

## FORUM

### **[Should we continue to publish clinical research in French?]**

Slim K

Gastroenterol Clin Biol. 2006 May;30(5):657-8.

### **Pitfalls in systematic reviews.**

Farquhar C, Vail A

Curr Opin Obstet Gynecol. 2006 Aug;18(4):433-9.

**PURPOSE OF REVIEW:** The term 'evidence-based medicine' means integrating individual clinical expertise with the best available external clinical evidence from systematic research. An important source for those who wish to practise evidence-based medicine is the systematic review. Systematic reviews, however, are not without their pitfalls. This review will consider the problems and challenges for researchers and users of systematic reviews. **RECENT FINDINGS:** Failure to adequately assess study quality, funding bias, publication bias, reliance on outcomes that provide no help in clinical decision-making, analysis errors and the incorrect use of evidence statements are all common pitfalls in systematic reviews. **SUMMARY:** There are several steps in completing a systematic review. These include developing the clinical question, searching for all available literature, study selection, assessment of study quality, data extraction, data analysis, interpreting the results, implications for practice and further research, and finally updating the review in a timely manner. Authors of systematic reviews need to be aware of these problems and attempt to address them so that research evidence may be of clinical value to both providers and consumers of healthcare.

### **Consensus statement on surgery journal authorship 2006.**

J Pediatr Surg. 2006 Jun;41(6):1041-1042.

### **Consensus statement on surgery journal authorship--2006.**

Ann Surg. 2006 Jun;243(6):713-4.

### **Sackings at the Canadian Medical Association Journal and editorial independence.**

Van Der Weyden MB

Med J Aust. 2006 Jun 5;184(11):543-5.

A clash of purpose between a journal's editors and its owner.

### **Killing the messenger: should scientific journals be responsible for policing scientific fraud?**

Marusic A, Marusic M

Med J Aust. 2006 Jun 19;184(12):596-7.

### **Media reporting on research presented at scientific meetings: more caution needed.**

Woloshin S, Schwartz LM

Med J Aust. 2006 Jun 5;184(11):576-80.

**OBJECTIVE:** To examine media stories on research presented at scientific meetings to see if they reported basic study facts and cautions, and whether they were clear about the preliminary stage of the research. **DESIGN AND SETTING:** Three physicians with clinical epidemiology training analysed front-page newspaper stories (n = 32), other newspaper stories (n = 142), and television/radio stories (n = 13) identified in LexisNexis and ProQuest searches for research reports from five scientific meetings in 2002-2003 (American Heart Association, 14th Annual International AIDS Conference, American Society of Clinical Oncology, Society for Neuroscience, and the Radiological Society of North America). **MAIN OUTCOME MEASURES:** Media reporting of basic study facts (size, design, quantification of results); cautions about study designs with intrinsic limitations (animal/laboratory studies, studies with < 30 people, uncontrolled studies, controlled but not randomised studies) or downsides (adverse effects in intervention studies); warnings about the preliminary stage of the research presented at scientific meetings. **RESULTS:** 34% of the 187 stories did not mention study size, 18% did not mention study design (another 35% were so ambiguous that expert readers had to guess the design), and 40% did not quantify the main result. Only 6% of news stories about animal studies mentioned their limited relevance to human health; 21% of stories about small

studies noted problems with the precision of the finding; 10% of stories about uncontrolled studies noted it was not possible to know if the outcome really related to the exposure; and 19% of stories about controlled but not randomised studies raised the possibility of confounding. Only 29% of the 142 news stories on intervention studies noted the possibility of any potential downside. Twelve stories mentioned a corresponding "in press" medical journal article; two of the remaining 175 noted that findings were unpublished, might not have undergone peer review, or might change. CONCLUSIONS: News stories about scientific meeting research presentations often omit basic study facts and cautions. Consequently, the public may be misled about the validity and relevance of the science presented.

**Medical journals and the mass media: moving from love and hate to love.**

Smith R

J R Soc Med. 2006 Jul;99(7):347-52.

**Miss, Mister, Doctor: Puzzling titles.**

Khalil A, O'brien P

J R Soc Med. 2006 Jul;99(7):335.

**Miss, Mister, Doctor: An insult.**

Giddon DB

J R Soc Med. 2006 Jul;99(7):335.

**Miss, Mister, Doctor: To protect and serve the patient.**

Naini FB, Gill DS

J R Soc Med. 2006 Jul;99(7):334.

**Miss, mister, doctor: doctor or mister?**

Moore S

J R Soc Med. 2006 Jul;99(7):334.

**Miss, Mister, Doctor: Do surgeons wish to become doctors?**

Davies PD

J R Soc Med. 2006 Jul;99(7):334.

**Miss, Mister, Doctor: How we are titled is of little consequence.**

Feaver G

J R Soc Med. 2006 Jul;99(7):333.

**Consensus statement on surgery journal authorship-2006.**

Sarr MG

Surgery. 2006 Jun;139(6):A11-2.

**Advanced nurse roles in UK primary care.**

Sibbald B, Laurant MG, Reeves D

Med J Aust. 2006 Jul 3;185(1):10-2.

Nurses increasingly work as substitutes for, or to complement, general practitioners in the care of minor illness and the management of chronic diseases. Available research suggests that nurses can provide as high quality care as GPs in the provision of first contact and ongoing care for unselected patients. Reductions in cost are context dependent and rarely achieved. This is because savings on nurses' salaries are often offset by their lower productivity (due to longer consultations, higher patient recall rates, and increased use of tests and investigations). Gains in efficiency are not achieved when GPs continue to provide the services that have been delegated to nurses, instead of focusing on the services that only doctors can provide. Unintended consequences of extending nursing roles include loss of personal continuity of care for patients and increased difficulties with coordination of care as the multidisciplinary team size increases. Rapid access to care is, however, improved. There is a high capital cost involved in moving to

multidisciplinary teams because of the need to train staff in new ways of working; revise legislation governing scope of practice; address concerns about legal liability; and manage professional resistance to change. Despite the unintended consequences and the high costs, extending nursing roles in primary care is a plausible strategy for improving service capacity without compromising quality of care or health outcomes for patients.

#### **Physician assistants and nurse practitioners: the United States experience.**

Hooker RS

Med J Aust. 2006 Jul 3;185(1):4-7.

Physician assistants (PAs) and nurse practitioners (NPs) were introduced in the United States in 1967. As of 2006, there are 110 000 clinically active PAs and NPs (comprising approximately one sixth of the US medical workforce). Approximately 11 200 new PAs and NPs graduate each year. PAs and NPs are well distributed throughout primary care and specialty care and are more likely than physicians to practise in rural areas and where vulnerable populations exist. The productivity of NPs and PAs, based on traditional doctor services, is comparable, and the range of services approaches 90% of what primary care physicians provide. The education time is approximately half that of a medical doctor and entry into the workforce is less restrictive. The interprofessional skill mix provided by PAs and NPs may enhance medical care in comparison with that provided by a doctor alone.

### **1 – THE PELVIC FLOOR**

#### **Placement of probes in electrostimulation and biofeedback training in pelvic floor dysfunction.**

der Zalm PJ, Pelger RC, van Heeswijk-Faase IC, Elzevier HW, Ouwerkerk TJ, Verhoef J, Nijeholt GA  
Acta Obstet Gynecol Scand. 2006;85(7):850-5.

Background. We examined the positioning of five commonly used probes in electrostimulation and biofeedback training. Materials and methods. Ultrasound and MRI were used to evaluate the position of these probes in two multiparous women, in reference to pelvic floor anatomy. Results. From caudal to cranial we identified the anal external sphincter, puborectal muscle, and levator group. Positioning of probes varied considerably: the recording plates are situated from 1 cm caudal to 6 cm cranial of the puborectal muscle. Most probes stretched, due to a relatively large diameter, the vagina wall, anal external sphincter, or puborectal muscle beyond physiological proportions. On straining, all probes were pushed upwards into the rectum. Conclusion. The positioning of all examined probes varied considerably. Hence it is not likely that these probes give a reliable and uniform registration of muscular activity of the pelvic floor function or are all optimal for electrostimulation.

### **2 – FUNCTIONAL ANATOMY**

#### **Pelvic floor: anatomy and function.**

Bharucha AE

Neurogastroenterol Motil. 2006 Jul;18(7):507-19.

The pelvic floor is a dome-shaped striated muscular sheet that encloses the bladder, uterus, and rectum, and, together with the anal sphincters, has an important role in regulating storage and evacuation of urine and stool. This article reviews the anatomy, nerve supply, pharmacology, and functions of the anal sphincters and the pelvic floor. The internal and external anal sphincters are primarily responsible for maintaining faecal continence at rest and when continence is threatened, respectively. Defecation is a somato-visceral reflex regulated by dual nerve supply (i.e. somatic and autonomic) to the anorectum. The net effects of sympathetic and cholinergic stimulation are to increase and reduce anal resting pressure, respectively. Faecal incontinence and functional defecatory disorders may result from structural changes and/or functional disturbances in the mechanisms of faecal continence and defecation.

#### **Androgen and menopause.**

Somboonporn W

Curr Opin Obstet Gynecol. 2006 Aug;18(4):427-32.

PURPOSE OF REVIEW: Androgen therapy is being increasingly used in the management of postmenopausal women. The most common indication is to improve sexual function. The aim of this review

is to evaluate current knowledge pertaining to testosterone and sexual function in postmenopausal women. **RECENT FINDINGS:** The change of testosterone levels during the menopause transition remains controversial. A correlation of endogenous testosterone levels and sexual function is still inconclusive. A Cochrane Review and recent randomized control trials have, however, consistently demonstrated that short-term testosterone therapy in combination with traditional hormone therapy regimens improves sexual function in postmenopausal women, particularly surgically menopausal women with hypoactive sexual desire disorder. An adverse effect on the lipid profile has been identified which appears to be mostly associated with oral methyltestosterone. Data for other effects of testosterone and long-term risks are lacking. Testosterone may act in a variety of ways in different tissues. This is, however, an area that requires further investigation. **SUMMARY:** Testosterone therapy is a promising option for treating women with hypoactive sexual desire disorder after surgical menopause. Two remaining questions need to be answered: who is most likely to benefit from testosterone therapy and what are the long-term health risks?

### **Changes in u.s. Prescribing patterns of menopausal hormone therapy, 2001-2003.**

Hing E, Brett KM

Obstet Gynecol. 2006 Jul;108(1):33-40.

**OBJECTIVE:** In 2002, the combination estrogen-progestin hormone therapy (HT) treatment arm of the Women's Health Initiative was terminated early because cardiovascular and cancer risks were identified, while the estrogen-only therapy (ET) arm of this trial continued. We investigated hormone therapy prescription practice changes between 2001 and 2003 to explore the effects of the clinical trial results. **METHODS:** Data were obtained from the National Ambulatory Medical Care Survey and the National Hospital Ambulatory Medical Care Survey for the years 2001 through 2003. These nationally representative surveys sample medical encounters in nonfederally employed physician's offices and outpatient departments of nonfederal short-stay and general hospitals. The proportion and rate of visits with ET and HT prescriptions were calculated. Logistic regression was used to estimate change over time accounting for patient and provider characteristics. **RESULTS:** Between 2001 and 2003, the number of visits with menopausal hormone prescriptions fell from 26.5 million to 16.9 million. Almost three-quarters of hormone visits were for ET prescriptions. The decrease in the rate of visits was slightly larger for HT prescription visits (44%) than ET prescription visits (35%). The rate of decline was highest among women 50 years of age and over. After controlling for covariates, there was no significant difference in the decline by hormone type. **CONCLUSION:** These nationally representative data indicate substantial declines in menopausal hormone prescriptions coinciding with clinical trial results on HT. These declines occurred among all types of therapy and patient characteristics. **LEVEL OF EVIDENCE:** II-3.

### **3 – DIAGNOSTICS**

#### **Efficiency of questionnaires used to screen for interstitial cystitis.**

Kushner L, Moldwin RM

J Urol. 2006 Aug;176(2):587-92.

**PURPOSE:** Questionnaires for the evaluation of interstitial cystitis are widely used, but their value in discriminating interstitial cystitis from other diagnoses among patients with urological symptoms has not been determined. We assessed the validity of 2 frequently used interstitial cystitis questionnaires—the O'Leary-Sant Symptom Index and Problem Index and the Pain, Urgency, Frequency Symptom Scale—for screening for interstitial cystitis. **MATERIALS AND METHODS:** The Pain, Urgency, Frequency Symptom Scale and the O'Leary-Sant Symptom Index and Problem Index were administered to the same 220 patients at a urology clinic before diagnosis. Questionnaire scores between patients with and without interstitial cystitis, as well as among diagnostic groups, were compared by parametric and nonparametric analyses. Receiver operating characteristic curves were constructed to determine the efficiency of each questionnaire in discriminating between patients with and without interstitial cystitis. **RESULTS:** Interstitial cystitis was distinguishable from the other diagnoses using both questionnaires ( $p < 0.001$ ). Separate analyses of bother and symptom scores yielded similar results. Receiver operating characteristic curves demonstrated the Pain, Urgency, Frequency Symptom Scale to be more efficient than the O'Leary-Sant Symptom Index and Problem Index in detecting interstitial cystitis in this population with an optimal cutoff value of 13 or greater. **CONCLUSIONS:** While the

Pain, Urgency, Frequency Symptom Scale and the O'Leary-Sant Symptom Index and Problem Index questionnaires distinguish interstitial cystitis from other urinary tract pathologies, neither questionnaire demonstrates sufficient specificity to serve as the sole diagnostic indicator. These questionnaires should not be used to define interstitial cystitis, but can be used to screen patients with urinary tract symptoms to identify those who should be further examined for interstitial cystitis or to follow those who have already been diagnosed.

#### **What Is a Clinician To Do-Believe the Patient or her Urinary Diary?**

Kenton K, Fitzgerald MP, Brubaker L  
J Urol. 2006 Aug;176(2):633-5.

**PURPOSE:** We determined if patient recall of incontinence episodes correlates with urinary diary record. **MATERIALS AND METHODS:** Women with 1 or more urge incontinence episode per week completed 2, 7-day diaries, the Urinary Distress Inventory and Incontinence Impact Questionnaire, and responded to 2 recall questions. **RESULTS:** The median number of incontinence episodes participants recalled (6.5, 5) was higher than those recorded in the diary (1.9, 1.1) at both points. Incontinence episodes in 2, 7-day diaries correlated strongly ( $\rho = 0.921$ ,  $p < 0.005$ ) while participant recall of incontinence episodes correlated weakly ( $\rho = 0.309$ ,  $p < 0.059$ ). When subjects reported being only slightly or not bothered by urge incontinence, recall and diary record correlated strongly ( $\rho = 0.812$ ,  $p = 0.014$ ). With increasing bother (moderate or great), recall and diary were not significantly correlated ( $\rho = 0.528$ ,  $p = 0.115$ ). **CONCLUSIONS:** Women with urge incontinence either overestimate or under record incontinence episode frequency in the urinary diary. This effect is more pronounced in women who are more bothered by incontinence.

#### **Determining the importance of change in the overactive bladder questionnaire.**

Coyne KS, Matza LS, Thompson CL, Kopp ZS, Khullar V  
J Urol. 2006 Aug;176(2):627-32.

**PURPOSE:** The overactive bladder questionnaire assesses symptom bother and health related quality of life in patients with overactive bladder. It has been shown to be reliable, valid and responsive. We established the minimally important difference of the overactive bladder questionnaire. **MATERIALS AND METHODS:** Post hoc analyses from 2 clinical trials were performed. Distribution based, eg effect size, and anchor based analyses using perception of treatment benefit and clinical variables were used. **RESULTS:** The mean age of the 2 study populations was 58.8 and 58.7 years, respectively. Patients were predominantly female (51.8% and 75.1%) and white (83.9% and 87%, respectively). Half SD of the overactive bladder questionnaire symptom bother subscale was 9.1 to 9.3, and half SD of the overactive bladder questionnaire health related quality of life subscales (coping, concern, sleep and social interaction) was 9.8 to 13.2. Questionnaire subscales had moderate to large effect sizes with the largest effect sizes for symptom bother (-0.85 to -1.09). Anchor based analyses showed that significantly greater change scores were associated with greater patient perceived treatment benefit and satisfaction. The difference between change scores in patients perceiving no and little benefit was 7.4 to 16.5 for all questionnaire scales except social interaction with the majority greater than 10 points. Greater change scores were consistently associated with greater improvements in micturition diary variables. **CONCLUSIONS:** Multiple methodologies provide strong justification for the recommendation of a 10-point minimally important difference for all overactive bladder questionnaire subscales. This minimally important difference may be conservative for some subscales, although a uniform minimally important difference is recommended to facilitate interpretation of the overactive bladder questionnaire.

**Editorial comment.** Brubaker L. J Urol. 2006 Aug;176(2):632.

#### **Gastrointestinal endoscopes cleaned without detergent substance following an automated endoscope washer/disinfector dysfunction.**

Mean M, Mallaret MR, Bichard P, Shum J, Zarski JP  
Gastroenterol Clin Biol. 2006 May;30(5):665-8.

**OBJECTIVE:** To report cases of gastrointestinal endoscopies performed with endoscopes that were reprocessed without detergent substance during a period of dysfunction of the automated endoscope reprocessor (AER). **METHOD:** A dysfunction of the AER for the cycles requiring detergent substance was reported at the Grenoble University Hospital on March 2005. During this period, 72 patients had potentially been exposed to a contaminated endoscope. A recall procedure was organized and serologic tests (HIV,

HCV, HBV) were performed 3 and 6 months after the AER incident. RESULTS: Within the 72 patients convened, 56 (77.8%) were seen in consultation and accepted the serologic screening. Finally, serologic screening was done for 59 patients (81.9%) and no seroconversion for HIV, HCV, or HBV was observed. The final attrition rate was 13 patients (18.1%). CONCLUSION: No viral infection was transmitted during the AER dysfunction. After this AER incident, the monitoring of the endoscopic procedures and the traceability of the cleaning process were both improved to prevent further incidents.

**Less patient discomfort by one-man colonoscopy examination.**

Lee IL, Wu CS

Int J Clin Pract. 2006 Jun;60(6):635-8.

A randomised prospective trial compared safety and patient tolerance for one-man method with two-man method undergoing colonoscopy. Eighty patients were randomized to 1 of 2 groups: the two-man method group (n = 40); or the one-man method group (n = 40). All colonoscopic examinations were performed by the same endoscopist to reduce skill-based variation. Patient tolerance for colonoscopy was evaluated with a numerical rating scale ranging from 0 for painless to 5 for maximal pain. Cardiopulmonary parameters were recorded during the procedure. Patients receiving one-man method had lower pain score than two-man method. The length of the scope reach to the cecum was shorter in the one-man group than the two-man group. The patients underwent two-man colonoscopy had higher maximum increase in heart rate during the procedure compared with one-man group. One-man colonoscopy can improve patient tolerance and reduces patient pain by decreasing the redundancy of colonoscope during the procedure.

**One man and his scope.**

Parkes GC, Sanderson JD

Int J Clin Pract. 2006 Jun;60(6):633-4.

**Validation of a semi-automated scintigraphic technique for detecting episodic, real-time colonic flow.**

Dinning PG, McKay E, Cook IJ

Neurogastroenterol Motil. 2006 Jul;18(7):547-55.

The relationships between the movement of colonic content and regional pressures have only been partially defined. During the analysis of a combined colonic scintigraphic and manometric study, a quantitative technique for determining discrete, episodic, real-time colonic flow was developed. Our aim was to validate this technique through the construction of a computer-generated phantom model of known antegrade and retrograde motility. The anthropoid phantom was rasterized into a 6-mm voxel model to create a 3D voxel phantom of the colon with four distinct colonic segments. Associating a time/activity curve with each segment simulated dynamic behaviour. Activity in the model was based on data obtained from human colonic scintigraphic recordings using 30 MBq of (99m)Tc sulphur colloid. The flow was simulated by modifying the input time/activity functions to represent episodes of net flow of 2%, 5% or 10% of segmental content. Our quantitative technique was applied to the phantom model to measure the accuracy with which simulated flows were detected. Our quantitative technique proved to be a sensitive and specific means of detecting the presence and the magnitude of discrete episodes of colonic flow and therefore, should improve our ability to correlate colonic flow and motor patterns.

**Inappropriate and improper use of fecal occult blood tests for colorectal cancer screening in the VA Medical System.**

Ahmed F, Murthy UK

Am J Gastroenterol. 2006 Jun;101(6):1401.

**A randomized controlled trial comparing the accuracy of general diagnostic upper gastrointestinal endoscopy performed by nurse or medical endoscopists.**

Meaden C, Joshi M, Hollis S, Higham A, Lynch D

Endoscopy. 2006 Jun;38(6):553-60.

BACKGROUND AND STUDY AIMS: Rising demand for general diagnostic upper gastrointestinal endoscopy in the UK is outgrowing the capacity of doctors to provide this service within a reasonable time. One solution is to train nurses to carry out the procedure, but it is not known whether nurses can perform general

diagnostic upper gastrointestinal endoscopy as competently as doctors. **PATIENTS AND METHODS:** A randomized controlled non-inferiority trial compared the adequacy and the accuracy of diagnostic upper gastrointestinal endoscopies performed by five medical and two nurse endoscopists. The videotaped procedures were assessed by a consultant gastroenterologist blinded to the identity of the endoscopist. **RESULTS:** 641 patients were randomly allocated (before attendance and consent procedure) to endoscopy carried out either by a doctor or a nurse. Of these, 412 were enrolled and 367 (89 %) were included in the analysis. An adequate view was obtained throughout in 53.4 % (93/177) of doctor endoscopies and 91.6 % (174/190) of nurse endoscopies (difference 38.2 %, 95 % CL 30.5 %, 47.2 %). In adequately viewed areas, the mean agreement between doctor and expert was 81.0 % and between nurse and expert it was 78.3 % (difference between the means 2.7 %, 95 % CL - 1.0 %, 6.4 %). There was no difference between doctors and nurses in the rate of biopsy performance (90.4 % and 91.1 %, respectively,  $P = 0.862$ ). Nurses took longer (8.1 minutes vs. 4.6 minutes,  $P < 0.001$ ) and used intravenous sedation more often (57.6 %,  $P = 0.027$ ). Adequacy of view correlated positively with endoscopy duration ( $P < 0.001$ ), but diagnostic accuracy correlated inversely with duration ( $P < 0.001$ ). Neither adequacy or accuracy correlated significantly with use of intravenous sedation. **CONCLUSIONS:** In endoscopies performed by nurses, the proportion of adequate examinations was much higher than that found for doctors. In areas with an adequate view, there is no significant difference in accuracy between nurses and doctors. Nurses can provide an accurate general diagnostic upper gastrointestinal endoscopy service as competently as doctors.

#### **4 – PROLAPSES**

##### **Descending perineum in women]**

Villet R, Ayoub N, Salet-Lizee D, Gadonneix P  
Gastroenterol Clin Biol. 2006 May;30(5):681-6.

Physiopathological and clinical interpretation of the descending perineum as described by A. Parks in 1970 remains difficult. This review is based on the literature between 1966 and 2004. The observed symptoms are more often due to associated lesions. The descending perineum on X-ray is not always symptomatic. Colpocystography shows the descent of the perineum and pelvic disorders from the anterior and middle parts of the perineum whereas defecography seems to provide a better diagnosis of dyschesia due to posterior damage (such as rectocele or endo-anal intussusception). The first step of treatment is reeducation and medical treatment because there is no consensus for surgical therapy. Soft sacrocolpopexy by the abdominal approach with three meshes, one under the bladder, one in front of and one behind the rectum can be proposed for complete descending perineum. Transanal rectal resection by staple could be useful when the descending perineum is only associated with a rectocele and/or an intra-anal intussusception.

##### **Transvaginal repair of enterocele and vaginal vault prolapse using autologous fascia lata graft.**

Molsted-Pedersen L, Rudnicki M, Lose G  
Acta Obstet Gynecol Scand. 2006;85(7):874-8.

Background. The aim was to describe the operative technique of transvaginal repair of enterocele and apical prolapse using autologous fascia lata and report intra- and postoperative complications and long-term outcome. Methods. A retrospective chart review of 74 consecutive patients who had repair of a symptomatic enterocele and vaginal vault prolapse or uterine prolapse from January 1987 to August 1999. All patients were followed for a minimum of 3 months and 61 were available for long-term evaluation at 18-106 months (median 52 months). Results. Intra- and postoperative complications were few. Pelvic examination at long-term follow-up disclosed a recurrence rate for enterocele of 1.7%, vaginal vault prolapse of 8.3%, and cystocele of 15%. Ninety-one per cent were subjectively satisfied with the relief of mechanical vaginal symptoms. Only 35% (6/17) were cured of constipation. Out of the 22 women who were sexually active after the procedure, 12 (54%) experienced improved quality. Conclusion. Repair of the posterior compartment defect and suspension of the vaginal vault using autologous fascia lata graft provides acceptable intra- and postoperative complication and long-term results.

##### **Effect of vaginal pessaries on symptoms associated with pelvic organ prolapse.**

Fernando RJ, Thakar R, Sultan AH, Shah SM, Jones PW  
Obstet Gynecol. 2006 Jul;108(1):93-9.

**OBJECTIVE:** To prospectively evaluate the effects of vaginal pessaries on symptoms associated with pelvic organ prolapse and identify the risk factors for failure. **METHODS:** All women referred to a specialist urogynecology unit with symptomatic pelvic organ prolapse who elected to use a pessary were included in this study. All completed the Sheffield pelvic organ prolapse symptom questionnaire before use and after 4 months of use. The primary outcome measure was change of symptoms from baseline to 4 months. **RESULTS:** Of 203 consecutive women fitted with a pessary, 153 (75%) successfully retained the pessary at 2 weeks, and 97 completed the questionnaires at 4 months. Multivariate logistic regression analysis showed that failure to retain the pessary was significantly associated with increasing parity (odds ratio [OR] 1.52, 95% confidence interval [CI] 1.14-2.02,  $P = .004$ ) and hysterectomy (OR 4.57, 95% CI 1.71-12.25,  $P = .002$ ). In the success group at 4 months ( $n = 97$ ), a significant improvement in voiding was reported by 39 participants (40%,  $P = .001$ ), in urinary urgency by 37 (38%,  $P = .001$ ), in urge urinary incontinence by 28 (29%,  $P = .015$ ), in bowel evacuation by 27 (28%,  $P = .045$ ), in fecal urgency by 22 (23%,  $P = .018$ ), and in urge fecal incontinence by 19 (20%,  $P = .027$ ), but there was no significant improvement in stress urinary incontinence in 22 participants (23%  $P = .275$ ). Of the 26 (27%) who were sexually active, 16 (17%,  $P = .001$ ) reported an increase in frequency of sexual activity, and 11 (11%,  $P = .041$ ) had improved in sexual satisfaction. **CONCLUSION:** A vaginal pessary is an effective and simple method of alleviating symptoms of pelvic organ prolapse and associated pelvic floor dysfunction. Failure to retain the pessary is associated with increasing parity and previous hysterectomy. **LEVEL OF EVIDENCE:** II-3.

**Long-term results of robotic assisted laparoscopic sacrocolpopexy for the treatment of high grade vaginal vault prolapse.**

Elliott DS, Krambeck AE, Chow GK  
J Urol. 2006 Aug;176(2):655-9.

**PURPOSE:** Transabdominal sacrocolpopexy is a definitive treatment option for vaginal vault prolapse with durable success rates. However, it is associated with increased morbidity compared with vaginal repairs. We describe a minimally invasive technique of vaginal vault prolapse repair and present our experience with a minimum of 1 year followup. **MATERIALS AND METHODS:** The surgical technique involves 5 laparoscopic ports: 3 for the da Vinci(R) robot and 2 for the assistant. A polypropylene mesh is attached to the sacral promontory and vaginal apex using polytetrafluoroethylene sutures. The mesh material is then covered by peritoneum. Patient analysis focused on complications, urinary continence, patient satisfaction and morbidity with a minimum of 12 months followup. **RESULTS:** A total of 30 patients with post-hysterectomy vaginal vault prolapse underwent robotic assisted laparoscopic sacrocolpopexy at our institution and 21 have a minimum of 12 months followup. Mean followup was 24 months (range 12 to 36) and mean age was 67 years (range 47 to 83). Mean operative time was 3.1 hours (range 2.15 to 4.75). All but 1 patient were discharged home on postoperative day 1 and the 1 patient left on postoperative day 2. Recurrent grade 3 rectocele developed in 1 patient, 1 had recurrent vault prolapse and 2 had vaginal extrusion of mesh. All patients were satisfied with outcome. **CONCLUSIONS:** The robotic assisted laparoscopic sacrocolpopexy is a minimally invasive technique for vaginal vault prolapse repair, combining the advantages of open sacrocolpopexy with the decreased morbidity of laparoscopy. We found a decreased hospital stay, low complication rates and high patient satisfaction with a minimum of 1 year followup.

**Technical and functional results after laparoscopic rectopexy to the promontory for complete rectal prolapse. Prospective study in 54 consecutive patients.**

Auguste T, Dubreuil A, Bost R, Bonaz B, Faucheron JL  
Gastroenterol Clin Biol. 2006 May;30(5):659-63.

**INTRODUCTION:** Laparoscopic rectopexy for complete rectal prolapse offers short-term advantages compared with operations performed by laparotomy. The aim of this prospective study was to report technical and functional outcome after laparoscopic rectopexy to the promontory in consecutive patients operated on by a single surgeon. **PATIENTS AND METHODS:** From May 1996 to July 2004, 54 consecutive patients (47 women), median age 53 years (range: 16-84 years), underwent laparoscopic rectopexy to the promontory for complete rectal prolapse. Preoperative evaluation included physical examination, dynamic videoproctography and, in patients with constipation, colonic transit time (with radiopaque markers). Postoperative evaluation included the same examinations and a simple global quality-of-life questionnaire. **RESULTS:** Conversion to laparotomy was required for three patients during the learning curve. Median



duration of operation was 157 minutes (range: 50-370). There was no mortality and morbidity was 5.5% (brachial plexus palsy in two patients and urinary tract infection in one). Median hospital stay was 3.5 days (range: 1-11). There were 4 recurrences (7.4%). Functional outcome at 12 months showed the presence of constipation in 20.3% of patients (persistence in eight and de novo in three) and the presence of outlet obstruction in 25.9% of patients (persistence in six and de novo in eight). Anal continence improved in 72.4% of the 29 patients who complained of this symptom. The global quality-of-life questionnaire showed a satisfactory result in 96% of patients. CONCLUSION: Laparoscopic rectopexy to the promontory is a safe and efficient procedure to treat complete rectal prolapse; morbidity is low. Functional outcome is at least equivalent to that obtained with open procedures in terms of continence, constipation and outlet obstruction.

#### **Stapled hemorrhoidectomy.**

Stamos MJ

J Gastrointest Surg. 2006 May;10(5):627-8.

Stapled hemorrhoidectomy or "hemorrhoidopexy" has gained popularity for the treatment of grade 3-4 hemorrhoids, largely due to decreased pain as compared to traditional surgical hemorrhoidectomy. This decreased pain, along with proven short term efficacy, has been supported by numerous randomized controlled trials. Despite this evidence in support of stapled hemorrhoidectomy, controversy exists due to rare but occasionally life threatening complications, and also due to significant chronic pain experienced by a small but significant subset of patients. Attention to the technical details of the operation will limit these deleterious outcomes, and allow stapled hemorrhoidectomy to maintain its niche role in the treatment of symptomatic hemorrhoids.

#### **Obsessive-compulsive disorder and rectal prolapse.**

Henry JB, Drummond LM, Kolb P

Eur J Gastroenterol Hepatol. 2006 Jul;18(7):797-798.

A 47-year-old woman with a long-standing history of obsessive-compulsive disorder relating to dirt and germs is presented. Her fear of developing bowel cancer led her to manually evacuate faeces from her rectum five times a day and to a resultant rectal prolapse. Treatment involved prolonged graduated exposure to the patient's feared contaminants and ritual avoidance. After 5 months of inpatient therapy, the patient reported a subjective 70% improvement in her symptoms. As her obsessive-compulsive disorder symptoms improved, the patient's rectal prolapse disappeared.

#### **Lomas-Cooperman technique for rectal prolapse in the elderly patient.**

Mansilla JE, Bannura GC, Contreras JP, Barrera AE, Melo CL, Soto DC

Tech Coloproctol. 2006 Jun;10(2):106-10. Epub 2006 Jun 19.

BACKGROUND: A variety of surgical procedures is used to correct complete rectal prolapse (RP). We analysed the immediate and long-term results of the Lomas-Cooperman technique in the management of symptomatic RP in elderly patients with severe concomitant diseases. METHODS: Across a 13-year period, all patients with RP having undergone surgery with this procedure were retrospectively evaluated. The technique consisted in placing a triply folded piece of polypropylene mesh encircling the anal canal through a perineal approach. RESULTS: A total of 22 patients (20 female) with a mean age of 84 years (range, 72-93 years) with severe concomitant pathologies were assessed. Four patients were classified as ASA II and 18 as ASA III. Mean Karnofsky score was 50%, ranging between 40% and 60%. All patients were operated on under regional anaesthesia without incidents. Mean operative time was 35 min (range, 20-60 min) and mean hospital stay was 4.5 days (range, 2-17 days). The most common immediate postoperative complication was urinary tract infection, found in 18% of the cases. Mean follow-up was 32 months (range, 4-84 months). During follow-up, 4 cases (18%) of mesh exteriorisation were detected, requiring mesh trimming at the outpatient clinic. Rectal prolapse recurred in 2 patients; one of them was managed with a new cerclage reaching a satisfactory outcome. Thus, by intention-to-treat basis, the recurrence rate was 4.5%. Constipation was resolved in three out of 4 patients, but in 18% of the cases late faecal impact was recorded. Mean preoperative incontinence score improved from 5.1+/-0.62 to 3.4+/-1.61 (p<0.0001) after surgery. CONCLUSION: Anal cerclage with the Lomas-Cooperman technique constitutes a simple and reproducible surgical technique with an acceptable morbidity and recurrence rate in high-risk elderly patients with RP.

## 5 – RETENTIONS 2006 06

### **Patterns of constipation in urogynecology: clinical importance and pathophysiologic insights.**

Soligo M, Salvatore S, Emmanuel AV, De Ponti E, Zoccatelli M, Cortese M, Milani R  
Am J Obstet Gynecol. 2006 Jul;195(1):50-5. Epub 2006 Apr 21.

**OBJECTIVE:** We have analyzed the prevalence and patterns of constipation in women with urinary symptoms and/or genital prolapse. **STUDY DESIGN:** Seven hundred and eighty-six consecutive urogynecologic patients underwent a questionnaire and structured clinical assessment. Comparison between constipated and nonconstipated women was made. Fisher exact test, Wilcoxon rank sum test, and logistic regression were used for statistical analysis ( $P < .05$  for significance). **RESULTS:** Thirty-two percent of women were constipated (172 difficult stool passage, 13 reduced stool frequency, 64 both). A genital prolapse  $\geq$  2 degree Half Way System (HWS) was present in 44% of women. A posterior colpocele was more frequent in constipated women (35% vs 19%;  $P < .0001$ ), resulting in a risk factor for constipation (OR 2.31; 95% CI 1.63-3.27). By contrast, higher degrees of anterior colpocele appeared to protect against constipation (OR 0.80; 95% CI 0.66-0.96). No differences in prevalence of constipation were observed for urinary symptoms or urodynamic diagnosis. **CONCLUSION:** Bowel dysfunction correlates exclusively with posterior aspects of the pelvic floor support.

### **Acute urinary retention as a result of a bladder diverticulum.**

Aslam F, Syed JA, Nadeem N, Hussain S  
Int J Urol. 2006 May;13(5):628-30.

An 11-month-old infant presented with acute urinary retention. He had presented 3 months earlier with complaints of an enlarging abdominal mass that was initially diagnosed as a mesenteric cyst on ultrasonography. Voiding cystourethrogram revealed a large bladder diverticulum. Bladder diverticulum should be a differential diagnosis in children, especially male, presenting with urinary retention, fever and an abdominal mass.

### **Dorsal graft urethroplasty for female urethral stricture.**

Tsvivan A, Sidi AA  
J Urol. 2006 Aug;176(2):611-3.

**PURPOSE:** Urethral strictures in females are uncommon, and treatment options and outcome are not well-defined with scanty reports. We describe a new method of urethroplasty for the repair of female urethral stricture. **MATERIALS AND METHODS:** Three 60-year-old females, each with a history of recurrent urinary tract infections and obstructive voiding symptoms due to urethral stricture, underwent urethroplasty with a dorsal vaginal or buccal mucosal graft. The dorsal aspect of the distal urethra was dissected from the surrounding tissue through a suprimeatal incision and the urethral wall was incised through the stricture at the 12 o'clock position. A 1.5 cm wide free graft was harvested from the vaginal wall or buccal mucosa in 1 case, and the mucosal surface was placed upon the urethral lumen and sutured with a running 5-zero polyglactin suture to the open urethra. Indwelling 18Fr urethral and 16Fr suprapubic catheters were left in place for 2 and 3 weeks, respectively. **RESULTS:** No additional treatment was required during the 1, 8 and 27 months of followup. All patients had normal micturition following catheter removal. **CONCLUSIONS:** Dorsal graft urethroplasty is feasible and effective for the correction of persistent female urethral stricture.

### **Nutritional care of the patient with constipation.**

Fernandez-Banares F  
Best Pract Res Clin Gastroenterol. 2006 Jun;20(3):575-87.

Chronic constipation is defined as a symptom-based disorder based on the presence for at least 3 months in the last year of unsatisfactory defecation characterized by infrequent stools, difficult stool passage, or both. On the other hand, the presence of clinically important abdominal discomfort or pain associated with constipation defines irritable bowel syndrome (IBS) with constipation. Intake of dietary fibre and bulking agents (psyllium) may be effective in alleviating chronic constipation in patients without slow colonic transit or disordered constipation. On the other hand, fibre may improve stool consistency in patients with IBS with constipation, but it is considered to be not effective in improving abdominal pain, distension or bloating.

Probiotics may be effective in relieving constipation; however, the effect of lactic acid bacteria ingestion may be dependent on the bacterial strain used and the population being studied. Lactulose, which is a substrate for lactic acid bacteria (prebiotic), is effective to treat patients with chronic constipation.

#### **Intestinal neuronal dysplasia.**

Skaba R, Frantlova M, Horak J

Eur J Gastroenterol Hepatol. 2006 Jul;18(7):699-701.

Intestinal neuronal dysplasia type B (IND B) is currently defined as a disease of the submucous plexus of the intestine. The aetiology of IND B remains largely obscure. The congenital origin of IND B is supposed; nevertheless, the findings of IND B associated with chronic intestinal obstruction support the notion that this disease could be caused by a reaction of the enteric nervous system to intestinal obstruction or inflammatory disease either in the fetal or the postnatal period. The treatment of IND type B has no unified concept of treatment. The ultimate clinical diagnosis of IND B should be based on a definitive histological diagnosis relating to clinical symptoms, the course of treatment and long-term follow-up of patients with this dysfunction of intestinal motility, despite the fact that no correlations of the clinical picture, radiological investigation and anorectal manometric studies with IND B have been found so far.

#### **Prospective randomized crossover trial comparing fibre with lactulose in the treatment of idiopathic chronic constipation.**

Quah HM, Ooi BS, Seow-Choen F, Sng KK, Ho KS

Tech Coloproctol. 2006 Jun;10(2):111-4. Epub 2006 Jun 19.

**BACKGROUND:** Fibre is often recommended as the first-choice treatment but its effects can be uneven. The aim of the study was to compare the clinical efficacy and tolerability of fibre versus lactulose in outpatients with chronic constipation. **METHODS:** In a prospective randomized crossover trial, patients were randomized to receive fibre or lactulose for four weeks. Between treatments, patients had at least one week free of laxatives. **RESULTS:** 50 patients, of median age 50 years (range, 18-85) were recruited and 39 patients completed the trial. Compared to fibre, lactulose resulted in significantly higher mean bowel frequency (7.3, 95% CI 5.7 to 8.9 vs. 5.5, 95% CI 4.4 to 6.5;  $p=0.001$ ) and stool consistency score (3.4, 95% CI 3.1 to 3.7 vs. 2.9, 95% CI 2.5 to 3.3;  $p=0.018$ ). Scores for ease of evacuation were similar. The frequencies of adverse effects were not significantly different, but greater in the lactulose group. Mean patients' recorded improvement score was significantly higher after taking lactulose than fibre (6.2, 95% CI 5.5 to 7.0 vs. 4.8, 95% CI 4.0 to 5.9;  $p=0.017$ ). Of the 39 patients who completed the trial, 24 (61.5%) preferred lactulose and 14 (35.9%) preferred fibre. **CONCLUSIONS:** Lactulose had better efficacy than fibre for chronic constipation in ambulant patients, although both treatments were equally well tolerated in terms of adverse effects.

## **6 – INCONTINENCES**

### **The role of mediolateral episiotomy during labour. Analysis of risk factors for obstetric anal sphincter tears.**

Aukee P, Sundstrom H, Kairaluoma MV

Acta Obstet Gynecol Scand. 2006;85(7):856-60.

**Background.** To determine risk factors for third-degree and complete third- or fourth-degree anal sphincter tears in vaginal delivery. **Methods.** This is a retrospective comparative study. Fifty-three women who had sustained an anal sphincter tear were compared with 9,178 women without such a complication between August 1997 and October 2001. Obstetric data was collected from an electronic database. The main outcome measures were odds ratios. **Results.** In the whole study population, odds ratios (ORs) for third-degree tears were: primiparity, 8.34 (95% confidence interval [CI] 3.98-17.48); vacuum extraction, 5.22 (95% CI 2.69-10.13); parietal presentation, 3.97 (95% CI 1.16-13.64); and birth weight >4,000 g, 3.77 (95% CI 2.11-6.68); and for complete third- or fourth-degree tears odds ratios were 5.42, 2.98, 5.64, and 3.01, respectively. In multivariate analysis, mediolateral episiotomy appeared to be protective as regards third-degree tears (OR 0.37 [95% CI 0.2020-0.70]). **Conclusions.** Vacuum-assisted vaginal delivery bears an increased risk of third-degree anal sphincter tears in a maternity unit where forceps are not used. Restricted use of mediolateral episiotomy may have a protective effect on the perineum.

**[Ultrasound for the diagnosis of female urinary incontinence]**

Jimenez Cidre MA, Lopez-Fando Lavalle L, Quicios Dorado C, de Castro Guerin C, Fraile Poblador A, Mayayo Dehesa T

Arch Esp Urol. 2006 May;59(4):431-9.

OBJECTIVES: The value of ultrasonography for the study of female urinary incontinence has been redefined over the last years. METHODS: We review the literature about the value of ultrasound in the workup of females with urinary incontinence, mainly transperineal ultrasound for the female stress urinary incontinence (SUI). RESULTS: Many papers have been published over the last few years. Upper urinary tract ultrasound has not a place in the workup of genuine female SUI. Transperineal ultrasound allows to evaluate the mobility of the bladder neck and urethra, the thickness of the bladder wall, the funnel shape of the bladder neck, the presence of SUI or pelvic organ prolapse (POP), to visualize mesh implants, to help with biofeedback, and to evaluate changes after surgical treatment. CONCLUSIONS: Ultrasounds in general, and transperineal or translabial ultrasound in particular, are in the process of becoming the standard diagnostic method in urogynecology. Their wide availability, the standardization of parameters, the possibility of evaluating not only the bladder but also the levator ani muscle or pelvic organ prolapses (POP) contribute to this fact. It allows to obtain data in a non invasive way before and after therapy.

**Frequency of de novo urgency in 463 women who had undergone the tension-free vaginal tape (TVT) procedure for genuine stress urinary incontinence-A long-term follow-up.**

Holmgren C, Nilsson S, Lanner L, Hellberg D

Eur J Obstet Gynecol Reprod Biol. 2006 Jun 30;.

BACKGROUND: To determine risk factors for the appearance of de novo urgency symptoms, and subsequent accompanying problems, after the tension-free vaginal tape (TVT) procedure in women with stress urinary incontinence. METHOD: A structured preoperative analysis of the incontinence symptoms was made. A mailed questionnaire was distributed to 970 women that underwent the TVT procedure between 1995 and 2001. Average follow-up was 5.2 years (range 2-8 years). The questionnaire included specific questions on current urinary symptoms and incontinence. The disease-specific quality of life instruments IIQ-7 and UDI-6 were used to compare women with, and those without de novo urgency. RESULTS: Seven hundred and sixty women (78.3%) responded and 463 of those were identified as genuine stress incontinence preoperatively. De novo urgency occurred in 67 (14.5%) of the women. The frequency was similar irrespective of duration since the TVT procedure. The women that reported de novo urgency symptoms were compared with those without symptoms. Risk factors for occurrence of de novo urgency symptoms were older age (64.7 years versus 60.9 years;  $p=0.01$ ), parity (2.6 versus 2.3;  $p=0.05$ ), history of cesarean section (9.5% versus 2.5%; odds ratio 5.4), and history of recurrent urinary infections (29.7% versus 18.8%; odds ratio 1.6, but non-significant). De novo urgency had a severe impact on quality of life, as compared to the remaining study population. CONCLUSION: Old age, parity and history of cesarean section were risk factors for de novo urgency after TVT surgery. Postoperative de novo urgency symptoms are as bothersome for the patient as the preoperative stress urinary incontinence.

**Overactive bladder made ridiculously simple?**

Rosenberg MT

Int J Clin Pract. 2006 Jun;60(6):631-3.

**Laparoscopic Burch colposuspension and the tension-free vaginal tape procedure.**

Paraiso MF

Curr Opin Obstet Gynecol. 2006 Aug;18(4):385-90.

PURPOSE OF REVIEW: Minimally invasive procedures for urinary incontinence and pelvic organ prolapse have gained increasing popularity in the past decade. The advantages of minimal access through laparoscopic and vaginal routes include smaller incisions, shortened hospital stay, decreased analgesia, rapid recovery and rapid return to work. The laparoscopic Burch colposuspension and the tension-free vaginal tape procedure were at the forefront of minimal access antiincontinence procedures. The most recent and significant publications regarding laparoscopic Burch colposuspension and tension-free vaginal tape procedure are highlighted in this article. RECENT FINDINGS: The laparoscopic Burch is time-consuming and requires a steep learning curve in laparoscopic suturing, thwarting its adoption and staying power. The

advantages and success of the retropubic midurethral sling procedures such as tension-free vaginal tape have largely replaced all other antiincontinence procedures and have ignited the development and adoption of transobturator midurethral sling procedures and vaginal 'kit' procedures for pelvic organ prolapse. SUMMARY: Clinical trials show that laparoscopic Burch cure rates are equal or inferior to tension-free vaginal tape cure rates. Publications regarding laparoscopic Burch colposuspension have tapered significantly in the past year, which may represent the ebb of its utilization. Tension-free vaginal tape and other midurethral sling procedures may become the new 'gold standard' antiincontinence therapy.

**Tolterodine extended release improves patient-reported outcomes in overactive bladder: results from the IMPACT trial.**

Roberts R, Bavendam T, Glasser DB, Carlsson M, Eyland N, Elinoff V  
Int J Clin Pract. 2006 Jun;60(6):752-8.

We evaluated the effect of tolterodine extended release (ER) on patient- and clinician-reported outcomes in a primary care setting. Patients had overactive bladder (OAB) symptoms for  $\geq 3$  months and were at least moderately bothered by their most bothersome symptom, as indicated on the patient-completed OAB Bother Rating Scale. Patients completed the Overactive Bladder Questionnaire (OAB-q), American Urological Association Symptom Index (AUA-SI), and Patient Perception of Bladder Condition at each visit; investigators completed the Clinical Global Impression-Improvement at week 12. By week 12, there were statistically significant and clinically meaningful decreases on the OAB-q and AUA-SI total and subscale scores ( $p < 0.0001$ ). Seventy-nine per cent of patients experienced some improvement in their overall bladder condition. Physicians reported that 68% of patients were 'much improved' or 'very much improved'. For symptom-defined conditions, patient-reported outcomes are a valuable means for determining responses to treatment.

**High Rate of Vaginal Erosions Associated With the Mentor ObTapetrade mark.**

Yamada BS, Govier FE, Stefanovic KB, Kobashi KC  
J Urol. 2006 Aug;176(2):651-4.

PURPOSE: The transobturator tape method is a newer surgical technique for the treatment of stress urinary incontinence. Limited data exist related to complications with this approach or the types of mesh products used. We report our experience with vaginal erosions associated with the Mentor ObTapetrade mark and American Medical Systems Monarctrade mark transobturator slings. MATERIALS AND METHODS: Beginning in December 2003 selected female patients with anatomic urinary incontinence were prospectively followed after placement of the Mentor ObTapetrade mark. Beginning in January 2004 we also began using the American Medical Systems Monarctrade mark in similar patients. Patients were admitted overnight after surgery, discharged on oral antibiotics, and seen in the clinic at 6 weeks postoperatively. RESULTS: A total of 67 patients have undergone placement of the Mentor ObTapetrade mark and 9 of those patients (13.4%) have had vaginal extrusions of the sling. Eight patients reported a history of persistent vaginal discharge. One patient presented initially to an outside facility with a left thigh abscess tracking to the left inguinal incision site. Each patient was taken back to the operating room for mesh removal. A total of 56 patients have undergone placement of the AMS Monarctrade mark and none have had any vaginal erosions. CONCLUSIONS: Our high rate of vaginal extrusion using the ObTapetrade mark has led us to discontinue the use of this product in our institution. Continued followup of all of these patients will be of critical importance.

**Comparison of the q-tip test and voiding cystourethrogram to assess urethral hypermobility among women enrolled in a randomized clinical trial of surgery for stress urinary incontinence.**

Walsh LP, Zimmern PE, Pope N, Shariat SF  
J Urol. 2006 Aug;176(2):646-50.

PURPOSE: We compared 2 measures of urethral hypermobility, the Q-tip test and voiding cystourethrogram, preoperatively in women recruited in 1 center participating in a multicenter randomized clinical trial comparing Burch colposuspension with autologous rectus fascia sling. MATERIALS AND METHODS: Following institutional review board approval, women with stress urinary incontinence and pelvic organ prolapse stage 2 or less underwent a standardized standing voiding cystourethrogram and a Q-tip test at a 45 degree angle reclining position preoperatively. Urethral angle at rest and straining were measured with a

radiological ruler (voiding cystourethrogram) or goniometer (Q-tip) by 2 different investigators blinded to each other findings. RESULTS: In 43 patients the mean urethral angle at rest and UAS were 20 degrees +/- 12 and 51 degrees +/- 20, by voiding cystourethrogram compared to 16 degrees +/- 9 and 58 degrees +/- 10 by Q-tip test, respectively. The mean angle difference (urethral angle with straining minus urethral angle at rest) was greater for the Q-tip test (42 degrees +/- 9) than that for the voiding cystourethrogram test (32 degrees +/- 17;  $p < 0.05$ ). Fewer patients (14% by Q-tip, 28% by voiding cystourethrogram) had urethral hypermobility using the definition of urethral angle at rest greater than 30, while almost all patients (91% by voiding cystourethrogram, 100% by Q-tip) had urethral hypermobility using the definition of urethral angle with straining greater than 30. However, using the definition of urethral angle with straining minus urethral angle at rest greater than 30, only 58% of patients had urethral hypermobility by voiding cystourethrogram compared to 98% by Q-tip. CONCLUSIONS: The voiding cystourethrogram and the Q-tip test measure urethral hypermobility differently. This may affect which patients are classified as having urethral hypermobility, and the choice of anti-incontinence surgery.

**Therapeutic effect of multiple resiniferatoxin intravesical instillations in patients with refractory detrusor overactivity: a randomized, double-blind, placebo controlled study.**

Kuo HC, Liu HT, Yang WC

J Urol. 2006 Aug;176(2):641-5.

PURPOSE: Previous study has shown that multiple intravesical instillations of resiniferatoxin (Sigma(R)) at 10 nM has therapeutic effects in patients with detrusor overactivity. To our knowledge the placebo effect of multiple instillations of low dose resiniferatoxin for neurogenic and nonneurogenic detrusor overactivity has not been investigated. In this randomized, double-blind, placebo controlled study we evaluated the therapeutic effects of this resiniferatoxin treatment. MATERIALS AND METHODS: A total of 54 patients with detrusor overactivity refractory to anticholinergics were enrolled and randomly treated with 4 weekly intravesical instillations of 10 nM resiniferatoxin (26) or vehicle, consisting of 10% ethanol in normal saline, as the control group (28). The clinical effects of treatment on incontinence grade, incontinence episodes, general satisfaction, lower urinary tract symptoms and urodynamic parameters were assessed. RESULTS: Three months after completing the 4 intravesical treatments the resiniferatoxin treatment group had a significantly higher percent of patients with excellent and improved results compared to the control group (19.2% vs 7.1% and 42.3% vs 14.2%, respectively, each  $p < 0.001$ ). Treatment remained effective at 6 months in 13 patients (50%) in the resiniferatoxin group but in only 3 (11%) in the control group ( $p < 0.001$ ). Bladder capacity was significantly increased and symptom scores significantly improved 3 months after treatment in the resiniferatoxin group but not in the control group. CONCLUSIONS: Multiple intravesical instillations of 10 nM resiniferatoxin were effective for improving the incontinence grade in 62% of patients at 3 months, of whom 50% maintained a therapeutic effect 6 months after treatment. The therapeutic effect of resiniferatoxin was significantly superior to that of placebo.

**Urgency is the Core Symptom of Female Overactive Bladder Syndrome, as Demonstrated by a Statistical Analysis.**

Hung MJ, Ho ES, Shen PS, Sun MJ, Lin AT, Chen GD

J Urol. 2006 Aug;176(2):636-40.

PURPOSE: We determined overactive bladder symptoms in combination with other lower urinary tract symptoms and illustrated their relationships using a statistical analysis. Furthermore, we also describe the potential contributory factors and adaptation strategies in patients that are associated with overactive bladder subtypes. MATERIALS AND METHODS: A total of 1,930 women with a mean age +/- SD of 46 +/- 15 years (range 15 to 91) with troubling lower urinary tract symptoms were successfully interviewed with a validated questionnaire at the urology and urogynecology clinics at 14 medical centers in Taiwan. The questionnaire was constructed to evaluate 6 lower urinary tract symptoms and 7 adaptation strategies. A log linear statistical model and multiple logistic regression analysis were used to assess the associations among lower urinary tract symptoms and the potential overactive bladder contributory factors, respectively. RESULTS: No single or isolated symptom presented in patients with overactive bladder. Most patients reported a combination with other lower urinary tract symptoms. These female patients can be categorized into 3 groups, including 1 is associated with dry symptoms (urgency, frequency and nocturia), 1 associated with wet symptoms (urgency, urge incontinence and mixed stress incontinence) and a small group that may have

overactive bladder symptoms combined with voiding difficulty symptoms. In contrast to patients with dry overactive bladder (urgency associated with frequency and/or nocturia without urge incontinence), after multiple logistic regression analysis patients with wet overactive bladder (urgency with urge incontinence) had a greater average age and higher body mass index, and made more adaptation efforts ( $p < 0.05$ ). CONCLUSIONS: We used statistical analysis to determine and suggest that urgency is the core symptom of female overactive bladder syndrome and there are 3 distinctive overactive bladder subtypes, which differ in their symptom combinations. Different symptom combinations and patient characteristics affect female adaptation to overactive bladder syndrome.

**Risk factors for fecal incontinence: a population-based study in women.**

Bharucha AE, Zinsmeister AR, Locke GR, Seide BM, McKeon K, Schleck CD, Melton LJ 3rd  
Am J Gastroenterol. 2006 Jun;101(6):1305-12.

BACKGROUND: In women with "idiopathic" fecal incontinence (FI), consensus guidelines recommend anal sphincter imaging and surgical repair, when feasible, of anal sphincter defects believed to cause FI. However, the relative contributions of obstetric trauma and bowel symptoms to FI in the community are unknown. METHODS: To assess risk factors for FI during the past year, a previously validated questionnaire was mailed to an age-stratified random sample of 5,300 women residing in Olmsted County, Minnesota. RESULTS: Altogether, 2,800 women (53%) responded. The risk of fecal incontinence increased with age (odds ratio [OR] per decade 1.3, 95% CI 1.2-1.4). The risk of fecal incontinence was higher among women with rectal urgency (OR 8.3, 95% CI 4.8-14.3) whether or not they also had other bowel disturbances (i.e., constipation, diarrhea, or abdominal pain) or had a vaginal delivery with forceps or stitches (OR 9.0, 95% CI 5.6-14.4). Among women with FI, rectal urgency and age were also risk factors for symptom severity. In contrast, obstetric risk factors for anorectal trauma did not increase the risk for FI. The risk for FI was not significantly different among women with cesarean section, vaginal delivery with or without forceps or stitches, or anorectal surgery, compared with nulliparous women without any of these risk factors. CONCLUSIONS: Rectal urgency rather than obstetric injury is the main risk factor for FI in women. These observations reinforce the importance of behavioral, dietary, and pharmacological measures to ameliorate bowel disturbances before anal imaging in women with "idiopathic" FI.

**Sacral neuromodulation in the treatment of severe anal incontinence. Forty consecutive cases treated in one institution.**

Faucheron JL, Bost R, Duffournet V, Dupuy S, Cardin N, Bonaz B  
Gastroenterol Clin Biol. 2006 May;30(5):669-72.

INTRODUCTION: Sacral neuromodulation is a recognized therapeutic option in severe anal incontinence from neurogenic origins, when medical treatment has failed. METHODS: We report the results of this procedure applied in 40 consecutive patients operated on by a single surgeon from August 2001 to June 2004. Mean duration of incontinence was 5 years. There were 33 women and 7 men of mean age 59 (range 29-89). All patients had had medical treatment, 26 had had physiotherapy and 9 had been previously operated on for that problem. Neuromodulation consisted in a temporary electrical stimulation test followed by implantation of a stimulator in case of efficacy. RESULTS: Twenty nine patients had a positive test and were implanted. Ten had a negative test and one is waiting for implantation. From the 29 patients, 23 had uneventful postoperative course. Incontinence score varied from 17 before neuromodulation to 6 after in the 24 patients who were improved. Mean resting pressure, mean maximum squeeze pressure and mean duration of squeeze pressure did not change from pre to postoperative period. CONCLUSION: Sacral neuromodulation is a safe and efficacious procedure in properly selected anal incontinent patients. However, we observed no correlation between clinical and manometric data.

**Do internal anal sphincter defects decrease the success rate of anal sphincter repair?**

Oberwalder M, Dinnewitzer A, Baig MK, Noguerras JJ, Weiss EG, Efron J, Vernava AM 3rd, Wexner SD  
Tech Coloproctol. 2006 Jun;10(2):94-7. Epub 2006 Jun 19.

BACKGROUND: Anatomic anal sphincter defects can involve the internal anal sphincter (IAS), the external anal sphincter (EAS), or both muscles. Surgical repair of anteriorly located EAS defects consists of overlapping suture of the EAS or EAS imbrication; IAS imbrication can be added regardless of whether there is IAS injury. The aim of this study was to assess the functional outcome of anal sphincter repair in patients

intraoperatively diagnosed with combined EAS/IAS defects compared to patients with isolated EAS defects. **METHODS:** The medical records of patients who underwent anal sphincter repair between 1988 and 2000 and had follow-up of at least 3 months were retrospectively assessed. Fecal incontinence was assessed using the Cleveland Clinic Florida incontinence score wherein 0 equals perfect continence and 20 is associated with complete incontinence. Postoperative scores of 0-10 were interpreted as success whereas scores of 11-20 indicated failure. **RESULTS:** A total of 131 women were included in this study, including 38 with combined EAS/IAS defects (Group I) and 93 with isolated EAS defects (Group II). Thirty-three patients (87%) in Group I had imbrication of a deficient IAS, compared to 83 patients (89%) in Group II. All patients had either overlapping EAS repair (n=121) or EAS imbrication (n=10). Mean follow-up was 30.9 months (range, 3-131 months). There were no statistically significant differences between the two groups relative to age (48.3 vs. 53.0 years; p=0.14), preoperative incontinence score (16.1 vs. 16.7; p=0.38), extent of pudendal nerve terminal motor latency pathology (left, 11.1% vs. 8%; p=0.58; right, 8.6% vs. 15.1%; p=0.84), extent of pathology at electromyography (54.8% vs. 60.1%; p=0.43), and length of follow-up (26.9 vs. 32.5 months; p=0.31). The success rates of sphincter repair were 68.4% for Group I versus 55.9% for Group II (p=NS). Both groups were well matched for incidence of IAS imbrication as well as age, follow-up interval, and physiologic parameters. The success rates of anal sphincter repair were not statistically significant between the two groups. **CONCLUSION:** A pre-existing IAS defect does not preclude successful sphincteroplasty as compared to repair of an isolated EAS defect. Thus, patients with combined anal sphincter defects should not be considered as poor candidates for sphincter repair.

## 7 – PAIN

### **Pyomyositis of the piriformis muscle in a juvenile.**

Burton DJ, Enion D, Shaw DL

Ann R Coll Surg Engl. 2005 Jan;87(1):9-12.

The authors present a case of pyomyositis of the piriformis muscle. This case, the first in the English speaking literature of piriformis involvement in a juvenile, serves to illustrate the need for a high index of suspicion when treating children with symptoms related to impalpable pathology deep in the pelvis and the usefulness of MRI in early diagnosis and treatment before abscess formation. It also shows the potentially wide differential diagnosis in which the signs and symptoms may be misleading due to the close relationship of the pelvic muscles with the hip joint and adjacent viscera.

### **Central sensitisation in visceral pain disorders.**

Moshiree B, Zhou Q, Price DD, Verne GN

Gut. 2006 Jul;55(7):905-8.

The concepts of visceral hyperalgesia and visceral hypersensitivity have been examined in a variety of functional gastrointestinal disorders (FGIDs). Although the pathophysiological mechanisms of pain and hypersensitivity in these disorders are still not well understood, exciting new developments in research have been made in the study of the brain-gut interactions involved in the FGIDs.

### **Intensity dependence of auditory-evoked cortical potentials in fibromyalgia patients: a test of the generalized hypervigilance hypothesis.**

Carrillo-de-la-Pena MT, Vallet M, Perez MI, Gomez-Perretta C

J Pain. 2006 Jul;7(7):480-7.

On the basis of recent evidence concerning the amplification of incoming stimulation in fibromyalgia (FM) patients, it has been proposed that a generalized hypervigilance of painful and nonpainful sensations may be at the root of this disorder. So far, research into this issue has been inconclusive, possibly owing to the lack of agreement as to the operational definition of "generalized hypervigilance" and to the lack of robust objective measures characterizing the sensory style of FM patients. In this study, we recorded auditory-evoked potentials (AEPs) elicited by tones of increasing intensity (60, 70, 80, 90, and 105 dB) in 27 female FM patients and 25 healthy controls. Fibromyalgia patients presented shorter N1 and P2 latencies and a stronger intensity dependence of their AEPs. Both results suggest that FM patients may be hypervigilant to sensory stimuli, especially when very loud tones are used. The most noteworthy difference between patients and control subjects is at the highest stimulus intensity, for which far more patients maintained increased N1-



P2 amplitudes in relation to the 90-dB tones. The larger AEP amplitudes to the 105-dB tones suggest that defects in an inhibitory system protecting against overstimulation may be a crucial factor in the pathophysiology of FM. Because a stronger loudness dependence of AEPs has been related to weak serotonergic transmission, it is hypothesized that for many FM patients deficient inhibition of the response to noxious and intense auditory stimuli may be due to a serotonergic deficit. PERSPECTIVE: The study of auditory-evoked potentials in response to tones of increasing intensity in FM patients may help to clarify the pathophysiology of this disorder, especially regarding the role of inhibition deficits involving serotonergic dysfunction, and may be a useful tool to guide the pharmacologic treatment of FM patients.

**Pharmacologic management of complex regional pain syndrome.**

Rowbotham MC

Clin J Pain. 2006 Jun;22(5):425-9.

Few randomized controlled trials of oral pharmacotherapy have been performed in patients with complex regional pain syndrome (CRPS). The prevalence of CRPS is uncertain. Severe and advanced cases of CRPS are easily recognized but difficult to treat and constitute a minority compared with those who meet minimum criteria for the diagnosis. Unsettled disability or liability claims limit pharmaceutical industry interest in the disorder. Many studies are small or anecdotal, or are reported on only via posters at meetings. Targeting the process of bone resorption with bisphosphonate-type compounds such as calcitonin, clodronate, and alendronate has shown efficacy in three published randomized controlled trials. Intravenous phentolamine has been studied both alone and in comparison to intravenous regional blockade or stellate ganglion block. Steroids continue to be administered by multiple routes without large-scale placebo-controlled trials. Topical medications have received little attention. There has been considerable interest in the use of thalidomide and TNF-alpha blockers for CRPS, but no published controlled trials as of yet. Numerous other oral drugs, including muscle relaxants, benzodiazepines, antidepressants, anticonvulsants, and opioids, have been reported on anecdotally. Some therapies have been the subject of early controlled studies, without subsequent follow-up (eg, ketanserin) or without an analogous well-tolerated and equally effective oral treatment (eg, intravenous ketamine). Gabapentin, tricyclic antidepressants, and opioids have been proven effective for chronic pain in disorders other than CRPS. Each has shown a broad enough spectrum of analgesic activity to be cautiously recommended for treatment of CRPS until adequate randomized controlled trials settle the issue. The relative benefit of oral medications compared with the widely used treatments of intensive physical therapy, nerve blocks, sympathectomy, intraspinally administered drugs, and neuromodulatory therapies (eg, spinal cord stimulation) remains uncertain. In summary, treatment of CRPS has received insufficient study and remains largely empirical.

**Treatment of complex regional pain syndrome: functional restoration.**

Harden RN, Swan M, King A, Costa B, Barthel J

Clin J Pain. 2006 Jun;22(5):420-4.

In this review, the authors discuss the development of consensus-based treatment guidelines in 1997. They also synthesize the recommendations of a closed workshop held in Budapest in late 2004 that reexamined these treatment guidelines and made further and more detailed recommendations. They explore and develop the rationale for making functional restoration the pivotal treatment algorithm in the management of complex regional pain syndrome, around which all other treatments, such as psychotherapy, drugs, and interventions, revolve. The authors discuss in detail the process of functional restoration and the modalities appropriate to accomplishing that--specifically, the role of the occupational therapist, physical therapist, recreational therapist, and vocational rehabilitation specialist. Medications, interventions, and psychotherapy will be covered in other sections of this series.

**Diagnosis of complex regional pain syndrome: signs, symptoms, and new empirically derived diagnostic criteria.**

Harden RN, Bruehl SP

Clin J Pain. 2006 Jun;22(5):415-9.

This review will discuss the relevant history of the taxonomy and eventual development of diagnostic criteria of what is currently called complex regional pain syndrome. The authors will take their discussion through the early days (at which time the disorder was called reflex sympathetic dystrophy) through consensus-

developing conferences to the current conceptualization of the criteria as published by the International Association for the Study of Pain's Task Force on Taxonomy in 1994. The authors will also mention the recent work of the closed workshop held in Budapest in 2004, where clinical and research criteria were proposed; these criteria were published in 2005. The review will also address issues of staging and subtyping the syndrome, as well as a discussion of the salient signs, symptoms, and tests appropriate for use in the diagnosis.

**Pieces of the puzzle: management of complex regional pain syndrome.**

Nelson DV

Clin J Pain. 2006 Jun;22(5):413-4.

**Prevalence of prostatitis-like symptoms in a managed care population.**

Clemens JQ, Meenan RT, O'keeffe-Rosetti MC, Gao SY, Brown SO, Calhoun EA

J Urol. 2006 Aug;176(2):593-6.

**PURPOSE:** We calculated the prevalence of symptoms typically associated with chronic prostatitis/chronic pelvic pain syndrome in men in a managed care population in the Pacific Northwest. **MATERIALS AND METHODS:** A questionnaire mailing to 5,000 male enrollees 25 to 80 years old in the Kaiser Permanente Northwest (Portland, Oregon) health plan was performed. The questionnaires included screening questions about the presence, duration and severity of pelvic pain, and the National Institutes of Health Chronic Prostatitis Symptom Index. Chronic prostatitis/chronic pelvic pain syndrome symptoms were defined in 2 ways: 1) presence of any of the following for a duration of 3 or more months: pain in the perineum, testicles, tip of penis, pubic or bladder area, dysuria, ejaculatory pain; and 2) perineal and/or ejaculatory pain, and a National Institutes of Health Chronic Prostatitis Symptom Index total pain score of 4 or more. Prevalence estimates were age adjusted to the total Kaiser Permanente Northwest male population. **RESULTS:** A total of 1,550 questionnaires were returned. The prevalence of chronic prostatitis/chronic pelvic pain syndrome symptoms was 7.5% for definition 1 and 5.9% for definition 2. Mean National Institutes of Health Chronic Prostatitis Symptom Index scores were 17 for definitions 1 and 2. Of those with prostatitis-like symptoms, 30% met criteria for having both definitions present. The prevalence of prostatitis-like symptoms using either of the 2 diagnoses was 11.2%. **CONCLUSIONS:** This population based study indicates that approximately 1 in 9 men have prostatitis-like symptoms. Application of 2 different definitions for prostatitis-like symptoms identified unique groups of men, with limited overlap in the groups.

**Using the International Continence Society's definition of painful bladder syndrome.**

Warren JW, Meyer WA, Greenberg P, Horne L, Diggs C, Tracy JK

Urology. 2006 Jun;67(6):1138-42; discussion 1142-3.

**OBJECTIVES:** To determine what proportion of patients with recent-onset interstitial cystitis (IC)/painful bladder syndrome (PBS) met the International Continence Society (ICS) definition and how those who met the definition differed from those who did not. **METHODS:** We recruited women who had recent-onset IC/PBS for an ongoing case-control study to identify its risk factors and studied our first 138 eligible patients to identify those who met the ICS definition. We then compared those who met the definition with those who did not by variables acquired from interviews and medical records. **RESULTS:** The 138 participants had intensities of pain, urgency, frequency, and nocturia, as well as O'Leary-Sant Symptom Index scores, similar to those of previously reported patients with IC/PBS. Six percent of cystoscopies demonstrated Hunner's ulcers, and 89% of hydrodistensions under anesthesia revealed glomerulations. The most liberal interpretation of the ICS definition did not include 47 (34%) of our patients. Comparing these with the 91 (66%) who did meet the ICS criteria, we found that 96 of 97 clinical variables, including many generally thought to be characteristic of IC/PBS, were not significantly different between the two groups. **CONCLUSIONS:** The ICS definition identified only 91 (66%) of the 138 patients whom study investigators and caregivers diagnosed as having IC/PBS. Furthermore, those who met the ICS definition did not differ in important ways from those who did not. These observations taken together suggest that the ICS definition may not be sufficiently sensitive. Minor modifications of the definition appeared to increase its sensitivity. Validation of a case definition (ie, assessing its sensitivity and specificity) would require testing it in patients with IC/PBS, as well as in patients with other diseases with similar symptoms.

**Is interstitial cystitis an allergic disorder?: A case of interstitial cystitis treated successfully with anti-IgE.**

Lee J, Doggweiler-Wiygul R, Kim S, Hill BD, Yoo TJ  
Int J Urol. 2006 May;13(5):631-4.

Interstitial cystitis (IC) is a chronic disorder diagnosed by symptomatology of pelvic pain and urinary frequency, which are extremely variable and unpredictable fluctuating among patients. IC has recently been found combined with some allergic disorders and histopathologic abnormalities resembling that of allergic disorders, including mast cell activation, histamine release and eosinophil infiltration. Therefore, it could be cautiously postulated that IC is one of the allergic disorders of the urogenital system. A 28-year-old Caucasian female patient, who was diagnosed with asthma and allergic rhinitis, suffered from bladder symptoms of frequency, urgency and pelvic pain for the past 3 years. The symptoms disturbed her every day and were intractable for treatment. Urologists concluded that she had interstitial cystitis. Specific immunotherapy (SIT) was recommended for her allergic symptoms. While taking specific immunotherapy, she had anaphylaxis. She still had the reaction even with the 1000-fold diluted shot of SIT. Omalizumab was used for her allergic symptoms and possible prevention of anaphylactic reaction to SIT. Interestingly, she reported that her urogenital symptoms had subsided since omalizumab had been started. According to the published literature, we postulate that interstitial cystitis might be one of the IgE mediated, mast cell driven allergic disorders of the urogenital system. Therefore, in this case, the patient's bladder symptoms are successfully controlled primarily by anti-IgE therapy and the improvement could be maintained by SIT. We report, for the first time, a case of interstitial cystitis with allergic rhinitis and asthma, successfully treated by anti-IgE therapy and specific immunotherapy.

**Genetic Polymorphism in the Fibrinolytic System and Endometriosis.**

Bedaiwy MA, Falcone T, Mascha EJ, Casper RF  
Obstet Gynecol. 2006 Jul;108(1):162-168.

**OBJECTIVE:** Although most women experience retrograde menses during their reproductive life, endometriosis develops only in a small percentage. We hypothesized that persistence of a fibrin matrix in peritoneal pockets, as a result of hypofibrinolysis, could allow menstrually deposited endometrial fragments to initiate endometriosis. Fibrinolysis is modulated by several factors, and polymorphisms in the plasminogen activator inhibitor-1 (PAI-1) gene are considered to be one of the important determinants. The objective of this study was to evaluate PAI-1 genotypes in a group of women with or without endometriosis. **METHODS:** In 118 women (75 with laparoscopically confirmed endometriosis and 43 controls), genomic DNA was extracted from blood and the PAI-1 promoter genotype was determined by polymerase chain reaction amplification of DNA using specific primers for the 4G or 5G allele followed by gel electrophoresis. A portion of the polymerase chain reaction product was purified and sequenced to confirm the gel electrophoresis results. **RESULTS:** Endometriosis was more likely in patients with 4G/5G (odds ratio 38; 95% confidence interval [CI] 6-229) or 4G/4G (odds ratio 441; 95% CI 53-3,694) compared with 5G/5G PAI-1 genotype. Fifty-two of 75 women with endometriosis (69 %, 95% CI 4-25%) had the 4G/4G genotype compared with only 5 of 43 (12%; 95% CI 4-25%) controls. In contrast, the 5G/5G genotype associated with normal fibrinolysis was found in 2 of 75 (3%; 95% CI 0-9%) women with endometriosis compared with 24 of 43 (56%; 95% CI 40-71%) controls. **CONCLUSION:** Hypofibrinolysis, associated with the 4G allele of the PAI-1 gene, was found significantly more often in women with endometriosis compared with controls. Persistence of fibrin matrix could support the initiation of endometriotic lesions in the peritoneal cavity, explaining why some women with retrograde menstruation develop endometriosis while others do not. **LEVEL OF EVIDENCE:** II-2.

**Physicians' attitudes and practices in the evaluation and treatment of irritable bowel syndrome.**

Lacy BE, Rosemore J, Robertson D, Corbin DA, Grau M, Crowell MD  
Scand J Gastroenterol. 2006 Aug;41(8):892-902.

**Objective.** Irritable bowel syndrome (IBS) is a common disorder characterized by abdominal discomfort and disordered bowel habits. Despite the high prevalence of IBS, little is known about how physicians perceive this condition. The aims of our study were to measure physicians' understanding of IBS, to assess their attitudes towards patients with IBS, and to determine whether there are differences in the way Internal Medicine physicians (IM), Family Practice physicians (FP), and Gastroenterology physicians (GI) evaluate and treat IBS patients. **Material and methods.** A survey was sent to 3000 physicians nationwide, 1000 each

to IM, FP, and GI. The survey contained 35 questions assessing demographics, the etiology and pathophysiology of IBS, the use of diagnostic tests, and practice patterns and attitudes. Results. Of the deliverable questionnaires, 501 were returned completed; 472 of the respondents interviewed only adult patients, representing the cohort for this analysis. The mean age of all respondents was 47; most were men (80%). IM and FP made a new diagnosis of IBS 1.3-1.6 times each week, while GI made a new diagnosis 5.4 times each week ( $p < 0.0001$ ). Compared with the perceptions of FP and IM, GI felt that IBS patients were less sick than other patients ( $p < 0.001$ ), although they required more time per visit. More GI compared with FP and IM stated that prior infection and a history of abuse were the causes of IBS ( $p < 0.01$ ), while FP were more likely to believe that diet was a cause of IBS ( $p < 0.01$ ). GI felt a new diagnosis of IBS could be made without further testing 42% of the time. FP and IM felt that one-third of IBS patients needed referral to a GI. Conclusions. The attitudes and practice patterns of physicians towards patients with IBS differ depending on practice specialty. This may be due to differences in training, the ability to perform specialized tests, and/or differences in referral patterns. Further training may improve the ability of physicians in all specialties confidently to diagnose and treat patients with IBS.

**Enteroendocrine cell counts correlate with visceral hypersensitivity in patients with diarrhoea-predominant irritable bowel syndrome.**

Park JH, Rhee PL, Kim G, Lee JH, Kim YH, Kim JJ, Rhee JC, Song SY  
Neurogastroenterol Motil. 2006 Jul;18(7):539-46.

The objective of this study was to determine whether or not the number of enteroendocrine cells (ECs) in the gut is related to visceral hypersensitivity in patients with diarrhoea-predominant irritable bowel syndrome (D-IBS). Twenty-five subjects with D-IBS (mean, 43.1 years; 16 women, nine men) were recruited into our study, along with 13 healthy controls (mean, 40.7 years; nine women, four men). Maximally tolerable pressures were evaluated via barostat testing, and the levels of ECs were immunohistochemically identified and quantified via image analysis. The numbers of ECs between the D-IBS subjects and the controls were not significantly different in the terminal ileum, ascending colon and rectum. However, the maximally tolerable pressures determined in the D-IBS subjects were significantly lower than those of the control subjects ( $P < 0.01$ ), and we detected a significant relationship between the maximally tolerable pressures and the numbers of ECs in the rectum ( $r = -0.37$ ,  $P < 0.01$ ). Rectal sensitivity was enhanced to a greater degree in D-IBS patients exhibiting an elevated level of rectal ECs. This study provides some evidence to suggest that ECs play an important role in visceral hypersensitivity.

**Novel smooth muscle markers reveal abnormalities of the intestinal musculature in severe colorectal motility disorders.**

Wedel T, Van Eys GJ, Waltregny D, Glenisson W, Castronovo V, Vanderwinden JM  
Neurogastroenterol Motil. 2006 Jul;18(7):526-38.

Histopathological studies of gastrointestinal motility disorders have mainly focused on enteric nerves and interstitial cells of Cajal, but rarely considered the enteric musculature. Here we used both classical and novel smooth muscle markers and transmission electron microscopy (TEM) to investigate muscular alterations in severe colorectal motility disorders. Full-thickness specimens from Hirschsprung's disease, idiopathic megacolon, slow-transit constipation and controls were stained with haematoxylin/eosin (HE) and Masson's trichrome (MT), incubated with antibodies against smooth muscle alpha-actin (alpha-SMA), smooth muscle myosin heavy chain (SMMHC), smoothelin (SM) and histone deacetylase 8 (HDAC8) and processed for TEM. Control specimens exhibited homogeneous immunoreactivity for all antibodies. Diseased specimens showed normal smooth muscle morphology by HE and MT. While anti-alpha-SMA staining was generally normal, immunoreactivity for SMMHC, HDAC8 and/or SM was either absent or focally lacking in Hirschsprung's disease (80%), idiopathic megacolon (75%) and slow-transit constipation (70%). Ultrastructurally, clusters of myocytes with noticeably decreased myofilaments were observed in all diseases. SMMHC and the novel smooth muscle markers SM and HDAC8 often display striking abnormalities linked to the smooth muscle contractile apparatus unnoticed by both routine stainings and alpha-SMA, suggesting specific defects of smooth muscle cells involved in the pathogenesis of gastrointestinal motility disorders.

**Management of patients with chronic abdominal pain in clinical practice.**

Camilleri M

Neurogastroenterol Motil. 2006 Jul;18(7):499-506.

A practical approach to the management of chronic abdominal pain is needed, given the high prevalence and impact of this problem. This article describes an approach that has evolved based on clinical experience and review of the literature: identifying predominant bloaters and abdominal wall pain; exclusion of organic disease, including consideration of laparoscopy for diagnosis; consideration of chronic functional abdominal pain and the first and second line pharmacotherapies; and seeking specialist care in a pain clinic, psychiatry, or behavioural therapy.

#### **Neuroimmune signalling in the gut - mediators linked to disorders?**

Vergnolle N

Neurogastroenterol Motil. 2006 Jul;18(7):497-8.

#### **Mucosal barrier defects in irritable bowel syndrome. Who left the door open?**

Barbara G

Am J Gastroenterol. 2006 Jun;101(6):1295-8.

There has been recent interest into the potential role of cellular and molecular mechanisms in the pathophysiology of irritable bowel syndrome (IBS). Although the intestinal mucosa of IBS patients is endoscopically and histologically "normal," it contains an increased number of activated T lymphocytes and mast cells, along with evidence of an increased release of mediators known to signal to epithelial, neuronal, and muscle cells leading to intestinal dysfunction. In this issue, Dunlop et al. provide evidence of increased intestinal permeability in patients with diarrhea predominant IBS. There is now consistent evidence indicating that mucosal barrier defects allow the passage of an increased load of luminal antigens of dietary and bacterial origin which, in turn, elicit the activation of mucosal immune responses involved in the generation of diarrhea. Further work has now to be done to better understand the interplay among luminal factors, epithelial cells, and mucosal immunocytes in the pathogenesis of IBS.

#### **Relationship of Underlying Abnormalities in Rectal Sensitivity and Compliance to Distension with Symptoms in Irritable Bowel Syndrome.**

Lee KJ, Kim JH, Cho SW

Digestion. 2006 Jun 22;73(2-3):133-141.

Background/Aims: Abnormalities in rectal physiology play an important role in the genesis of symptoms in irritable bowel syndrome (IBS). However, their relationship to symptoms is unclear. Our aim was to investigate the association of abnormalities in rectal sensitivity and compliance to specific symptoms in IBS. Methods: Fifty-six IBS patients and 14 healthy controls participated in this study. The intensities of individual IBS symptoms in the past 4 weeks were scored on a graded 5-point Likert scale. Using a barostat, isobaric rectal distensions were performed before and after a meal. Results: Rectal hypersensitivity and hypocompliance in the fasting state were observed in 68 and 52% of IBS patients, respectively. Postprandial hypersensitivity of the rectum was significantly more prevalent in the diarrhea-predominant IBS (D-IBS) group compared to the constipation-predominant IBS (C-IBS) group. The D-IBS group showed a significant postprandial decrease in rectal compliance, but the C-IBS group did not. A significant correlation was observed between a sense of incomplete evacuation and increased bowel movements with postprandial rectal hypersensitivity or hypocompliance. Conclusion: A sense of incomplete evacuation and increased bowel movements are related to postprandial abnormalities in rectal sensitivity and compliance to distension. The other IBS symptoms do not seem to predict such abnormalities.

#### **Acupuncture for functional gastrointestinal disorders.**

Takahashi T

J Gastroenterol. 2006 May;41(5):408-17.

Functional gastrointestinal (GI) symptoms are common in the general population. Especially, motor dysfunction of the GI tract and visceral hypersensitivity are important. Acupuncture has been used to treat GI symptoms in China for thousands of years. It is conceivable that acupuncture may be effective in patients with functional GI disorders because it has been shown to alter acid secretion, GI motility, and visceral pain. Acupuncture at the lower limbs (ST-36) causes muscle contractions via the somatoparasympathetic pathway, while at the upper abdomen (CV-12) it causes muscle relaxation via the somatosympathetic

pathway. In some patients with gastroesophageal reflux disease (GERD) and functional dyspepsia (FD), peristalsis and gastric motility are impaired. The stimulatory effects of acupuncture at ST-36 on GI motility may be beneficial to patients with GERD or FD, as well as to those with constipation-predominant irritable bowel syndrome (IBS), who show delayed colonic transit. In contrast, the inhibitory effects of acupuncture at CV-12 on GI motility may be beneficial to patients with diarrhea-predominant IBS, because enhanced colonic motility and accelerated colonic transit are reported in such patients. Acupuncture at CV-12 may inhibit gastric acid secretion via the somatosympathetic pathway. Thus, acupuncture may be beneficial to GERD patients. The antiemetic effects of acupuncture at PC-6 (wrist) may be beneficial to patients with FD, whereas the antinociceptive effects of acupuncture at PC-6 and ST-36 may be beneficial to patients with visceral hypersensitivity. In the future, it is expected that acupuncture will be used in the treatment of patients with functional GI disorders.

## 8 – FISTULAE

### **Laparoscopic treatment of colovesical fistulas: technique and review of the literature.**

Tsvian A, Kyzer S, Shtricker A, Benjamin S, Sidi AA  
Int J Urol. 2006 May;13(5):664-7.

Colovesical fistula is an uncommon complication of diverticulitis. We present our technique of a laparoscopic approach for treatment of vesicosigmoid fistulas and review the available published literature. We believe that a laparoscopic approach is a feasible and advantageous alternative for the treatment of colovesical fistulas, with low morbidity and short hospital stay.

### **Conservative management of necrotizing fasciitis in children.**

Wakhlu A, Chaudhary A, Tandon RK, Wakhlu AK  
J Pediatr Surg. 2006 Jun;41(6):1144-8.

**BACKGROUND:** Necrotizing fasciitis (NF) is a severe infection of the subcutaneous tissue and fascia affecting children and adults. Conventional management includes resuscitation, aggressive debridement of necrotic tissue, and sometimes, additional measures such as hyperbaric oxygen and immunoglobulin therapy. This paper reports conservative management of 18 patients with NF with minimal morbidity and mortality. **MATERIAL AND METHODS:** Patients with NF admitted to our department between January 2000 and February 2004 were included in the study (N = 18). In all cases, the presentation was rapidly progressing cellulitis progressing to cutaneous gangrene between 6 and 18 hours. The patients were managed by aggressive fluid resuscitation, analgesia, broad-spectrum antibiotics, and dressing with liberal quantities of povidone iodine ointment. After separation of the gangrenous skin margins from the surrounding healthy tissue between 24 and 72 hours, dead skin and fascia were removed with forceps on the ward, the wound washed with liberal quantities of water, and the ointment dressing reapplied. This procedure was repeated until all the dead tissue had been removed. Once the wound was granulating, dressings were changed at increasing intervals until healing took place by secondary intention. **RESULTS:** The patients were aged between 5 days and 11 years. In all, NF began as a small boil progressing to a rapidly spreading cellulitis. None of the patients was operated during the acute stage of the infection. Blackening of the skin and separation of the edges occurred within 8-72 hours, the dead tissue was allowed to separate from the granulating base and could be removed at the bedside with minimal blood loss. Blood transfusion was required only in 2 patients where hemoglobin was < 9 gm/dL. Of the 18 patients, 6 grew group A streptococci and staphylococci in a polymicrobial wound culture, whereas the other 12 had polymicrobial flora without streptococci. The clinical course and outcomes were similar in both types of wounds. There was 1 death in the study group, and 1 patient required skin grafting. All other survivors had healing by secondary intention without disability. The period for complete epithelization varied between 3 and 8 weeks. Patients were discharged home when 70% of the wound had healed. There was extensive scarring in 3 children with NF involving the back. The other children had minimal or no scarring. None of the patients had any restriction in the movement of limbs or joints. These findings were compared with 16 retrospective patients of NF treated before January 2000 by the conventional approach of aggressive early debridement, the results of the conservative approach were superior with shorter hospital stay, lower number of blood transfusions, earlier appearance of granulation tissue, and shorter duration of complete healing. **CONCLUSIONS:** We conclude that the conservative management of NF offers advantages in morbidity without compromising the outcome. In our hospital setup, conservative treatment was less expensive and easily carried out. We would therefore

advocate conservative management for the treatment of this condition.

**How should complex perianal Crohn's disease be treated in the Remicade era.**

Poritz LS

J Gastrointest Surg. 2006 May;10(5):633-4.

**Role of fibrin glue in the management of simple and complex fistula in ano.**

Dietz DW

J Gastrointest Surg. 2006 May;10(5):631-2.

**Randomized clinical and manometric study of advancement flap versus fistulotomy with sphincter reconstruction in the management of complex fistula-in-ano.**

Perez F, Arroyo A, Serrano P, Sanchez A, Candela F, Perez MT, Calpena R

Am J Surg. 2006 Jul;192(1):34-40.

**BACKGROUND:** The goal of this study was to compare the outcomes of advancement flap (AF) versus fistulotomy with sphincter reconstruction (FSR) for primary complex fistula-in-ano in terms of recurrence and anal function. **METHODS:** A randomized clinical trial was conducted to compare AF with FSR. Preoperative and postoperative evaluation included physical examination, anal ultrasonography, and anal manometry, with a minimum follow-up period of 24 months. Anal continence was evaluated using the Wexner Continence Grading Scale (scale, 0-20). **RESULTS:** Sixty patients were randomized to AF (group 1, N = 30) or FSR (group 2, N = 30). Three patients from group 1 and 2 patients from group 2 were excluded from the study because of active sepsis at surgery. Fistulas were classified as high transsphincteric in 44 patients (80%) and suprasphincteric in 11 patients (20%). Demographic and clinical features showed no differences between the 2 groups. The mean Wexner Continence Grading Scale did not vary significantly after surgery in either group, and there was no difference between the groups. On anal manometry there was a significant decrease in the maximum resting pressure after surgery in both groups, and in the maximum squeeze pressure in the AF group, but neither the maximum resting pressure nor the maximum squeeze pressure differed significantly between groups, either before or after surgery. Two fistulas from each group recurred after surgery (7.4% and 7.1%, respectively). The mean follow-up period was 36 months (range, 24-52 mo). **CONCLUSIONS:** FSR compares with AF in terms of postoperative continence and recurrence. Anal continence and manometric values are not jeopardized in either technique.

**Complex perirectal sepsis: clinical classification and imaging.**

Zbar AP, Armitage NC

Tech Coloproctol. 2006 Jun;10(2):83-93. Epub 2006 Jun 19.

**BACKGROUND:** The use of specialized imaging to assess cryptogenic fistula-in-ano is selective, aimed at delineation of the site of the internal fistula opening and the relationship of the primary and secondary tracks and collections to the main levator plate. Advanced imaging also permits definition of the destructive effects of perirectal sepsis (e.g. internal or external anal sphincter damage, perineal body destruction and an ano- or rectovaginal fistula), which may require secondary reconstructive surgery. **METHODS:** We performed a PubMed search of outcomes for fistula management in the English and non-English literature, and summarized results regarding the accuracy of internal opening and horseshoe detection as well as the operative correlation for cryptogenic and non-cryptogenic fistula-in-ano using endoanal ultrasound (EAUS) and magnetic resonance (MR) imaging. Only literature defining these characteristics was included. **RESULTS:** The advantages and limitations of the main forms of imaging are discussed in this review with emphasis on EAUS and endoanal or pelvic phased-array MR fistulography. The new technique of transperineal sonography is highlighted. A small but important group of patients with complex fistula-in-ano require specialized imaging. There are specific limitations of endoanal ultrasound (EAUS) which necessitate pelvic phased-array MR imaging. Initial work suggests that EAUS may have a role in intraoperative use for image-guided drainage of recurrent abscesses where operative interpretation can be difficult. The coloproctologist in a tertiary referral center must acquire the skills of ultrasound performance in order to successfully treat fistulous disease, suggesting a role for formal imaging accreditation as part of coloproctological training. **CONCLUSION:** Future studies should determine both what sequential imaging algorithms for imaging are cost-effective as well as predictive of fistula cure.

## 9 – BEHAVIOUR

### **Mind over matter: psychological factors and the menstrual cycle.**

Edozien LC

Curr Opin Obstet Gynecol. 2006 Aug;18(4):452-456.

**PURPOSE OF REVIEW:** Increasingly, gynaecologists are becoming aware of the impact of psychosocial factors on women's health generally, and on the menstrual cycle in particular. This review highlights developments in this field in the last triennium. **RECENT FINDINGS:** Stress impairs the ovarian cycle through activation of the hypothalamus pituitary adrenal axis. The effect of psychological stress on the menstrual cycle is mediated by metabolic factors. Stress-induced impairment of ovarian function may not necessarily manifest as menstrual irregularity, and the effects of stress may persist beyond the cycle in which the stress episode occurred. Response to stress may be determined not so much by the nature of the stress as by the intrinsic neuronal attributes of the individual. **SUMMARY:** Interventions to address underlying stress should be part of the management regime for women with menstrual cycle abnormalities.

### **Child abuse pediatrics: a new pediatric subspecialty.**

Block RW, Palusci VJ

J Pediatr. 2006 Jun;148(6):711-2.

### **Impact of an adolescent sex education program that was implemented by an academic medical center.**

Sulak PJ, Herbelin SJ, Fix DD, Kuehl TJ

Am J Obstet Gynecol. 2006 Jul;195(1):78-84. Epub 2006 Apr 21.

**OBJECTIVE:** The purpose of this study was to assess changes in knowledge and attitudes before and after a large-scale sex education curriculum that was implemented by an academic medical center. **STUDY DESIGN:** Middle school students were surveyed regarding demographics, knowledge, attitudes, and behaviors. All grade levels at each campus completed a presurvey on the same day before any of the 2-week curricula were received. Postsurveys were taken on the day after the last lesson. **RESULTS:** Surveys were completed by 26,125 students before and 24,550 students after a sex education curriculum. Knowledge improved ( $P < .001$ ) for all grades, based on paired comparisons for each group. Although most students chose the option to wait until after high school graduation to have sex, significantly more students held this opinion after the program ( $P < .0001$ ). Variables that were associated with the attitude of delaying sex included making a pledge (odds ratio, 7.4; 95% CI, 6.7-8.2), original parents still married (odds ratio, 1.6; 95% CI, 1.1-2.1), attending weekly religious/church services (odds ratio, 1.5; 95% CI, 1.3-1.6), and watching 0 to 2 hours of television on school nights (odds ratio, 1.4; 95% CI, 1.2-1.5). Self-reported "less than C" students showed the least knowledge improvement and the belief that teens should "have sex whenever they want" at a greater percentage than other academic levels. **CONCLUSION:** Implementation of a sex education curriculum by an academic medical center to adolescents resulted in increased knowledge and a shift in attitude toward delaying sexual activity.

### **Male and female sexual function and dysfunction; andrology.**

Seftel A

J Urol. 2006 Jul;176(1):237-9.

### **Arousing properties of the vulvar epithelium.**

Martin-Alguacil N, Schober J, Kow LM, Pfaff D

J Urol. 2006 Aug;176(2):456-62.

**PURPOSE:** The initiation of genital tactile stimulation is regarded as a precursor to sexual arousal and perhaps in women it is the most easily recognized initiator of central nervous system arousal. Unfortunately little published material details the specific mechanisms preceding arousal, beginning at the epithelial level, which are the sensory precursors to arousal. Little is known about its cutaneous receptors, nerves and the other histochemical properties of this epithelial tissue that contribute to sexual arousal. Sexual sensitivity evaluations target female genital somatosensory pathways for cutaneous sensation by testing evoked



potentials of nerves, hot/cold and vibratory sensory discrimination. The anatomical bases of these several sensibilities form a subject for future investigation. We reviewed the known influences and mechanisms responsible for the arousing properties of the epithelium in the female external genitalia as well neural pathways associated with sexual arousal originating from the vulvar epithelium. MATERIALS AND METHODS: A comprehensive review was done of published, relevant clinical and histological material in human and nonhuman vertebrate studies. RESULTS: Tactile stimulation of the vulvar epithelium initiates changes suggesting complex integrative mechanisms. Influences of skin temperature, hormonal environment, mechanical tissue compliance and inflammation as well as the large number of transmitters and neuropeptides involved in peripheral pathways serving female sexual arousal speak of a direct sensory role. CONCLUSIONS: Genital epithelial cells may actively participate in sensory function to initiate sexual arousal by expressing receptors and releasing neurotransmitters in response to stimuli, resulting in epithelial-neuronal interactions.

**Brain processing of audiovisual sexual stimuli inducing penile erection: a positron emission tomography study.**

Tsujimura A, Miyagawa Y, Fujita K, Matsuoka Y, Takahashi T, Takao T, Matsumiya K, Osaki Y, Takasawa M, Oku N, Hatazawa J, Kaneko S, Okuyama A  
J Urol. 2006 Aug;176(2):679-83.

PURPOSE: Penile erection is dependent on commands from the central nervous system. Although basic studies of animals and neuroimaging studies of humans have been conducted to identify key brain regions associated with sexual arousal, to our knowledge no reliable studies of the first excitation phase of sexual arousal leading to penile erection have been reported. MATERIALS AND METHODS: We used H(2)(15)O-positron emission tomography to analyze regional cerebral blood flow just before penile erection in heterosexual volunteers. The subjects viewed 3 different types of audiovisual materials-sexually explicit clips, nonsexual neutral clips and dynamic mosaic image control clips-presented in random order, and penile rigidity was monitored in real time with a RigiScan(R) Plus device. Positron emission tomography scanning was initiated simultaneously when each clip was started, and images obtained when the subjects showed appropriate penile response were analyzed and compared. RESULTS: The advanced audiovisual cortices and cerebellar vermis in the right hemisphere were activated for sexually explicit-dynamic mosaic image control clip contrast, and only the right middle frontal gyrus was activated for sexually explicit- nonsexual neutral clip contrast. Several primary visual and audio regions were activated for dynamic mosaic image control-sexually explicit clip contrast and nonsexual neutral-sexually explicit clip contrast. CONCLUSIONS: We speculate that advanced audiovisual activity with imagination, not primary visual and audio activity, occurs when men experience sexual arousal inducing penile erection. Furthermore, the cerebellar vermis may be a key region for induction of penile erection in humans.

**Condom use and the risk of genital human papillomavirus infection in young women.**

Winer RL, Hughes JP, Feng Q, O'Reilly S, Kiviat NB, Holmes KK, Koutsky LA  
N Engl J Med. 2006 Jun 22;354(25):2645-54.

BACKGROUND: To evaluate whether the use of male condoms reduces the risk of male-to-female transmission of human papillomavirus (HPV) infection, longitudinal studies explicitly designed to evaluate the temporal relationship between condom use and HPV infection are needed. METHODS: We followed 82 female university students who reported their first intercourse with a male partner either during the study period or within two weeks before enrollment. Cervical and vulvovaginal samples for HPV DNA testing and Papanicolaou testing were collected at gynecologic examinations every four months. Every two weeks, women used electronic diaries to record information about their daily sexual behavior. Cox proportional-hazards models were used to evaluate risk factors for HPV infection. RESULTS: The incidence of genital HPV infection was 37.8 per 100 patient-years at risk among women whose partners used condoms for all instances of intercourse during the eight months before testing, as compared with 89.3 per 100 patient-years at risk in women whose partners used condoms less than 5 percent of the time (adjusted hazard ratio, 0.3; 95 percent confidence interval, 0.1 to 0.6, adjusted for the number of new partners and the number of previous partners of the male partner). Similar associations were observed when the analysis was restricted to high-risk and low-risk types of HPV and HPV types 6, 11, 16, and 18. In women reporting 100 percent condom use by their partners, no cervical squamous intraepithelial lesions were detected in 32 patient-years

at risk, whereas 14 incident lesions were detected during 97 patient-years at risk among women whose partners did not use condoms or used them less consistently. **CONCLUSIONS:** Among newly sexually active women, consistent condom use by their partners appears to reduce the risk of cervical and vulvovaginal HPV infection.

**Sexually transmitted diseases 2006: a dermatologist's view.**

Rosen T

Cleve Clin J Med. 2006 Jun;73(6):537-8, 542, 544-5 passim.

Despite the downturn in the incidence of many sexually transmitted diseases (STDs), some--particularly genital herpes and genital warts--are epidemic, and syphilis is seeing a resurgence. This article covers how to recognize, diagnose, and manage common STDs and how their presentation and treatment differ in patients with human immunodeficiency virus (HIV) infection.

**A review of gastrointestinal foreign bodies.**

Ayantunde AA, Oke T

Int J Clin Pract. 2006 Jun;60(6):735-9.

Gastrointestinal tract (GIT) foreign bodies represent a significant clinical problem in the Emergency Department, causing a high degree of financial burden, morbidity and mortality. A large variety of foreign bodies are accidentally ingested or inserted into the GIT in different age groups. This a retrospective review of 38 patients who presented to the Emergency Department with GIT foreign bodies between January 2001 and December 2004. Computer database and case note search of patients' personal data, nature of the foreign objects and mode of entry to the GIT were recorded. There were 30 males and eight females (M : F ratio of 3.75:1) with an age range of 10 months to 87 years (median age 25.5 years). Foreign body ingestion/insertion was accidental in 14 patients, deliberate in 11, for anal erotism in 11 and as a result of assault in two cases. The median time before presentation was 12 h, and the mean length of hospital stay was 1.7 days. Treatment was conservative in 15 patients; five patients had gastroscopic retrieval; 15 patients underwent examination under anaesthetic, retrieval and proctosigmoidoscopy and three patients underwent laparotomy for impacted foreign bodies. GIT foreign body ingestion or insertion is common; however, majority of cases can be successfully managed conservatively.

**10 – MISCELLANEOUS**

**Sigmoid vaginoplasty: long-term results.**

Kapoor R, Sharma DK, Singh KJ, Suri A, Singh P, Chaudhary H, Dubey D, Mandhani A

Urology. 2006 Jun;67(6):1212-5.

**OBJECTIVES:** To evaluate the long-term results of sigmoid vaginoplasty for Mayer-Rokitansky-Kuster-Hauser syndrome. The social and psychological acceptance of the procedure is also discussed in terms of a developing country scenario. **METHODS:** A total of 14 patients with Mayer-Rokitansky-Kuster-Hauser syndrome were treated at our institute from January 1995 to December 2004. Sigmoid vaginoplasty was performed in all patients. The procedure was performed using a combined abdominoperineal approach. Dissection was done between the urethra and rectum to create a bed for the neovaginal colon conduit. A 10-cm segment of sigmoid colon was raised on its vascular pedicle, delivered through the abdominoperineal tunnel, and fixed to the vaginal pit incision. The patient records were reviewed for surgical technique and postoperative complications. Patients underwent a personal interview to assess the postoperative results, social acceptance of the procedure, and sexual satisfaction. **RESULTS:** The mean patient age at surgery was 16.8 years. The patients who underwent sigmoid vaginoplasty had good cosmetic results without the need for routine dilation or the problem of excessive mucus production. The postoperative morbidity was minimal. During a mean follow-up of 4.1 years, no stenosis or colitis was encountered. The subjective satisfaction rate with the surgical outcomes in all the patients was 8.01 on a scale of 0 to 10 (0, very disappointed to 10, satisfied). **CONCLUSIONS:** Sigmoid vaginoplasty is an effective treatment for patients with vaginal atresia. Timed vaginal reconstruction in these patients allows for a better quality of life and social acceptance. It also enables the patient to lead a near-normal sexual life, with high satisfaction rates.

**An unusual cause of a frozen pelvis. Diagnosis: actinomycosis.**

Tou SI, David G, Thomas EA, Schneider HJ  
Gut. 2006 Jul;55(7):990, 1011.

**Pediatric pelvic fractures: a marker for injury severity.**

Spiguel L, Glynn L, Liu D, Statter M  
Am Surg. 2006 Jun;72(6):481-4.

Pelvic fractures comprise a small number of annual Level I pediatric trauma center admissions. This is a review of the University of Chicago Level I Pediatric Trauma Center experience with pediatric pelvic fractures. This is a retrospective review of the University of Chicago Level I Pediatric Trauma Center experience with pediatric pelvic fractures during the 12-year period from 1992 to 2004. From 1992 to 2004, there were 2850 pediatric trauma admissions. Thirteen patients were identified with pelvic fractures; seven were boys and six were girls. The average age was 8 years old. The mechanism of injury in all cases was motor vehicle related; 11 patients (87%) sustained pedestrian-motor vehicle crashes. According to the Torode and Zeig classification system, type III fractures occurred in eight patients (62%) and type IV fractures occurred in six patients (31%). Associated injuries occurred in eight patients (62%). Seven of these patients (88%) had associated injuries involving two or more organ systems. Of the associated injuries, additional orthopedic injuries were the most common, occurring in 62 per cent of our patients. Neurological injuries occurred in 54 per cent of patients, vascular injuries in 39 per cent, pulmonary injuries in 31 per cent, and genitourinary injuries in 15 per cent. Five patients (38%) were treated operatively; only two patients underwent operative management directly related to their pelvic fracture. The remaining three patients underwent operative management of associated injuries. The mortality rate was 0 per cent. Although pelvic fractures are an uncommon injury in pediatric trauma patients, the morbidity associated with these injuries can be profound. The majority of pelvic fractures in children are treated nonoperatively, however, more than one-half of these patients have concomitant injuries requiring operative management. When evaluating and treating pediatric pelvic fractures, a systematic multidisciplinary approach must be taken to evaluate and prioritize the pelvic fracture and the associated injuries.

**[Rehabilitation after abdominal surgery.]**

Bonnet F, Szymkiewicz O, Marret E, Houry S  
Presse Med. 2006 Jun;35(6 Pt 2):1016-22.

A combined strategy of anesthetic and surgical care defines postoperative rehabilitation, which aims to accelerate recovery from surgery, shorten convalescence, and reduce postoperative morbidity. Preoperative and early postoperative oral feeding, a relatively "dry" fluid regimen, and the avoidance of or early removal of drains, gastric tubes and bladder catheters all contribute to decreasing postoperative morbidity after abdominal surgery. Postoperative pain control, prevention of nausea and vomiting, shortening the duration of postoperative ileus, and early ambulation can also help to decrease postoperative morbidity. The use of multimodal fast-track clinical rehabilitation programs should improve outcomes and quality of life, reduce hospital stays, and save money.

**[Smoking and surgery.]**

Dureuil B, Dautzenberg B, Masquelet AC  
Presse Med. 2006 Jun;35(6 Pt 2):1009-15.

Smokers have an elevated risk of perioperative respiratory distress and of transfer to intensive care. Tobacco smoke substantially alters the healing process and constitutes a documented risk factor for postoperative complications (anastomotic leakage, delayed healing etc.). Risk of postoperative infection is also higher in smokers. When patients stop smoking 6 to 8 weeks before surgery, the incidence of complications related to tobacco smoke drops nearly to zero. Even stopping for a short period reduces the risk of complications, although the benefits of stopping increase with length of time. Preoperative smoking cessation should take place as early as possible. The general practitioner and the surgeon both have essential roles to play. Identification of smokers must be accompanied by measures to help the patient stop smoking, including advice, and if necessary, nicotine substitutes. Anxiety levels are higher in smokers than nonsmokers. Nonetheless smoking cessation for hospitalization does not increase these levels, even without nicotine substitutes. There is no interaction between anesthetic agents and nicotine substitutes: the latter may be continued through the morning of surgery and reinitiated in the immediate postoperative period.

PATIENTS: who stop smoking for surgery should be encouraged to continue to stop, permanently. The general practitioner's support is essential for this.

**Beautiful Buttocks: Characteristics and Surgical Techniques.**

Cuenca-Guerra R, Lugo-Beltran I  
Clin Plast Surg. 2006 Jul;33(3):321-332.

**Major congenital malformations after first-trimester exposure to ACE inhibitors.**

Cooper WO, Hernandez-Diaz S, Arbogast PG, Dudley JA, Dyer S, Gideon PS, Hall K, Ray WA  
N Engl J Med. 2006 Jun 8;354(23):2443-51.

BACKGROUND: Use of angiotensin-converting-enzyme (ACE) inhibitors during the second and third trimesters of pregnancy is contraindicated because of their association with an increased risk of fetopathy. In contrast, first-trimester use of ACE inhibitors has not been linked to adverse fetal outcomes. We conducted a study to assess the association between exposure to ACE inhibitors during the first trimester of pregnancy only and the risk of congenital malformations. METHODS: We studied a cohort of 29,507 infants enrolled in Tennessee Medicaid and born between 1985 and 2000 for whom there was no evidence of maternal diabetes. We identified 209 infants with exposure to ACE inhibitors in the first trimester alone, 202 infants with exposure to other antihypertensive medications in the first trimester alone, and 29,096 infants with no exposure to antihypertensive drugs at any time during gestation. Major congenital malformations were identified from linked vital records and hospitalization claims during the first year of life and confirmed by review of medical records. RESULTS: Infants with only first-trimester exposure to ACE inhibitors had an increased risk of major congenital malformations (risk ratio, 2.71; 95 percent confidence interval, 1.72 to 4.27) as compared with infants who had no exposure to antihypertensive medications. In contrast, fetal exposure to other antihypertensive medications during only the first trimester did not confer an increased risk (risk ratio, 0.66; 95 percent confidence interval, 0.25 to 1.75). Infants exposed to ACE inhibitors were at increased risk for malformations of the cardiovascular system (risk ratio, 3.72; 95 percent confidence interval, 1.89 to 7.30) and the central nervous system (risk ratio, 4.39; 95 percent confidence interval, 1.37 to 14.02). CONCLUSIONS: Exposure to ACE inhibitors during the first trimester cannot be considered safe and should be avoided.

**Dai-kenchu-to, a Chinese herbal medicine, improves stasis of patients with total gastrectomy and jejunal pouch interposition.**

Endo S, Nishida T, Nishikawa K, Nakajima K, Hasegawa J, Kitagawa T, Ito T, Matsuda H  
Am J Surg. 2006 Jul;192(1):9-13.

BACKGROUND: Intestinal motility after gastric surgery frequently is disturbed and results in postoperative intestinal symptoms and poor quality of life (QOL). The purpose of this study was to examine the effects of Dai-kenchu-to on intestinal motility and postoperative QOL of patients. METHODS: Seventeen patients who underwent total gastrectomy with jejunal pouch interposition for gastric cancer in the Department of Surgery of Osaka University Medical Hospital were enrolled. The patients were assigned randomly to the cross-over study with or without 15 g/d of Dai-kenchu-to. Questionnaires and emptying tests using (111)In-labeled liquid and (99m)Tc-labeled solid test meal were performed at the end of each treatment period. A manometric study was performed in 6 patients to measure contractile activity with or without Dai-kenchu-to. RESULTS: Stasis-related symptoms were reduced significantly by Dai-kenchu-to ( $P = .032$ ). In the emptying test, Dai-kenchu-to accelerated emptying of both liquid ( $P < .01$ ) and solid ( $P = .015$ ) meals from the pouch. The pouch showed bursts of contractions, which were increased significantly by oral intake of Dai-kenchu-to ( $P = .028$ ). CONCLUSIONS: Dai-kenchu-to increased intestinal motility and decreased postoperative symptoms of patients with total gastrectomy with jejunal pouch interposition.

**High and intermediate imperforate anus: psychosocial consequences among school-aged children.**

Ojmyr-Joelsson M, Nisell M, Frenckner B, Rydelius PA, Christensson K  
J Pediatr Surg. 2006 Jul;41(7):1272-8.

BACKGROUND/PURPOSE: Imperforate anus is an unusual malformation, which, even after surgical intervention, usually entails constipation and fecal incontinence. This study aimed to evaluate ongoing psychosocial effects of this birth defect in school-aged children. METHODS: Twenty-five children born with

high and intermediate imperforate anus participated in the study, along with their parents and classroom teachers. One group of healthy children and 1 group of children with juvenile chronic arthritis, along with their parents, served as controls. Children and parents individually answered a questionnaire devised for this study. Parents filled out the Child Behavior Checklist and the children's teacher filled out the Teacher's Report Form. RESULTS: According to test results, children with imperforate anus were happy and optimistic. They liked school better and reported better relationships with schoolmates than the other children. The index group reported statistically significantly more frequent constipation. According to parental responses, the imperforate-anus children suffered from fecal incontinence and odor, as well as constipation ( $P < .001$ ). Index-group parents reported on the Child Behavior Checklist that their children had more emotional and behavioral problems. On the Teacher's Report Form, teachers reported few problems for the same children. CONCLUSIONS: Patients with imperforate anus did not experience psychosocial impairment despite significant functional problems.

#### **Nutrition in the prevention of gastrointestinal cancer.**

van den Brandt PA, Goldbohm RA

Best Pract Res Clin Gastroenterol. 2006 Jun;20(3):589-603.

Diet has been hypothesized to play a role in the etiology of gastrointestinal cancer for a long time. Initially, strong evidence of such effects was found in retrospective epidemiological studies. Dietary habits, in particular those from the distant past, are difficult to measure, however. Results from recent, prospective and larger studies of better quality did not always confirm these associations. Consumption of fruits and vegetables appear to have a modest role in the prevention of gastrointestinal cancers. In contrast, the roles of alcohol consumption and overweight on risk of gastrointestinal cancer have become much clearer. Overweight and obesity are important risk factors for adenocarcinoma (but not squamous carcinoma) of the esophagus, gastric cardia carcinoma (but not noncardia carcinoma), and colorectal cancer, the latter in particular among men. Alcohol consumption is a risk factor for squamous carcinoma (but not adenocarcinoma) of the esophagus, gastric cancer and colorectal cancer. Selenium may be inversely related to esophageal and gastric cancer.

#### **A comparison of colorectal neoplasia screening tests: a multicentre community-based study of the impact of consumer choice.**

Med J Aust. 2006 Jun 5;184(11):546-50.

OBJECTIVE: International guidelines and local practices for colorectal cancer screening suggest an important role for several different screening tests, and for consumer choice. We aimed to determine whether choice of test improved participation in screening. DESIGN: A randomised comparative study offering one of six screening strategies: faecal occult blood testing (FOBT), FOBT and flexible sigmoidoscopy (FS), computed tomography colonography (CTC), colonoscopy, or one of two groups offered a choice of these strategies (one of which was sent an FOBT kit with the letter of invitation, while the other was required to request an FOBT kit by telephone if that was the test chosen). SETTING AND PARTICIPANTS: 1679 people aged 50-54 or 65-69 years, randomly selected from the electoral roll in metropolitan Perth, Adelaide and Melbourne. MAIN OUTCOME MEASURES: Participation, yield of advanced colorectal neoplasia (CRN), acceptability and safety. RESULTS: 346 (20.6%) were excluded from screening, mostly for a recent examination (165), symptoms (72) or personal or family history of colorectal neoplasia or cancer (83). 278 of the 1333 eligible (20.9%; 95% CI, 18.7%-23.1%) participated in screening. Participation was similar by age and sex, but lower in Perth than Adelaide (17.1% v 24.2%;  $P = 0.01$ ). Participation by screening group was: FOBT, 27.4%; FOBT/FS, 13.7% ( $P < 0.001$  compared with FOBT); CTC, 16.3% ( $P = 0.005$ ); colonoscopy, 17.8% ( $P = 0.02$ ); or a choice of test 18.6% ("with FOBT kit";  $P = 0.03$ ) or 22.7% ("without FOBT kit";  $P = 0.3$ ). Yield of advanced CRN was higher in participants screened by colonoscopy than FOBT (7.9% v 0.8%;  $P = 0.02$ ). All tests were well accepted and no serious complications arose from screening. CONCLUSION: A choice of screening test did not improve participation. Participation by FOBT was higher than by other tests. Yield of advanced colorectal neoplasia on an intention-to-screen basis, determined by test sensitivity and participation, is likely to be a critical determinant of the effectiveness of screening strategies.