 28 months (range 1-80 months). There were no patients who reported a relapse of prolapse. Urinary incontinence, urge, stress, or mixed incontinence, was present in almost half of the cases. The time to full recovery after the operation was experienced to be less than 3 months for 48%. General satisfaction with the procedure was high with 88% being (very) satisfied. Conclusion. The operative correction of a pelvic organ prolapse in a group of women 80 years and older is a successful operation, with an acceptable morbidity and a high satisfaction of the patients.

##### **Pelvic Organ Support Study (POSST): The distribution, clinical definition, and epidemiologic condition of pelvic organ support defects.**

Swift S, Woodman P, O'boyle A, Kahn M, Valley M, Bland D, Wang W, Schaffer J

Am J Obstet Gynecol 2005 Mar;192(3):795-806.

Objective The purpose of this study was to describe the distribution of pelvic organ support in a gynecologic clinic population to define the clinical disease state of pelvic organ prolapse and to analyze its epidemiologic condition. Study design This was a multicenter observational study. Subjects who were seen at outpatient gynecology clinics who required an annual gynecologic examination underwent a pelvic organ prolapse quantification examination and completed a prolapse symptom questionnaire. Receiver operator characteristic curves were used to define pelvic organ prolapse with the use of symptoms and pelvic organ prolapse quantification examination measures. Standard age-adjusted univariate and multivariate logistic regression analysis were used to evaluate various relationships. Results The population consisted of 1004 women who were aged 18 to 83 years. The prevalence of pelvic organ prolapse quantification stages was 24% (stage 0), 38% (stage 1), 35% (stage 2), and 2% (stage 3). The definition of pelvic organ prolapse that was determined by the receiver operator characteristic curve was the leading edge of their vaginal wall that was -0.5 cm above the hymenal remnants. Multivariate analysis revealed age, Hispanic race, increasing body mass index, and the increasing weight of the vaginally delivered fetus as risk factors for pelvic organ prolapse, as defined in this population. Conclusion The results from this population suggest that there is a bell-shaped distribution of pelvic organ support in a gynecologic clinic population. Advancing age, Hispanic race, increasing body mass index, and the increasing weight of the vaginally delivered fetus have the strongest correlations with prolapse.

##### **Controversies and uncertainties: Abdominal versus vaginal surgery for pelvic organ prolapse.**

Brubaker L

Am J Obstet Gynecol 2005 Mar;192(3):690-3.

Reconstructive pelvic surgery is a common phenomenon in American women. The efficacy and durability of current procedures are often extrapolated from clinical case series and may be fraught with bias. Although the route of reconstructive pelvic surgery is debated with little evidence to support expert opinion, several recent clinical trials have provided a modest amount of data that can assist surgeons in counseling women who are facing prolapse repairs. An individual woman's tolerance for certain symptoms and risks can be matched with the scientifically based evidence for certain procedures. It is clear that the route of surgery must vary with individual surgeons and individual patients. The challenge is to test current surgical habits using modern clinical trials to obtain the necessary information to optimize each and every woman's restorative surgery.

##### **Rectoanal Intussusception: Presentation of the Disorder and Late Results of Resection Rectopexy.**

Tsiaoussis J, Chrysos E, Athanasakis E, Pechlivanides G, Tzortzinis A, Zoras O, Xynos E  
Dis Colon Rectum 2005 Mar 2;

**BACKGROUND:** Rectoanal intussusception may cause symptoms of obstructed defecation, and functional results of prosthesis rectopexy are usually not satisfactory. The aim of this study was to assess several parameters of the disorder and to evaluate the outcome of resection rectopexy. **METHODS:** During a 10-year period, 27 female patients with symptomatic large rectoanal intussusception had resection rectopexy (23 laparoscopy; 4 laparotomy). Conservative treatment, including biofeedback treatment in 22 patients, had failed in all cases. Preoperative and postoperative evaluation included clinical assessment, anorectal manometry, evacuation defecography, and colon transit studies. Follow-up ranged between one and five years. **RESULTS:** Length of intussusception was 2 to 4.9 cm and was significantly related to pelvic floor descent ( $P = 0.003$ ) and inversely related to resting anal pressures ( $P < 0.001$ ). Eleven patients had undergone a previous hysterectomy, 9 had enterocele-sigmoidocele, 7 had incontinence of varying severity, and 8 had a solitary rectal ulcer. Colon transit was abnormal in all but five cases. Immediate functional results were bad in two-thirds of the cases; tenesmus, urge to defecate, and frequent stools were the main complaints. By the time these symptoms had subsided, and one year after surgery, all but two patients were satisfied with the outcome. Intussusception was reduced in all cases, anal sphincter tone recovered ( $P = 0.002$ ), perineal descent decreased ( $P < 0.001$ ), and colonic transit was accelerated ( $P < 0.001$ ). Patients available at five-year follow-up had no or only minor defecatory problems. **CONCLUSION:** Resection rectopexy improves symptoms of obstructed defecation attributed to large rectoanal intussusception.

**External Pelvic Rectal Suspension (The Express Procedure) for Full-Thickness Rectal Prolapse: Evolution of a New Technique.**

Williams NS, Giordano P, Dvorkin LS, Huang A, Hetzer FH, Scott SM  
Dis Colon Rectum 2005 Feb 10;

**OBJECTIVE:** The Delorme's operation for rectal prolapse is a safe procedure but has a high recurrence rate. We aimed to develop an operation akin to it, but designed to reduce this deficit. **PATIENTS AND METHODS:** Thirty-one consecutive patients with rectal prolapse were included in the study. Initially, a conventional Delorme's procedure was performed and sutures or strips of Gore-Tex(R) were attached circumferentially to the apex of the prolapse, tunneled subcutaneously, and anchored to the external surface of the pelvis. Subsequently, the procedure was modified. Acellular porcine collagen strips were used and buried within the apex without plication of the denuded rectal musculature. Patients were formally assessed preoperatively and four months postoperatively by symptom and quality of life questionnaires and subsequently by regular clinical review. **RESULTS:** In the Gore-Tex(R) group ( $N = 11$ ; males:females = 10:1; mean age, 61 years) three patients underwent suture repair and eight had strip fixation. All suture repairs developed sepsis and one patient had a recurrence. Seven of the strip fixations (88 percent) developed sepsis that resulted in implant extrusion. There was one full-thickness and one mucosal recurrence after a median follow-up of 25 months. In the collagen group ( $N = 20$ ; males:females = 2:18; mean age, 63 years), sepsis occurred in four patients, requiring surgical intervention in one patient (5 percent) (cf Gore-Tex(R) group,  $P = 0.002$ ). There was one mucosal and three full-thickness (15 percent) recurrences after a median follow-up of 14 months (cf Gore-Tex(R) group,  $P =$  not significant). Significant improvements in symptom and quality of life scores were recorded in both groups at four months. **CONCLUSION:** A new, minimally invasive perineal procedure for rectal prolapse has been developed and initial data testify to its relative safety provided collagen is used. It remains to be seen whether long-term recurrence rates will be lower than those of conventional perineal procedures.

**Randomized controlled trial to compare the early and mid-term results of stapled versus open hemorrhoidectomy.**

Bikhchandani J, Agarwal PN, Kant R, Malik VK  
Am J Surg 2005 Jan;189(1):56-60.

**BACKGROUND:** The new technique of circular stapler for the treatment of hemorrhoids has shown early promise in terms of minimal or no postoperative pain, early discharge from hospital, and quick return to work. This study was designed to compare stapled technique with the well-accepted conventional Milligan Morgan hemorrhoidectomy. **METHODS:** After fulfilling the selection criteria, 84 patients were randomly allocated to the stapled ( $n = 42$ ) or open group ( $n = 42$ ). All patients were operated on under spinal anesthesia. The 2 techniques were evaluated with respect to the operative time, pain scores, complications, day of discharge, return to work, and level of satisfaction. **RESULTS:** The mean age of patients was 46.02 years (SD, 12.33) in the stapled group and 48.64 years (14.57) in the open group. Grade III or IV hemorrhoids were more common in men (ie, 80.9% and 85.7% in the stapled and open group, respectively). The mean operative time was shorter in the stapled group 24.28 minutes (4.25) versus 45.21 minutes (5.36) in the Milligan-Morgan group ( $P < .001$ ). The blood loss, pain scores and requirement of analgesics was significantly less in the stapled group. Mean hospital stay was 1.24 days (0.62) and 2.76 days (1.01) ( $P < .001$ ) in the stapled

and open group, respectively. The patients in the stapled group returned to work or routine activities earlier (ie, within 8.12 days [2.48]) as compared with 17.62 (5.59) in the open group. Only 88.1% of patients were satisfied by the open method compared with 97.6% after the stapled technique. The median follow-up period was 11 months with a maximum follow-up of 19 months (range 2-19 months). **CONCLUSIONS:** Stapled hemorrhoidectomy is a safe and effective day-care procedure for the treatment of grade III and grade IV hemorrhoids. It ensures lesser postoperative pain, early discharge, less time off work, complications similar to the open technique, and in the end a more satisfied patient with no perianal wound. However, more such randomized trials are essential to deny any long-term complication.

**Proctitis complicating stapled hemorrhoidectomy: report of a case.**

Arroyo A, Perez-Vicente F, Serrano P, Candela F, Perez-Vazquez MT, Calpena R  
Int J Colorectal Dis 2005 Feb 19;.

**Practice Parameters for the Management of Hemorrhoids (Revised).**

Cataldo P, Ellis CN, Gregorcyk S, Hyman N, Buie WD, Church J, Cohen J, Fleshner P, Kilkenny J, Ko C, Levien D, Nelson R, Newstead G, Orsay C, Perry WB, Rakinic J, Shellito P, Strong S, Ternent C, Tjandra J, Whiteford M  
Dis Colon Rectum 2005 Feb 10;.

**5 – RETENTIONS**

**Transurethral incision of bladder neck in treatment of bladder neck obstruction in women.**

Peng CH, Kuo HC

Urology 2005 Feb;65(2):275-8.

**OBJECTIVES:** To report our preliminary experience with transurethral incision of the bladder neck in the treatment of female voiding dysfunction due to bladder neck obstruction. Bladder neck obstruction in women is an infrequently diagnosed urologic condition. **METHODS:** Bladder neck obstruction was diagnosed in 11 women 41 to 80 years of age, who presented with difficult micturition or urinary retention. Preoperative investigations included a full urodynamic examination and urethrocytoscopy. Transurethral bladder neck incision was performed in all patients. Urodynamic results and clinical improvement in voiding symptoms were assessed. **RESULTS:** Of the 11 patients, 5 had chronic urinary retention and 6 had difficult micturition; 3 also had recurrent urinary tract infection or upper urinary tract deterioration. The most frequent findings on video-urodynamic study were a high voiding pressure plus low flow rate and a narrow bladder neck during voiding on cinefluoroscopy. After treatment, the lower urinary tract symptoms were resolved or improved in all patients. Ten patients resumed spontaneous voiding with a small postvoid residual urine volume; the remaining patient was able to void by abdominal straining after adjuvant urethral botulinum A toxin injection. Urodynamic study revealed a decreased voiding pressure and postvoid residual urine volume and an increased maximal flow rate. The overall satisfactory rate was 91%. **CONCLUSIONS:** Transurethral incision of the bladder neck is effective in relieving voiding difficulty owing to anatomic or functional bladder neck obstruction in women. A full video-urodynamic evaluation is essential in making the correct diagnosis and formulating a treatment plan.

**Hereditary vacuolar internal anal sphincter myopathy causing proctalgia fugax and constipation: a new case contribution.**

de la Portilla F, Borrero JJ, Rafel E

Eur J Gastroenterol Hepatol 2005 Mar;17(3):359-61.

Hereditary anal sphincter myopathy is rare. We present a family with one affected member with proctalgia fugax, constipation and internal anal sphincter hypertrophy. Ultrastructural findings show vacuolization of smooth muscle cells without the characteristic polyglucosan inclusion. Further relief of symptoms was obtained using an oral calcium antagonist. Based on clinical presentation, endosonography and morphological findings, we consider our case is a histological variant of the vacuolar myopathy originally described.

**Information from your family doctor. Irritable bowel syndrome.**

Am Fam Physician 2005 Feb 1;71(3):547-8.

**Information from your family doctor. Constipation.**

Am Fam Physician 2005 Feb 1;71(3):539-40.

## 6 – INCONTINENCES

### **In vivo tension sustained by fascial sling in pubovaginal sling surgery for female stress urinary incontinence.**

Lin AT, Wang SJ, Chen KK, Chang LS  
J Urol 2005 Mar;173(3):894-7.

### **Transurethral polydimethylsiloxane implantation: a valid option for the treatment of stress urinary incontinence due to intrinsic sphincter deficiency without urethral hypermobility.**

Zullo MA, Plotti F, Bellati F, Muzii L, Angioli R, Panici PB  
J Urol 2005 Mar;173(3):898-902.

Careful patient selection by optimal diagnostic tools are essential for maximizing the results of urethral bulking agent therapy. PDMS injection in women with SUI due to ISD with limited urethral mobility is a valid, minimally invasive procedure.

### **Dysfunctional voiding and incontinence scoring system: quantitative evaluation of incontinence symptoms in pediatric population.**

Akbal C, Genc Y, Burgu B, Ozden E, Tekgul S  
J Urol 2005 Mar;173(3):969-73.

**PURPOSE:** Functional voiding problems in children are common. Although pathophysiology and presentation of this clinical entity are well described, there is not yet a generally accepted method of quantitative and standard evaluation of clinical symptoms, and there are few studies addressing the issue of symptom scoring in children. We investigated use of a symptom scoring system in children with functional voiding problems and the normal population, and validated it using a scientific tool. **MATERIALS AND METHODS:** A symptom scoring system was designed empirically. The questionnaire was composed of items regarding daytime symptoms, nighttime symptoms, voiding habits, bowel habits and quality of life. There were 2 groups whose symptoms were evaluated using this scoring system. Group 1 consisted of 86 patients who were admitted to our clinic with various wetting and daytime voiding problems. Group 2 consisted of 265 controls with no urological complaints. Parents of all children were asked to fill out a questionnaire that included the symptom scoring system. Boys with lower urinary tract abnormalities, and patients with spina bifida occulta and neurogenic bladder were excluded from the study. Odds ratios of answers to each item in the questionnaire were used to define strength of the questions to differentiate patients from healthy controls. According to the value of odds ratios, questions were modified and a score for each question was given. Receiver operating characteristic plots were used to define detection cutoff or threshold score, and Youden's index was used to detect best reflecting optimal sensitivity and specificity. **RESULTS:** The total score was determined to range from 0 to 35, and items were modified to 13 questions and 1 quality of life question at the end of the study. Among the 86 patients in group 1 (female-to-male ratio 1.5:1) mean score was 18.56. Among the 265 controls in group 2 (female-to-male ratio 1.5:1) mean score was 2.88. Statistical analysis revealed that within a confidence interval of 96.2% patients with a score of 8.5 or greater had voiding abnormalities, with 90% sensitivity and 90% specificity. There were no statistically significant differences between the 2 genders and 2 age groups of 4 to 7 and 8 to 10 years. **CONCLUSIONS:** This statistically validated functional voiding problems symptom score may provide accurate, objective and scientific bases to grade the symptoms in comparative research, diagnosis, treatment and followup of patients with wetting and functional voiding disorders.

### **Laparoscopic Burch Colposuspension versus Tension-Free Vaginal Tape: A Randomized Trial.**

Paraiso MF, Walters MD, Karram MM, Barber MD  
Obstet Gynecol Surv 2005 Mar;60(3):166-7.

Many of the benefits of the tension-free vaginal tape procedure for treatment of stress incontinence are derived from its minimally invasive surgical approach. The authors theorized that laparoscopic Burch colposuspension might offer the same advantages and conducted this randomized, prospective trial to compare the 2 procedures. Seventy-two women with primary urodynamic stress incontinence requiring surgical correction participated in the study. Thirty-six were randomized to undergo a standard laparoscopic Burch colposuspension, and 36 were randomized to the tension-free vaginal tape (TVT) procedure. Each participant underwent multichannel urodynamic tests at enrollment and one year after surgery. In addition, patients were evaluated with the Urogenital Distress Inventory, Incontinence Impact Questionnaire, pelvic examinations, and patients' voiding diaries at 6 months, 1 year, and 2 years after surgery. Low enrollment and lack of adequate funding led to the decision to stop the trial with a median follow up of 18 months. Thirty-three patients in each study arm were available for analysis. Both groups were similar in clinical and demographic characteristics, except that women who underwent Burch colposuspension were more likely to undergo concomitant lysis of adhesions (32% compared with 11% in the TVT group). Hysterectomy was

performed in 25% of patients in each group. The only significant differences in operative data between the two procedures were that total operating room time and length of operation were greater in the Burch colposuspension group ( $P < 0.001$  for both). Complication rates were similar in each group. Among those undergoing Burch colposuspension, operative complications included detection of bladder sutures in 2 patients and 1 bowel injury. Conversion to laparotomy was necessary in 3 patients. Two were the result of severe adhesions; and, in one, there were difficulties performing total laparoscopic hysterectomy. In the TVT group, there were 2 cystotomies and 1 blood transfusion. Postoperatively, one hematoma and one pelvic abscess occurred in each group. Four patients in the Burch procedure group and two in the TVT group had low hematocrit levels. In addition, among the women who had Burch colposuspension, one patient had a postoperative ileus, one required readmission for pulmonary embolism, one developed pyelonephritis, and two eventually underwent collagen injections. Among those undergoing TVT, voiding dysfunctions necessitated mesh transection in two patients, one of who also underwent concomitant bone anchor pubovaginal sling. Another patient developed vaginal erosion of the TVT mesh. Compared with enrollment, at the 1- and 2-year evaluations, patients reported significant overall improvement in incontinence episodes per week, pads required per week, percentage of patients using pads, the Urogenital Distress Inventory, and the Incontinence Impact Questionnaire (range,  $P < 0.01$  to  $P < 0.001$ ). Overall satisfaction was similar for women treated by either procedure and ranged from 8.2 to 9.0 on a visual analog scale of 0 (not at all satisfied) to 10 (extremely satisfied). In multichannel urodynamic test results at 1 year after surgery, 18.8% of patients who underwent laparoscopic Burch colposuspension had urodynamic stress incontinence compared with 3.2% of those who had TVT ( $P = 0.056$ ). There were no significant differences seen in detrusor overactivity, voiding dysfunction, pelvic organ prolapse quantification, or cotton-tipped swab examinations. There were no patients who developed symptomatic vaginal organ prolapse. At postoperative evaluations, 34.5% of Burch procedure patients and 23.5% of TVT patients were on anticholinergic therapy. Among women who developed postoperative symptoms of incontinence, the onset of symptoms was significantly earlier in those who underwent Burch colposuspension compared with women who had TVT ( $P = 0.04$ ).

#### **Dynamic morphological changes in the anterior vaginal wall before and after laparoscopic Burch colposuspension in primary urodynamic stress incontinence.**

Yang JM, Yang SH, Huang WC

Ultrasound Obstet Gynecol 2005 Mar;25(3):289-95.

**OBJECTIVE:** To evaluate dynamic morphological changes in the anterior vaginal wall in primary urodynamic stress incontinence before and after laparoscopic Burch colposuspension and to explore the related effects on urethral and voiding functions. **METHODS:** Ultrasound cystourethrography and urodynamic study were performed in 112 patients with primary urodynamic stress incontinence before and 3 months after laparoscopic Burch colposuspension. Ultrasound assessment included measurement of the bladder neck positions at rest and during straining, the bladder wall thickness at the dome and trigone, and observation of the motion of the bladder neck in addition to the development of cystocele on Valsalva maneuver. On ultrasonography, a cystocele was defined as prolapse or descent of the bladder base below the bladder neck at rest, on Valsalva, or both. **RESULTS:** After laparoscopic Burch colposuspension, ultrasound cystourethrography revealed significant differences in the bladder neck position at rest and during stress (preoperative median 93 degrees vs. postoperative 70 degrees at rest and preoperative 160 degrees vs. postoperative 81 degrees during stress,  $P < 0.001$ , respectively) and rotational angle (preoperative median 58 degrees vs. postoperative 10 degrees,  $P < 0.001$ ). A laparoscopic Burch operation corrected 50% (5/10) of the preoperative cystoceles. However, a residual cystocele developed postoperatively in 29% (30/102) of the women who did not have one previously. Postoperative ultrasonographic and urodynamic studies did not reveal any differences between those women with or without postoperative cystocele except for the residual urine volume, detrusor opening pressure, and straining and rotational angles of the bladder neck ( $P < 0.001$ , 0.032, 0.010 and  $< 0.001$ , respectively). **CONCLUSIONS:** Laparoscopic Burch colposuspension may correct a pre-existing cystocele, but in other patients a cystocele may persist or be disclosed. After laparoscopic Burch operation a persistent cystocele is not associated with urethral compression or voiding impairment. Copyright (c) 2005 ISUOG. Published by John Wiley & Sons, Ltd.

#### **Urinary urgency and frequency: what should a clinician do?**

Brubaker L

Obstet Gynecol 2005 Mar;105(3):661-7.

Obstetrician-gynecologists often care for women with urinary symptoms of urgency and frequency. These symptoms are bothersome and treatable. Although it is rare that serious disease is causative, the clinician must be alert to ominous signs and physical findings. Most patients experience relief of their symptoms after a simple initial evaluation with appropriately directed treatment. A step-wise evaluation includes the directed history and physical, assessment of urinary habits, typically with a urinary diary, and occasionally an assessment of voiding efficiency, typically with a postvoid residual. Treatments may include myofascial

therapy when trigger points are present on physical examination. Behavioral therapy and pharmaceuticals also play an important role. Persistent symptoms, hematuria, severe de novo postoperative symptoms, and ominous physical findings may warrant specialty consultation.

#### **Effects of estrogen with and without progestin on urinary incontinence.**

Hendrix SL, Cochrane BB, Nygaard IE, Handa VL, Barnabei VM, Iglesia C, Aragaki A, Naughton MJ, Wallace RB, McNeeley SG

JAMA 2005 Feb 23;293(8):935-48.

CONTEXT: Menopausal hormone therapy has long been credited with many benefits beyond the indications of relieving hot flashes, night sweats, and vaginal dryness, and it is often prescribed to treat urinary incontinence (UI). OBJECTIVE: To assess the effects of menopausal hormone therapy on the incidence and severity of symptoms of stress, urge, and mixed UI in healthy postmenopausal women. DESIGN, SETTING, AND PARTICIPANTS: Women's Health Initiative multicenter double-blind, placebo-controlled, randomized clinical trials of menopausal hormone therapy in 27,347 postmenopausal women aged 50 to 79 years enrolled between 1993 and 1998, for whom UI symptoms were known in 23,296 participants at baseline and 1 year. INTERVENTIONS: Women were randomized based on hysterectomy status to active treatment or placebo in either the estrogen plus progestin (E + P) or estrogen alone trials. The E + P hormones were 0.625 mg/d of conjugated equine estrogen plus 2.5 mg/d of medroxyprogesterone acetate (CEE + MPA); estrogen alone consisted of 0.625 mg/d of conjugated equine estrogen (CEE). There were 8506 participants who received CEE + MPA (8102 who received placebo) and 5310 who received CEE alone (5429 who received placebo). MAIN OUTCOME MEASURES: Incident UI at 1 year among women without UI at baseline and severity of UI at 1 year among women who had UI at baseline. RESULTS: Menopausal hormone therapy increased the incidence of all types of UI at 1 year among women who were continent at baseline. The risk was highest for stress UI (CEE + MPA: relative risk [RR], 1.87 [95% confidence interval {CI}, 1.61-2.18]; CEE alone: RR, 2.15 [95% CI, 1.77-2.62]), followed by mixed UI (CEE + MPA: RR, 1.49 [95% CI, 1.10-2.01]; CEE alone: RR, 1.79 [95% CI, 1.26-2.53]). The combination of CEE + MPA had no significant effect on developing urge UI (RR, 1.15; 95% CI, 0.99-1.34), but CEE alone increased the risk (RR, 1.32; 95% CI, 1.10-1.58). Among women experiencing UI at baseline, frequency worsened in both trials (CEE + MPA: RR, 1.38 [95% CI, 1.28-1.49]; CEE alone: RR, 1.47 [95% CI, 1.35-1.61]). Amount of UI worsened at 1 year in both trials (CEE + MPA: RR, 1.20 [95% CI, 1.06-1.36]; CEE alone: RR, 1.59 [95% CI, 1.39-1.82]). Women receiving menopausal hormone therapy were more likely to report that UI limited their daily activities (CEE + MPA: RR, 1.18 [95% CI, 1.06-1.32]; CEE alone: RR, 1.29 [95% CI, 1.15-1.45]) and bothered or disturbed them (CEE + MPA: RR, 1.22 [95% CI, 1.13-1.32]; CEE alone: RR, 1.50 [95% CI, 1.37-1.65]) at 1 year. CONCLUSIONS: Conjugated equine estrogen alone and CEE + MPA increased the risk of UI among continent women and worsened the characteristics of UI among symptomatic women after 1 year. Conjugated equine estrogen with or without progestin should not be prescribed for the prevention or relief of UI.

#### **Overactive bladder: a clinical entity or a marketing hype?**

Madersbacher H

Eur Urol 2005 Mar;47(3):273-6. Epub 2004 Dec 15.

#### **Help-Seeking Behaviour and Associated Factors among Women with Urinary Incontinence in France, Germany, Spain and the United Kingdom.**

O'donnell M, Lose G, Sykes D, Voss S, Hunskaar S

Eur Urol 2005 Mar;47(3):385-92. Epub 2004 Nov 21.

#### **Long-Term Open-Label Solifenacin Treatment Associated with Persistence with Therapy in Patients with Overactive Bladder Syndrome.**

Haab F, Cardozo L, Chapple C, Ridder AM

Eur Urol 2005 Mar;47(3):376-384. Epub 2005 Jan 5.

#### **Should we switch over to tolterodine in every child with non-neurogenic daytime urinary incontinence in whom oxybutynin failed?**

Yucel S, Akkaya E, Guntekin E, Kukul E, Danisman A, Akman S, Baykara M

Urology 2005 Feb;65(2):369-73.

#### **Clinical usefulness of pelvic floor reeducation for men undergoing radical prostatectomy.**

Pannek J, Konig JE

Urol Int 2005;74(1):38-43.

**Can neurologic examination predict type of detrusor sphincter-dyssynergia in patients with spinal cord injury?**

Schurch B, Schmid DM, Karsenty G, Reitz A  
Urology 2005 Feb;65(2):243-6.

**OBJECTIVES:** To assess the correlations in males with spinal cord injury (SCI) between the neurologic status and type of detrusor-sphincter dyssynergia (DSD) observed during urodynamic examinations and to evaluate the change in the DSD pattern over time. **METHODS:** A total of 105 male patients with chronic SCI were neurologically examined according to the American Spinal Cord Injury Association protocol and underwent video-urodynamic examinations. DSD observed during urodynamic studies was classified according to the Blaivas classification. To assess the stability of the DSD over time, patients who had been recently injured were clinically and urodynamically controlled after 1 year and thereafter. **RESULTS:** A statistically significant positive correlation was found between the DSD type and completeness or incompleteness of the SCI lesion. Patients with an incomplete sensory and motor SCI lesion presented with DSD type 1 compared with patients with complete sensory and motor SCI lesion, who had DSD type 2 to type 3. A correlation was also found between the American Spinal Cord Injury Association scores and the DSD type. No correlation was found between the DSD type and lesion level. At medium to long-term follow-up, a significant change was found in the DSD type. **CONCLUSIONS:** The neurologic status and DSD type after SCI showed significant correlations. Therefore, neurologic examination and determination of the DSD type might be helpful to complete the neurourologic diagnosis and to assist in confirming completeness of the lesion after acute injury. Because DSD seems to become aggravated with time, regular urodynamic follow-up examinations are mandatory in patients with DSD to adjust their treatment, if necessary.

**Fecal incontinence after radical perineal prostatectomy: a prospective study.**

Kirschner-Hermanns R, Borchers H, Reineke T, Willis S, Jakse G  
Urology 2005 Feb;65(2):337-42.

**OBJECTIVES:** To assess, in a prospective study, the incidence of fecal incontinence after radical perineal prostatectomy. **METHODS:** Bowel symptoms were evaluated with questionnaires mailed to 132 patients preoperatively and 6 months postoperatively, and annually thereafter. All patients had undergone extrafascial perineal prostatectomy for Stage cT1-cT3N0M0 prostate cancer. The data of 116 patients (88%), who answered at least the preoperative and 12-month questionnaires, were analyzed. Reduced sensibility, reduced discrimination, urgency, or stool smearing were symptoms indicative of fecal incontinence. Patients with one symptom of fecal incontinence were evaluated further with a structured telephone interview. **RESULTS:** Daily stool smearing was reported preoperatively by 4% of the patients. Two symptoms related to fecal incontinence were present preoperatively in 6% of the patients. At 12 months postoperatively, 15 patients (13%) reported at least two symptoms of fecal incontinence. The structured telephone interview revealed that 6 of these 15 patients had symptoms of fecal incontinence that were related to the perineal prostatectomy; 9 patients had newly developed symptoms not related to surgery or symptoms due to tumor recurrence or radiotherapy. Patients with the presence of at least one symptom of fecal incontinence before surgery had an almost fourfold increased risk of developing at least two symptoms of fecal incontinence postoperatively compared with patients without any symptom of fecal incontinence. **CONCLUSIONS:** Significant fecal incontinence after radical extrafascial perineal prostatectomy is a rare event. The results of questionnaires should be supplemented by additional interviews to obviate wrong interpretations.

**Factors predicting severe perineal trauma during childbirth: Role of forceps delivery routinely combined with mediolateral episiotomy.**

Hudelist G, Gelle'n J, Singer C, Ruecklinger E, Czerwenka K, Kandolf O, Keckstein J  
Am J Obstet Gynecol 2005 Mar;192(3):875-81.

In consistence with previous reports, women who are vaginally delivered of a large infant are at a high risk for sphincter damage. Although the rate of these complications was surprisingly low in vaginally assisted childbirth, the use of forceps, even if routinely combined with mediolateral episiotomy, should be minimized whenever possible.

**Use of Malone Antegrade Continence Enema in Patients With Perineal Colostomy After Rectal Resection.**

Portier G, Bonhomme N, Platonoff I, Lazorthes F  
Dis Colon Rectum 2005 Feb 15;.

**PURPOSE:** Abdominoperineal resection, with iliac colostomy, remains the gold standard treatment for very low-lying rectal cancer, but it alters patients' quality of life. Alternatives to iliac colostomy need to be experimented. Antegrade enemas via a cecal access (Malone operation) obtains a colonic emptying and improves continence for incontinent patients. Continence and quality of life after abdominoperineal resection and perineal colostomy associated to a Malone antegrade continence enema were studied. **METHODS:** After

abdominoperineal resection for cancer, 18 patients had a digestive reconstruction by perineal colostomy and Malone antegrade continence enema. Patients performed antegrade enemas every 24 to 48 hours with tap water. After six months, continence (Cleveland Clinic score) and quality of life (Fecal Incontinence Quality of Life scale) were recorded. RESULTS: Morbidity was 5 percent (1 appendix necrosis). All patients could perform antegrade enemas by themselves. Mean continence score was 6.41/20 (standard error, 2.31). Fecal Incontinence Quality of Life scores were: lifestyle 3.18/4 (standard error, 0.83); coping/behavior 2.99/4 (standard error, 0.83); depression/self-perception 3.11/4 (standard error, 0.83); embarrassment 2.84/4 (standard error, 0.63). CONCLUSIONS: After abdominoperineal resection, Malone antegrade continence enema associated to perineal colostomy provided an acceptable continence. It preserved patients' body image and resulted in a satisfying quality of life. It could become an alternative to iliac colostomy in selected patients.

### **Outcome of Anterior Sphincter Repair for Obstetric Injury: Comparison of Early and Late Results.**

Zorcolo L, Covotta L, Bartolo DC

Dis Colon Rectum 2005 Mar 2;

INTRODUCTION: Fecal incontinence is commonly caused by structural sphincter damage secondary to obstetric trauma. Anterior sphincter repair achieves reasonable early improvement rates of between 69 and 97 percent. Few series have reported long-term results. This study was designed to evaluate the long-term outcome and examine whether there are any predictive factors that could refine patient selection and predict long-term outcome. METHODS: The case records of all patients who underwent anterior sphincter repair between January 1991 and December 1999 were studied. The patients were sent a questionnaire that asked about preoperative and postoperative and current bowel function, with questions about quality of life and overall satisfaction with the outcome of the procedure. The late outcome after a mean period of 70 months from the operation was compared with the early clinical results. All the preoperative and operative variables were studied to ascertain their significance in predicting success. RESULTS: Ninety-three patients were admitted to the study. Anterior sphincter repair was successful in improving continence in 73 percent of patients. Long-term results were obtained for 62 patients. Seventy percent had objective clinical improvement based on the questionnaire, but only 55 percent considered their bowel control had improved and only 45 percent were satisfied by the operation. Urgency was the most important symptom in determining patient satisfaction; 24 of 26 patients in whom urgency had improved were happy with their outcome. None of the preoperative and operative variables predicted the outcome. CONCLUSIONS: Patients should be warned that complete continence is difficult to achieve and that symptoms tend to deteriorate with time.

### **Systematic review of sacral nerve stimulation for faecal incontinence and constipation (Br J Surg 2004; 91: 1559-1569).**

Pescatori M

Br J Surg 2005 Mar;92(3):379.

No Abstract.

### **Role of internal anal sphincter damage in the causation of idiopathic faecal incontinence: A prospective study.**

Petros P, Anderson J

Aust N Z J Obstet Gynaecol 2005 Feb;45(1):77-8.

Abstract This prospective study aimed to examine the relationship between internal anal sphincter (IAS) damage and 'idiopathic' faecal incontinence (FI) in 50 consecutive patients, using endoanal ultrasound examination. The external anal sphincter (EAS) was intact on direct and ultrasonic assessment in all patients. IAS damage was defined as complete rupture or attenuation, less than 2 mm thickness in some part of the sphincter. Complete rupture was found in one patient and damage in a further 17 (total 36%). All three nulliparous patients had normal IAS and EAS. IAS damage was only minimally associated with 'idiopathic' FI, suggesting IAS per se is unlikely to be a direct cause of FI in the 'idiopathic' group of FI patients. Its role might be analogous to the periurethral striated horse-shoe shape muscle in the urethra, which is thought to act as a mucosal sealant.

### **The Prevalence of Encopresis in a Multicultural Population.**

van der Wal MF, Benninga MA, Hirasing RA

J Pediatr Gastroenterol Nutr 2005 Mar;40(3):345-348.

BACKGROUND:: Population-based studies on the prevalence of encopresis in children are scarce and generally outdated. Prevalence estimates based on clinical studies are unreliable because parents tend to be reticent to seek medical help for this problem. Professional help is necessary, however, because encopresis can lead to serious psychosocial health problems. The authors examined the prevalence of

encopresis in children, the frequency of visits made to general practitioners for encopresis and the psychosocial health problems of encopretic children. **METHODS::** This population-based study involved 13,111 parents and their 5- to 6-year-old children and 9,780 parents and their 11- to 12-year-old children, all residents of Amsterdam, the Netherlands. **RESULTS::** The prevalence of encopresis was 4.1% in the 5-to-6 age group and 1.6% in the 11-to-12 age group. Encopresis was more frequent among boys and children from the very depressed areas of the city. Encopresis was less frequent among Moroccan and Turkish children. A defecation frequency of less than three per week was found in 3.8% of the 5- to 6-year-olds and 10.1% of the 11- to 12-year-olds with encopresis. Only 37.7% of the 5- to 6-year-olds and 27.4% of the 11- to 12-year-olds who had encopresis had ever been taken to see a doctor for this problem. Psychosocial problems were far more common among children with encopresis than among normal children. **CONCLUSIONS::** Encopresis is a common condition that is often associated with psychosocial health disorders but only a small proportion of the children with encopresis are taken to a general practitioner to discuss their problem.

## **7 – PAIN**

### **The effectiveness of multidisciplinary rehabilitation in the treatment of fibromyalgia: a randomized controlled trial.**

Lemstra M, Olszynski WP

Clin J Pain 2005 Mar-Apr;21(2):166-74.

**OBJECTIVES::** To assess the effectiveness of multidisciplinary rehabilitation in the treatment of fibromyalgia in comparison to standard medical care. **METHODS::** Seventy-nine men and women were randomly assigned to one of two groups. The intervention group consisted of a rheumatologist and physical therapist intake and discharge, 18 group supervised exercise therapy sessions, 2 group pain and stress management lectures, 1 group education lecture, 1 group dietary lecture, and 2 massage therapy sessions. The control group consisted of standard medical care with the patients' family physician. Outcome measures included self-perceived health status, pain-related disability, average pain intensity, depressed mood, days in pain, hours in pain, prescription and nonprescription medication usage, and work status. Outcomes were measured at the end of the 6-week intervention and at 15-month follow-up. **RESULTS::** Thirty-five out of 43 patients from the intervention group and 36 out of 36 patients from the control group completed the study. There were no statistically significant differences between the 2 groups prior to intervention. Intention-to-treat analysis revealed that the intervention group, in comparison to the control group, experienced statistically significant changes at intervention completion in self-perceived health status, average pain intensity, pain related disability, depressed mood, days in pain, and hours in pain, but no significant differences in nonprescription drug use, prescription drug use, or work status. At 15 months, all health outcomes retained their significance except health status. Nonprescription and prescription drug use demonstrated significant reductions at 15 months. Binary logistic regression indicated that long-term changes in Pain Disability Index were influenced by long-term exercise adherence and income status. **CONCLUSIONS::** Positive health-related outcomes in this mostly unresponsive condition can be obtained with a low-cost, group multidisciplinary intervention in a community-based, nonclinical setting.

### **Rational integration of pharmacologic, behavioral, and rehabilitation strategies in the treatment of chronic pain.**

Gallagher RM

Am J Phys Med Rehabil 2005 Mar;84(3 Suppl):S64-76.

Historically, the concept of a mind-body duality in medicine, which supports a biomedical approach to pain management, has impeded the development of adequate treatments for persistent pain conditions and diseases. Although usually there is an initiating pathophysiologic nociceptive cause of pain, over time, the conditioning of neurophysiologic and affective systems by environmental and internal events can promote chronicity and frustrate the efforts of physicians to attenuate nociceptive processes. A full elucidation of the environmental and psychological factors contributing to pain and suffering may prove difficult using a traditional biomedical approach. Prevention of chronicity, by early identification and treatment of pain generators and the pain response to tissue injury and by recognition of those general factors that contribute to risk for chronicity (e.g., depressive illness, poor pain control), is crucial for any healthcare system that wishes to reduce the morbidity and costs of persistent pain. Goal-directed, outcomes-focused biopsychosocial treatment plans that efficiently integrate physical, behavioral, and medical approaches more frequently achieve better pain control and improved function. The following article presents a general overview of evidence for effectiveness of these approaches and some central principles of integrated treatment planning.

### **Pharmacotherapy of complex regional pain syndrome.**

Harden RN

Am J Phys Med Rehabil 2005 Mar;84(3 Suppl):S17-28.

Complex regional pain syndrome has both nociceptive/inflammatory and neuropathic elements and is always (by definition) associated with abnormal activity of the sympathetic nervous system. There is good evidence that complex regional pain syndrome, as currently conceptualized, ultimately includes central sensitization and has motor abnormalities. The lack of a standard diagnostic test or a specific mechanistically based diagnostic scheme has hindered the conduct of well-designed trials, and to date, there is very little evidence supporting an effective treatment. Fortunately, some randomized, controlled trials of drug therapies have been conducted, and systematic reviews have been published of related neuropathic conditions, from which the results have been extrapolated to clinical use in complex regional pain syndrome. The following article presents an overview of available data regarding drug and interventional treatment options for complex regional pain syndrome and of those relevant pharmacotherapies we can derive from the neuropathy literature. As with most chronic pain syndromes, pharmacotherapy coupled with functional restoration and an interdisciplinary approach to treatment are essential to a successful outcome.

### **Decompression and transposition of the pudendal nerve in pudendal neuralgia: a randomized controlled trial and long-term evaluation.**

Robert R, Labat JJ, Bensignor M, Glemain P, Deschamps C, Raoul S, Hamel O

Eur Urol 2005 Mar;47(3):403-8.

**BACKGROUND::** We assess that pudendal neuralgia is a tunnel syndrome due to a ligamentous entrapment of the pudendal nerve and have treated 400 patients surgically since 1987. We have had no major complication. We conducted a randomized controlled trial to evaluate our procedure. **METHODS::** A sequential, randomized controlled trial to compare decompression of the pudendal nerve with non-surgical treatment. Patients aged 18-70, had chronic, uni/bilateral perineal pain, positive temporary response to blocks at the ischial spine and in Alcock's canal. They were randomly assigned to surgery (n=16) and control (n=16) groups. Primary end point was improvement at 3 months following surgery or assignment to the non-surgery group. Secondary end points were improvement at 12 months and at 4 years following surgical intervention. **RESULTS::** A significantly higher proportion of the surgery group was improved at 3 months. On intention-to-treat analysis 50% of the surgery group reported improvement in pain at 3 months versus 6.2% of the non-surgery group (p=.0155); in the analysis by treatment protocol the figures were 57.1% versus 6.7% (p=.0052). At 12 months, 71.4% of the surgery group compared with 13.3% of the non-surgery group were improved, analyzing by treatment protocol (p=.0025). Only those randomized to surgery were evaluated at 4 years: 8 remained improved at 4 years. No complications were encountered. **CONCLUSIONS::** In this study we demonstrate that decompression of the pudendal nerve is an effective and safe treatment for cases of chronic pudendal neuralgia that have been unresponsive to analgesia and nerve blocks. Following surgery, other medical interventions may be necessary.

### **Recognition and treatment of irritable bowel syndrome among women with chronic pelvic pain.**

Williams RE, Hartmann KE, Sandler RS, Miller WC, Savitz LA, Steege JF

Am J Obstet Gynecol 2005 Mar;192(3):761-7.

**Objective** We sought to describe irritable bowel syndrome (IBS) treatment among women with chronic pelvic pain. **Study design** We performed a cross-sectional study of new chronic pelvic pain patients between 1993 and 2000 (n = 987). IBS was defined by Rome I criteria. IBS treatment was defined as lower gastrointestinal drugs or referral. Analyses were descriptive and multivariable. **Results** IBS occurred in 35% of patients. In the highest quartile of pain, women with IBS were not more likely to have IBS treatment initiated. In the lowest three quarters of pain, women with IBS were 5.08 times more likely to have IBS treatment initiated. IBS was not diagnosed 40% of the time. IBS treatments were not recommended to 67% of patients with IBS. More than 35% of patients were prescribed narcotics. **Conclusion** IBS is not consistently diagnosed and treated even in a pelvic pain clinic. Yet, treatment of IBS may reduce the overall abdominal pain of these patients.

### **Impaired reflex control of intestinal gas transit in patients with abdominal bloating.**

Passos MC, Serra J, Azpiroz F, Tremolaterra F, Malagelada JR

Gut 2005 Mar;54(3):344-8.

**BACKGROUND:** Patients with abdominal bloating and distension exhibit impaired transit of intestinal gas which may lead to excessive gas retention and symptoms. Furthermore, we have previously shown that intestinal gas transit is normally accelerated by rectal distension. We hypothesize that in patients with functional bloating this modulatory mechanism fails and impairs gas transit. **METHODS:** In 12 healthy subjects and eight patients with abdominal bloating we compared, by paired studies, the effect of rectal versus sham distension on intestinal gas transit. Gas was infused into the jejunum (12 ml/min) for three hours with simultaneous perfusion of lipids into the duodenum (Intralipid 1 kcal/min) while measuring

evacuation of gas per rectum. RESULTS: In healthy subjects, duodenal lipid infusion produced gas retention (409 (68) ml) which was prevented by rectal distension (90 (90) ml;  $p < 0.05$  v sham distension). In contrast, rectal distension in patients with abdominal bloating failed to reduce lipid induced gas retention (771 (217) ml retention during rectal distension v 730 (183) ml during sham distension; NS;  $p < 0.05$  v healthy controls for both). CONCLUSION: Failure of distension related reflexes impairs intestinal gas propulsion and clearance in patients with abdominal bloating.

## 8 – FISTULAE

### **Rectovaginal fistulas after rectal cancer surgery: Incidence and operative repair by gluteal-fold flap repair.**

Kosugi C, Saito N, Kimata Y, Ono M, Sugito M, Ito M, Sato K, Koda K, Miyazaki M

Surgery 2005 Mar;137(3):329-36. Background We investigated the correlation between operative procedures for rectal carcinoma and postoperative rectovaginal fistulas (RVF), and treatment for RVF. Methods The medical records of 161 female patients with rectal carcinoma were examined retrospectively with respect to the cause, incidence, and methods of treatment for RVF occurring after rectal cancer operations, and to the outcomes of gluteal-fold flap repairs for RVF. Results Of the 161 patients, 16 developed RVF clinically. The incidence of RVF was significantly higher in patients who were anastomosed by the double stapling technique (DST) and had concomitant resection of the vaginal wall. No statistical difference was found between the established diverting ostomy group and the no-stoma group. Six patients recovered by the establishment of a diverting ostomy only. The gluteal-fold flap technique was performed for 5 patients. No RVF recurrences were noted in these 5 patients. Conclusions The incidence of RVF was higher in the patients who were anastomosed by DST or had concomitant resection of the vaginal wall. Although some RVFs heal with only fecal diversion, for patients in whom RVF is caused by involvement of the vaginal wall in the circular staple or intersphincteric resection, good results are obtained with the gluteal-fold flap repair technique

### **V-Y advancement flap closures for complicated pilonidal sinus disease.**

Berkem H, Topaloglu S, Ozel H, Avsar FM, Yildiz Y, Yuksel BC, Hengirmen S, Akyurek N

Int J Colorectal Dis 2005 Mar 4;.

BACKGROUND AND AIMS: Hair entry into the midline is the generally accepted theory in pilonidal sinus formation. This theory is also involved in the pathogenesis of the recurrence after different types of operations for pilonidal sinus disease. The relationship of the suture lines and the midline was evaluated in this study. PATIENT AND METHODS: Thirty-four patients with stage 4 or recurrent pilonidal sinus disease who underwent V-Y advancement flap closure were randomized into two groups: vertical suture line unrelated to midline (VLUM, n=18) and vertical suture line related to midline (VLRM, n=16). RESULTS: None of the patients with or without a suction drain developed flap necrosis, local haematomas or seromas. The median length of the postoperative hospital stay was 3 days for the VLRM group and the VLUM group ( $p > 0.05$ ). The median follow-up period was 32 months. During the follow-up period, two recurrences were determined 22 and 15 months after operation in the VLRM group. Recurrences were situated in the scar tissue over the midline. INTERPRETATION AND CONCLUSION: Routine application of suction drains is not recommended after V-Y advancement flap closure. Avoidance of the relationship of the postoperative suture line and the midline, if possible, offers a safe method of definitive reconstruction.

### **Modified lay-open (incision, curettage, partial lateral wall excision and marsupialization) versus total excision with primary closure in the treatment of chronic sacrococcygeal pilonidal sinus A prospective, randomized clinical trial**

Gencosmanoglu R, Inceoglu R

Int J Colorectal Dis 2005 Feb 16;.

### **Pilot Study: Fibrin Sealant in Anal Fistula Model.**

Buchanan GN, Sibbons P, Osborn M, Bartram CI, Ansari T, Halligan S, Cohen CR

Dis Colon Rectum 2005 Feb 10;.

PURPOSE: The aim of this study was to investigate the failure of fibrin sealant treatment for fistula-in-ano in an experimental porcine model and to determine histologic changes associated with the sealant and setons. METHODS: Three surgically created fistulas were treated by seton drainage in each of eight male pigs. After 26 days, magnetic resonance imaging was performed and setons were removed. Two pigs were killed as controls for stereologic histologic fistula track assessment. In six, fistulas were curetted, and in four the fistulas were treated with fibrin sealant. In these four sealant and two seton pigs, magnetic resonance imaging was repeated a median of 47.5 days after fistula formation. The pigs were killed and stereologic histologic fistula track examination was performed to determine granulation tissue and fistula lumen volumes.

These values were compared among control, seton, and sealant groups over time, and related to fistula volumes derived from magnetic resonance imaging. RESULTS: Sealant was not visible microscopically within tracks, although some sections revealed a foreign body-type reaction. On stereologic assessment, granulation tissue volumes were smaller in sealant and seton groups than in controls (median, 88 vs. 187 vs. 453 mm<sup>3</sup>), respectively;  $P = 0.002$ ) and decreased over time (median, 408 and 152 mm<sup>3</sup> (Day 42) vs. 88 and 75 (Day 53), respectively;  $P = 0.002$ ). Fistula lumen ( $P < 0.001$ ), and granulation tissue combined with fistula lumen volumes ( $P = 0.002$ ) were similarly smaller. Magnetic resonance imaging of fistula intensity was less in the sealant group than in the seton group and controls (mean, 777 vs. 978 vs. 1214 units/mm<sup>2</sup>),  $P = 0.003$ ). Magnetic resonance imaging fistula volumes were least in sealant and seton groups vs. controls ( $P = 0.024$ ), decreasing significantly in the sealant group over time ( $P = 0.018$ ). No direct relationship was found between imaging and histologic volumes. CONCLUSIONS: In an experimental porcine model of anal fistula, granulation tissue was still present, albeit diminished, following track curettage combined with seton or sealant therapy, and was minimal in the sealant group, confirming some benefit from this procedure. Eradication of all longstanding granulation tissue may ensure complete success of fibrin sealant therapy.

### **Experimental Model of Fistula-In-Ano.**

Buchanan GN, Sibbons P, Osborn M, Bartram CI, Ansari T, Halligan S, Cohen CR

Dis Colon Rectum 2005 Feb 15;

PURPOSE: This study was designed to create and evaluate an experimental porcine model of fistula-in-ano. METHODS: Initial cadaveric dissection enabled refinement of the technique for fistula formation and histoanatomical study of the porcine anal canal. Subsequently, three surgically created fistulas were treated by seton drainage in each of eight male pigs (weight, 38-41 kg). After 26 days, magnetic resonance imaging at 1.5 Tesla was performed and setons removed under general anesthesia, enabling clinical and microbiologic track assessment. Two pigs were killed for histologic fistula track assessment. RESULTS: Histoanatomical assessment noted a rudimentary internal anal sphincter, together with structures resembling anal glands. Artificial fistulas persisted during seton drainage and were more often associated with fecal than skin-derived organisms compared with both perineal and anal canal swabs ( $P = 0.002$ ). All six fistulas assessed histologically had a lumen, and abundant surrounding granulation tissue similar to that seen in human fistula-in-ano. Epithelialization was not evident in any track. Fistulas were visualized as high signal tracks using magnetic resonance imaging. CONCLUSIONS: Porcine anal anatomy resembles that of humans, and an experimental model proved suitable when assessed by magnetic resonance imaging, microbiology, and histologically, which demonstrated abundant granulation tissue. This model could be further used to investigate fistula treatments.

## **9 – BEHAVIOUR, PSYCHOLOGY, SEXOLOGY**

### **Stress and the gastrointestinal tract.**

Bhatia V, Tandon RK

J Gastroenterol Hepatol 2005 Mar;20(3):332-9.

Abstract Stress, defined as an acute threat to homeostasis, evokes an adaptive or allostatic response and can have both a short- and long-term influence on the function of the gastrointestinal tract. The enteric nervous system is connected bidirectionally to the brain by parasympathetic and sympathetic pathways forming the brain-gut axis. The neural network of the brain, which generates the stress response, is called the central stress circuitry and includes the paraventricular nucleus of the hypothalamus, amygdala and periaqueductal gray. It receives input from the somatic and visceral afferent pathways and also from the visceral motor cortex including the medial prefrontal, anterior cingulate and insular cortex. The output of this central stress circuit is called the emotional motor system and includes automatic efferents, the hypothalamus-pituitary-adrenal axis and pain modulatory systems. Severe or long-term stress can induce long-term alteration in the stress response (plasticity). Corticotropin releasing factor (CRF) is a key mediator of the central stress response. Two CRF receptor subtypes, R1 and R2, have been described. They mediate increased colonic motor activity and slowed gastric emptying, respectively, in response to stress. Specific CRF receptor antagonists injected into the 0 block these visceral manifestations of stress. Circulating glucocorticoids exert an inhibitory effect on the stress response by receptors located in the medial prefrontal cortex and hippocampus. Many other neurotransmitters and neuroimmunomodulators are being evaluated. Stress increases the intestinal permeability to large antigenic molecules. It can lead to mast cell activation, degranulation and colonic mucin depletion. A reversal of small bowel water and electrolyte absorption occurs in response to stress and is mediated cholinergically. Stress also leads to increased susceptibility to colonic inflammation, which can be adaptively transferred among rats by sensitized CD4(+) lymphocytes. The association between stress and various gastrointestinal diseases, including functional bowel disorders, inflammatory bowel disease, peptic ulcer disease and gastroesophageal reflux disease, is being actively investigated. Attention to the close relation between the brain and gut has opened many therapeutic avenues

for the future.

### **Clinical empathy as emotional labor in the patient-physician relationship.**

Larson EB, Yao X

JAMA 2005 Mar 2;293(9):1100-6.

Empathy should characterize all health care professions. Despite advancement in medical technology, the healing relationship between physicians and patients remains essential to quality care. We propose that physicians consider empathy as emotional labor (ie, management of experienced and displayed emotions to present a certain image). Since the publication of Hochschild's *The Managed Heart* in 1983, researchers in management and organization behavior have been studying emotional labor by service workers, such as flight attendants and bill collectors. In this article, we focus on physicians as professionals who are expected to be empathic caregivers. They engage in such emotional labor through deep acting (ie, generating empathy-consistent emotional and cognitive reactions before and during empathic interactions with the patient, similar to the method-acting tradition used by some stage and screen actors), surface acting (ie, forging empathic behaviors toward the patient, absent of consistent emotional and cognitive reactions), or both. Although deep acting is preferred, physicians may rely on surface acting when immediate emotional and cognitive understanding of patients is impossible. Overall, we contend that physicians are more effective healers--and enjoy more professional satisfaction--when they engage in the process of empathy. We urge physicians first to recognize that their work has an element of emotional labor and, second, to consciously practice deep and surface acting to empathize with their patients. Medical students and residents can benefit from long-term regular training that includes conscious efforts to develop their empathic abilities. This will be valuable for both physicians and patients facing the increasingly fragmented and technological world of modern medicine.

### **Help-seeking behaviour for sexual problems: the global study of sexual attitudes and behaviors.**

Moreira ED Jr, Brock G, Glasser DB, Nicolosi A, Laumann EO, Paik A, Wang T, Gingell C

Int J Clin Pract 2005 Jan;59(1):6-16.

The Global Study of Sexual Attitudes and Behaviors (GSSAB) investigated various aspects of sex and relationships among 27,500 men and women aged 40-80 years. Here, we report help-seeking behaviours for sexual problems in this population. A questionnaire was administered using the accepted survey method in each country. Although almost half of all sexually active respondents had experienced at least one sexual problem, less than 19% of them (18.0% of men and 18.8% of women) had attempted to seek medical help for their problem(s). The most frequent action taken by men and women was to talk to their partner (39%). Only 9% of men and women had been asked about their sexual health by a doctor in a routine visit during the past 3 years. Although sexual problems are highly prevalent, few men and women seek medical help for these problems. Overall, men and women show similar help-seeking behaviours.

### **Gut feelings, intuition, and emotions: an exploratory study.**

Radin DI, Schlitz MJ

J Altern Complement Med 2005 Feb;11(1):85-91.

Objective: Investigate whether the gut feelings of one person, as measured with an electrogastrogram (EGG), respond to the emotions of a distant person. Design: In a double blind protocol, EGG activity was recorded in an individual relaxing in a heavily shielded chamber while, at a distance, a second person periodically viewed the live video image of the first person along with stimuli designed to evoke positive, negative, calming, or neutral emotions. Subjects: Twenty-six (26) pairs of healthy adult volunteers. Outcome measures: EGG maximum values recorded while the distant person was exposed to emotional stimuli were compared to similar values recorded during exposure to neutral stimuli. Results: EGG maximums were significantly larger on average when the distant person was experiencing positive ( $p = 0.006$ ) and negative ( $p = 0.0009$ ) emotions, as compared to neutral emotions. Nonparametric bootstrap procedures were employed to evaluate these differences, and the results survive correction for multiple analyses. Conclusions: EGG activity increases in response to the emotions of a distant person, beyond the influence of ordinary sensory interactions. Relationships commonly reported between gut feelings and intuitive hunches may share a common, poorly understood, perceptive origin.

### **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. TARGET AUDIENCE:: Obstetricians & Gynecologists, Family Physicians LEARNING OBJECTIVES:: After completion of this article, the reader should be able to list the classifications of female sexual dysfunction, to outline the evaluation of a woman with female sexual dysfunction, and to summarize the various therapies for female sexual dysfunction.

**Impact of vaginal surgery for stress urinary incontinence on female sexual function: is the use of polypropylene mesh detrimental?**

Shah SM, Bukkapatnam R, Rodriguez LV  
Urology 2005 Feb;65(2):270-4.

OBJECTIVES: To evaluate prospectively the impact of a distal urethral polypropylene sling on sexual function using a validated questionnaire. Suburethral slings are currently the most common anti-incontinence surgery performed. Although the use of polypropylene is safe and effective, concern exists that the presence of the material in the vagina may adversely affect sexual function. METHODS: A total of 29 patients agreed to participate in this prospective study. The patients were evaluated with the Female Sexual Function Index, a validated, 19-item questionnaire that assesses six domains of sexual function: desire, arousal, lubrication, orgasm, satisfaction, and pain. The questionnaires were administered at 6-month intervals during the follow-up visits. RESULTS: The mean patient age was 52 years (range 38 to 72). The mean duration of follow-up was 19.4 months (range 7 to 37). No statistically significant difference was found in sexual function after placement of a distal urethral polypropylene sling. Of the 29 patients, 14% were not sexually active before or after surgery. No statistically significant difference was found between preoperative and postoperative desire, arousal, lubrication, orgasm, satisfaction, and pain. CONCLUSIONS: No change was found in overall sexual function in women undergoing placement of a mid to distal polypropylene urethral sling. Specifically, neither a deleterious effect nor statistically significant improvement was found in sexual desire, arousal, lubrication, orgasm, satisfaction, or pain compared with the preoperative baseline values.

## 10 – MISCELLANEOUS

**The treatment of posterior urethral disruption associated with pelvic fractures: comparative experience of early realignment versus delayed urethroplasty.**

Mouraviev VB, Coburn M, Santucci RA  
J Urol 2005 Mar;173(3):873-6.

PURPOSE: Urological treatment of the patient with severe mechanical trauma and urethral disruption remains controversial. Debate continues regarding the advisability of early realignment vs delayed open urethroplasty. We analyzed our experience with 96 patients to determine the long-term results of the 2 approaches. MATERIALS AND METHODS: We retrospectively reviewed the records of 191 men with posterior urethral disruption after severe blunt pelvic injury between 1984 and 2001, of whom 96 survived. Data on 57 patients who underwent early realignment were compared to those on 39 treated with delayed urethroplasty with an average 8.8-year followup (range 1 to 22). All patients were evaluated postoperatively for incontinence, impotence and urethral strictures. RESULTS: The majority of patients had severe concomitant organ injuries (78%) and severe pelvic fractures (76%). The overall mortality rate was 51%. Diagnosis of urethral rupture was based on clinical findings and retrograde urethrography. Strictures developed in 49% of the early realignment group and in 100% of the suprapubic tube group. Impotence (33.6%) and incontinence (17.7%) were less frequent in the early realignment group than in the delayed reconstruction group (42.1% and 24.9%, respectively). Patients with delayed reconstruction underwent an average of 3.1 procedures compared with an average of 1.6 in the early realignment group. CONCLUSIONS: Early realignment may provide better outcomes than delayed open urethroplasty after posterior urethral disruption. Increased complications are not seen and, although it can be inconvenient in the massively injured patient, it appears to be a worthwhile maneuver.

**Urinary tract infections: new insights into a common problem.**

Kucheria R, Dasgupta P, Sacks SH, Khan MS, Sheerin NS  
Postgrad Med J 2005 Feb;81(952):83-6.

This review discusses recent advances in the understanding of how the common pathogen, uropathogenic Escherichia coli, interacts with the host to lead to infection.

**The vicious cycling: bicycling related urogenital disorders.**

Leibovitch I, Mor Y  
Eur Urol 2005 Mar;47(3):277-87. Epub 2004 Dec 30.

**PURPOSE::** Bicycle riding is one of the most popular means of transportation, recreation, fitness and sports among millions of people of all ages who ride on road and off road, using a variety of bicycle types. It is also a readily available form of aerobic non-impact exercise with established cardiovascular beneficial effects. Bicycles are also a common source of significant injuries. This review focuses upon the specific bicycling related overuse injuries affecting the genitourinary tract. **MATERIALS AND METHODS::** MEDLINE search of the literature on bicycling and genitourinary disorders was performed using multiple subject headings and additional keywords. The search yielded overall 62 pertinent articles. We focused primarily on the most prevalent related disorders such as pudendal nerve entrapment, erectile dysfunction and infertility. The potential effect of bicycling on serum PSA level was also discussed in depth in view of its recognized clinical importance. Infrequent disorders, which were reported sporadically, were still addressed, despite their rarity, for the comprehensiveness of this review. **RESULTS::** The reported incidence of bicycling related urogenital symptoms varies considerably. The most common bicycling associated urogenital problems are nerve entrapment syndromes presenting as genital numbness, which is reported in 50-91% of the cyclists, followed by erectile dysfunction reported in 13-24%. Other less common symptoms include priapism, penile thrombosis, infertility, hematuria, torsion of spermatic cord, prostatitis, perineal nodular induration and elevated serum PSA, which are reported only sporadically. **CONCLUSIONS::** Urologists should be aware that bicycling is a potential and not an infrequent cause of a variety of urological and andrological disorders caused by overuse injuries affecting the genitourinary system.

#### **Novel modification of the vertical rectus abdominis myocutaneous flap for neovagina creation.**

Sood AK, Cooper BC, Sorosky JI, Ramirez PT, Levenback C  
Obstet Gynecol 2005 Mar;105(3):514-8.

**OBJECTIVE:** We describe a modification of the traditional vertical rectus abdominis myocutaneous flap for neovagina creation and our experience to date. **METHODS:** Our modified vertical rectus abdominis myocutaneous flap uses a smaller flap size with a full-thickness skin graft posteriorly to decrease the size of the abdominal wall defect. We have used the modified vertical rectus abdominis myocutaneous flap in 18 patients between March 1998 and March 2004 to create a neovagina after exenterative surgery. **RESULTS:** The mean age of the patients was 54 years, and the mean body mass index was 27 (range 18-44). Twelve patients underwent a total pelvic, 5 anterior, and 1 posterior exenteration. Among the 13 patients requiring a colostomy, the vertical rectus abdominis myocutaneous flap was taken from the contralateral side. In these patients, the urostomy was brought out on the vertical rectus abdominis myocutaneous flap donor side. There has been only 1 partial flap loss, which eventually resulted in a fully epithelialized neovagina. Eight patients at last follow-up were sexually active. Two other patients have died from recurrent disease, and 2 are alive with recurrence. The other 6 patients have no evidence of recurrent disease and, although not sexually active at the time of this report, have a viable and adequate neovagina. All patients had a successful primary closure of the abdominal wound in a vertical fashion. Three patients had superficial abdominal wound breakdown, which healed by secondary intention. **CONCLUSION:** The modified vertical rectus abdominis myocutaneous flap allows for creation of an adequate neovagina with a smaller abdominal wall defect. **LEVEL OF EVIDENCE:** II-3.

#### **Gynecologic cancer as a "sentinel cancer" for women with hereditary nonpolyposis colorectal cancer syndrome.**

Lu KH, Dinh M, Kohlmann W, Watson P, Green J, Syngal S, Bandipalliam P, Chen LM, Allen B, Conrad P, Terdiman J, Sun C, Daniels M, Burke T, Gershenson DM, Lynch H, Lynch P, Broaddus RR  
Obstet Gynecol 2005 Mar;105(3):569-74.

**OBJECTIVE:** Women with hereditary nonpolyposis colorectal cancer syndrome have a 40-60% lifetime risk for colon cancer, a 40-60% lifetime risk for endometrial cancer, and a 12% lifetime risk for ovarian cancer. A number of women with hereditary nonpolyposis colorectal cancer syndrome will have more than one cancer in their lifetime. The purpose of this study was to estimate whether women with hereditary nonpolyposis colorectal cancer syndrome who develop 2 primary cancers present with gynecologic or colon cancer as their "sentinel cancer." **METHODS:** Women whose families fulfilled Amsterdam criteria for hereditary nonpolyposis colorectal cancer syndrome and who developed 2 primary colorectal/gynecologic cancers in their lifetime were identified from 5 large hereditary nonpolyposis colorectal cancer syndrome registries. Information on age at cancer diagnoses and which cancer (colon cancer or endometrial cancer/ovarian cancer) developed first was obtained. **RESULTS:** A total of 117 women with dual primary cancers from 223 Amsterdam families were identified. In 16 women, colon cancer and endometrial cancer/ovarian cancer were diagnosed simultaneously. Of the remaining 101 women, 52 (51%) women had an endometrial or ovarian cancer diagnosed first. Forty-nine (49%) women had a colon cancer diagnosed first. For women who developed endometrial cancer/ovarian cancer first, mean age at diagnosis of endometrial cancer/ovarian cancer was 44. For women who developed colon cancer first, the mean age at diagnosis of colon cancer was 40. **CONCLUSION:** In this large series of women with hereditary nonpolyposis colorectal cancer

syndrome who developed 2 primary colorectal/gynecologic cancers, endometrial cancer/ovarian cancer was the "sentinel cancer," preceding the development of colon cancer, in half of the cases. Therefore, gynecologists and gynecologic oncologists play a pivotal role in the identification of women with hereditary nonpolyposis colorectal cancer syndrome. LEVEL OF EVIDENCE: II-3.

#### **Sphincter-saving resection for all rectal carcinomas: the end of the 2-cm distal rule.**

Rullier E, Laurent C, Bretagnol F, Rullier A, Vendrely V, Zerbib F  
Ann Surg 2005 Mar;241(3):465-9.

OBJECTIVE: To assess oncologic outcome of patients treated by conservative radical surgery for tumors below 5 cm from the anal verge. SUMMARY BACKGROUND DATA: Standard surgical treatment of low rectal cancer below 5 cm from the anal verge is abdominoperineal resection. METHODS: From 1990 to 2003, patients with a nonfixed rectal carcinoma at 4.5 cm or less from the anal verge and without external sphincter infiltration underwent conservative surgery. Surgery included total mesorectal excision with intersphincteric resection, that is, removal of the internal sphincter, to achieve adequate distal margin. Patients with T3 disease or internal sphincter infiltration received preoperative radiotherapy. RESULTS: Ninety-two patients with a tumor at 3 (range 1.5-4.5) cm from the anal verge underwent conservative surgery. There was no mortality and morbidity was 27%. The rate of complete microscopic resection (R0) was 89%, with 98% negative distal margin and 89% negative circumferential margin. In 58 patients with a follow-up of more than 24 months, the rate of local recurrence was 2% and the 5-year overall and disease-free survival were 81% and 70%, respectively. CONCLUSIONS: The technique of intersphincteric resection permits us to achieve conservative surgery in patients with a tumor close to or in the anal canal without compromising local control and survival. Tumor distance from the anal verge is no longer a limit for sphincter-saving resection.

#### **Patient perceptions of stool-based DNA testing for colorectal cancer screening.**

Schroy PC 3rd, Heeren TC  
Am J Prev Med 2005 Feb;28(2):208-14.

PURPOSE: Stool-based DNA (SB-DNA) testing is an emerging colorectal cancer screening strategy that offers a convenient, noninvasive, and potentially more acceptable alternative to existing screening tests. The objectives of this study were to compare patient perceptions of SB-DNA testing, fecal occult blood testing (FOBT), and colonoscopy, and elicit screening preferences. METHODS: A prospective survey was conducted between August 2001 and March 2003 of asymptomatic, mostly average-risk subjects aged  $\geq 50$  years who were participating in a multicenter comparison of SB-DNA testing and FOBT for detecting colorectal neoplasia. Subjects completed a 25-item questionnaire within 48 hours after undergoing a colonoscopy, which served as the standard. Respondents were asked to rate each of the three screening tests on various prep- and test-related features, using a five-point ordinal scale or yes/no format, and to select a preferred strategy. RESULTS: A total of 4042 subjects completed the survey (84% response rate). SB-DNA testing received the same or higher mean ratings than FOBT for most prep- and test-related features. When compared with colonoscopy, SB-DNA testing received higher ratings for all prep- and test-related features except perceived accuracy, where colonoscopy was rated higher. Overall, a higher percentage of patients preferred SB-DNA testing (45%) to both FOBT (32%) and colonoscopy (15%) for routine screening ( $p < 0.001$ ); 8% had no preference. CONCLUSIONS: Patients willing to undergo colonoscopy, SB-DNA testing, and FOBT perceive SB-DNA testing to have a number of advantages over the other two tests. Moreover, many such patients prefer SB-DNA testing to FOBT and colonoscopy for routine screening.

#### **Colon Polyps and Cancer.**

Bond JH  
Endoscopy 2005 Mar;37(3):208-212.

The role of endoscopy, in particular colonoscopy, clearly is paramount in the screening, diagnosis, and prevention of colorectal cancer. In preparation for writing this "state-of-the-art" review on colon polyps and cancer, a PubMed literature search linking the topic with endoscopy yielded an enormous number of papers published in peer-reviewed journals just in the past 12 months. I have selected a few of these to highlight that I believe are most germane to current issues of risk stratification, screening and surveillance, prevention, and the premalignant potential of different types of adenomas detected by endoscopy. Several of these papers address the advantages and limitations of direct colonoscopy screening for colorectal neoplasia, and discuss the emerging role of virtual colonoscopy screening.

#### **Extent of Lateral Internal Sphincterotomy: Up to the Dentate Line or Up to the Fissure Apex?**

Mentes BB, Ege B, Leventoglu S, Oguz M, Karadag A  
Dis Colon Rectum 2005 Feb 10;.

**PURPOSE:** The aim of this randomized, prospective study was to compare the results of lateral internal sphincterotomy up to the dentate line or up to the fissure apex in the treatment of chronic anal fissure. **METHODS:** Adult patients with chronic anal fissure were randomly assigned to undergo lateral internal sphincterotomy to the level of the dentate line or to the level of the fissure apex. The patients were reexamined on postoperative Days 1, 7, 14, 28, and then at 2 and 12 months. **RESULTS:** The time required for relief of pain postoperatively was 2.08 +/- 1.44 days in the dentate line group, which was significantly shorter than that for the fissure apex group (4.72 +/- 4.86 days;  $P = 0.002$ ). Objective healing was achieved in 23.7 percent and 17.6 percent at 14 days, 97.4 percent and 88.2 percent at 28 days, and 100 percent and 97.7 percent at 2 months in the dentate line and fissure apex groups, respectively ( $P > 0.05$  for all comparisons). Only sphincterotomy up to the dentate line caused a significant change in anal incontinence ( $P = 0.016$ ). Both groups had significantly lower anal resting pressures at 4 months postoperatively, compared with their corresponding preoperative levels ( $P = 0.005$  and  $P = 0.007$ ). The postoperative resting pressures did not differ significantly between the two groups ( $P = 0.273$ ). By 12 months postoperatively, no treatment failures or recurrences were noted in the dentate line group (100 percent healing rate). In the fissure apex group, there was one nonhealing case and four recurrences, resulting in a 13.2 percent rate of treatment failure ( $P = 0.058$ ). **CONCLUSIONS:** Sphincterotomy up to the dentate line provided a faster and definitive healing within the time limits of this study, but it was associated with a significant alteration in anal continence. In turn, sphincterotomy up to the fissure apex was free of significant disturbance of continence, but its healing effect was slower and it was prone to an insignificantly higher rate of treatment failure.

#### **Denervation of the Neorectum as a Potential Cause of Defecatory Disorder Following Low Anterior Resection for Rectal Cancer.**

Koda K, Saito N, Seike K, Shimizu K, Kosugi C, Miyazaki M  
Dis Colon Rectum 2005 Feb 10;.

#### **Modified Two-Stage Ileal Pouch-Anal Anastomosis: Equivalent Outcomes With Less Resource Utilization.**

Swenson BR, Hollenbeak CS, Poritz LS, Koltun WA  
Dis Colon Rectum 2005 Feb 10;.

#### **Prospective, Randomized Trial Comparing Intraoperative Colonic Irrigation With Manual Decompression Only for Obstructed Left-Sided Colorectal Cancer.**

Lim JF, Tang CL, Seow-Choen F, Heah SM  
Dis Colon Rectum 2005 Feb 15;.

#### **Transanal Endoscopic Microsurgery: A Systematic Review.**

Middleton PF, Sutherland LM, Maddern GJ  
Dis Colon Rectum 2005 Feb 10;.

#### **Long-Term Treatment of High Intestinal Output Syndrome With Budesonide in Patients With Crohn's Disease and Ileostomy.**

Ecker KW, Stallmach A, Loffler J, Greinwald R, Achenbach U  
Dis Colon Rectum 2005 Feb 15;.

**PURPOSE:** In a previous, controlled study, it was shown that orally administered budesonide increases the absorptive capacity of the intestinal mucosa in patients with ileostomies caused by Crohn's disease. This open, nonrandomized study was designed to analyze this functional, not inflammation-dependent steroid-effect in the long-term course comparing exposure, withdrawal, and reexposure. **METHODS:** Phase 1: 23 patients without inflammatory activity of the disease received oral budesonide (3 mg t.i.d.) for at least four weeks (36.7 weeks; standard deviation, 45.3 weeks) because of high intestinal output syndrome. Phase 2: Medication was stopped for four weeks. Phase 3: Medication as in Phase 1. In each phase the weight of the ileostomy bags was measured with a spring balance before emptying and documented in a diary. Mean values per day and per week were calculated and the differences statistically evaluated by the Wilcoxon-(Pratt)-test. **RESULTS:** Comparing the last week of Phase 1 to first week of Phase 2, a significant ( $P < 0.0001$ ) increase of the intestinal output (295 g; standard deviation, 313 g) was observed after omitting budesonide. In contrast, comparing the last week of Phase 2 to Phase 3, a significant ( $P < 0.0001$ ) decrease of the intestinal output by 323.7 g (standard deviation, 322.2 g) was noticed reaching the same level as in Phase 1. **CONCLUSIONS:** These data show that the functional, inflammation-independent effect of budesonide on the intestinal mucosa is strongly correlated to the administration of the drug and may be maintained long-term. These results should be confirmed by a larger number of patients.

#### **Loop Ileostomy Closure After Restorative Proctocolectomy: Outcome in 1,504 Patients.**

Wong KS, Remzi FH, Gorgun E, Arrigain S, Church JM, Preen M, Fazio VW  
Dis Colon Rectum 2005 Feb 15;

**PURPOSE:** Routine use of a temporary loop ileostomy for diversion after restorative proctocolectomy is controversial because of reported morbidity associated with its creation and closure. This study intended to review our experience with loop ileostomy closure after restorative proctocolectomy and determine the complication rates. In addition, complication rates between handsewn and stapled closures were compared.**METHODS:** Our Department Pelvic Pouch Database was queried and charts reviewed for all patients who had ileostomy closure after restorative proctocolectomy from August 1983 to March 2002.**RESULTS:** A total of 1,504 patients underwent ileostomy closure after restorative proctocolectomy during a 19-year period. The median length of hospitalization was three (range, 1-40) days and the overall complication rate was 11.4 percent. Complications included small-bowel obstruction (6.4 percent), wound infection (1.5 percent), abdominal septic complications (1 percent), and enterocutaneous fistulas (0.6 percent). Handsewn closure was performed in 1,278 patients (85 percent) and stapled closure in 226 (15 percent). No significant differences in complication rates and length of hospitalization were found between handsewn and stapled closure techniques.**CONCLUSIONS:** Our results demonstrated that ileostomy closure after restorative proctocolectomy can be achieved with a low morbidity and a short hospitalization stay. In addition, we found that complication rates and length of hospitalization were similar between handsewn and stapled closures.

#### **Sutured Perineal Omentoplasty After Abdominoperineal Resection for Adenocarcinoma of the Lower Rectum.**

De Broux E, Parc Y, Rondelli F, Dehni N, Tiret E, Parc R  
Dis Colon Rectum 2005 Feb 15;

**PURPOSE:** This study was designed to describe and evaluate the efficacy of sutured perineal omentoplasty on perineal wound healing after abdominoperineal resection for adenocarcinoma of the lower rectum.**METHODS:** Charts of patients who underwent abdominoperineal resection for adenocarcinoma of the rectum from June 1995 to December 2001 were reviewed for mortality, morbidity, and perineal healing. Abdominoperineal resection was accomplished according to Miles combined with total mesorectal excision. The omentum was pediculated on the left gastroepiploic artery and tightly sewn to the subcutaneous fatty tissue. The perineal skin was then closed primarily.**RESULTS:** A total of 104 patients were included in the study. The mean age at surgery was 65 (range, 13-91) years. The distance of the tumor from the anal sphincters was 0.45 +/- 0.9 mm (range, 0-50). During the study period, 92 patients (88 percent) had sutured perineal omentoplasty. The rate of primary perineal wound healing was 80 percent. Postoperative perineal wound complications consisted of perineal abscess in seven patients. Six of these patients had a sutured perineal omentoplasty (6 percent). Only four patients required a surgical drainage. Minor perineal suppuration occurred in four patients (4 percent), whereas partial perineal wound dehiscence occurred in eight patients (8 percent). All wounds healed completely at three months. Intestinal obstruction occurred in three patients (3 percent). No complication of the pedicled omentoplasty was observed.**CONCLUSIONS:** This study demonstrated that sutured perineal omentoplasty is possible in the majority of patients after abdominoperineal resection for adenocarcinoma of the lower rectum with excellent primary perineal wound healing.

#### **Primary Perineal Wound Closure After Preoperative Radiotherapy and Abdominoperineal Resection has a High Incidence of Wound Failure.**

Bullard KM, Trudel JL, Baxter NN, Rothenberger DA  
Dis Colon Rectum 2005 Mar 2;

#### **Colonic J-Pouch-Anal Anastomosis for Rectal Cancer: A Prospective, Randomized Study Comparing Handsewn vs. Stapled Anastomosis.**

Laurent A, Parc Y, McNamara D, Parc R, Tiret E  
Dis Colon Rectum 2005 Mar 2;

#### **Immediate Radical Resection After Local Excision of Rectal Cancer: An Oncologic Compromise?**

Hahnloser D, Wolff BG, Larson DW, Ping J, Nivatvongs S  
Dis Colon Rectum 2005 Mar 2;

**PURPOSE:** Local excision for early-staged rectal cancers is controversial. Preoperative understaging is not uncommon and radical resection after local resection may be needed for a curative treatment. The aim of this study was to determine the frequency and outcome of radical resection (within 30 days) after local excision for rectal adenocarcinoma. **METHODS:** All locally excised rectal cancers (curative intent) that required radical surgery within 30 days were reviewed (1980-2000). T2-3N0-1 stage cancers were each matched to three primary radical surgery controls for stage, age (+/-5 years), gender, date (+/-1 years), and

type (abdominoperineal resection or low anterior resection) of operation. T1N0-1 cancers were compared with stage-matched rectal cancers treated by either primary radical surgery (n = 78) or local excision alone (n = 77). RESULTS: Fifty-two locally excised rectal adenocarcinomas (29 transanal and 23 polypectomies) were followed by radical surgery (24 abdominoperineal resection and 28 low anterior resection) within 7 (range, 1-29) days. Radical surgery was performed because of a cancerous polyp (n = 42), positive margins (5), lymphovascular invasion (3), and T3-staged cancer (2). Twelve of 52 cancers (23 percent) were found to have nodal involvement and 15 of 52 (29 percent) showed residual cancer in the resected specimen. The T2-3N0-1 stage controls were well matched. No significant difference in tumor location, size, adjuvant therapy, or length of follow-up was noted. Local and distant recurrence occurred in 2 of 4 T2-3N1 tumors and in 2 of 11 T2-3N0 cancers and were comparable to the matched controls, as was survival, with the exception of shorter survival in T3N1 cases, but numbers were too small for a definitive conclusion. Length of follow-up was not different. For T1 cancers, the controls were also comparable regarding patient and tumor demographics and adjuvant therapy. Nodal involvement was 21 percent in T1 study cases and 15 percent in T1 primary radical-surgery controls, with a trend toward location in the lower third of the rectum in both groups (58 percent and 50 percent, respectively). Local recurrence rates were 3 percent in the study group, 5 percent for patients undergoing primary radical surgery, and 8 percent for local excision alone. Distant metastasis (11 percent, 12 percent, and 13 percent, respectively) and overall five-year survival were also not significantly different (78 percent, 89 percent, and 73 percent, respectively). CONCLUSIONS: Nodal involvement in attempted locally excised rectal cancers is not uncommon. Local excision of rectal tumors followed by radical surgery within 30 days in cancer patients does not compromise outcome compared with primary radical surgery. Even after radical surgery for superficial T1 rectal cancers, recurrence rates are not insignificant. Future improvements in preoperative staging may be helpful in selecting tumors for local excision only.

**Association Between Fecal Hydrogen Sulfide Production and Pouchitis.**

Ohge H, Furne JK, Springfield J, Rothenberger DA, Madoff RD, Levitt MD  
Dis Colon Rectum 2005 Feb 23;.

**Patterns of local disease failure and outcome after salvage surgery in patients with anal cancer.**

Renehan AG, Saunders MP, Schofield PF, O'dwyer ST  
Br J Surg 2005 Feb 28;.

**Primary rectus abdominis myocutaneous flap for repair of perineal and vaginal defects after extended abdominoperineal resection.**

Bell SW, Dehni N, Chaouat M, Lifante JC, Parc R, Tiret E  
Br J Surg 2005 Feb 25;.