## Pelvic Floor Digest

*This section presents a small sample of the Pelvic Floor Digest, an online publication (**www.pelvicfloordigest.org**) that reproduces titles and abstracts from over 200 journals. The goal is to increase interest in all the compartments of the pelvic floor and to develop an interdisciplinary culture in the reader.*

### 1 – THE PELVIC FLOOR

**Patients' pelvic goals change after initial urogynecologic consultation.** *Lowenstein L, Kenton K, Pierce K, Fitzgerald MP, Mueller ER, Brubaker L. Am J Obstet Gynecol. 2007;197:640.* The objective of the study was to determine the effect of initial urogynecologic consultation on the number and type of patient goals. The number of patients' postconsultation goals was higher than the number of preconsultation goals. Women were less likely to report "symptom" and "information-seeking" goals, but more likely to report treatment goals after consultation. It is important to reassess goals following initial consultation.

**Levator avulsion and grading of pelvic floor muscle strength.** *Dietz HP, Shek C. Int Urogynecol J Pelvic Floor Dysfunct. 2007 Nov 13; epub.* In a retrospective study with 3D/4D translabial ultrasound and digital assessment on 1,112 women, levator avulsion was diagnosed whenever the examiner was unable to palpate the insertion of the pubovisceral muscle on the inferior pubic ramus and/or whenever a discontinuity between bone and muscle was detected on ultrasound. Avulsion defects were found in 23%, associated with a highly significant reduction in the overall Oxford grading. Avulsion of the puborectalis muscle seems to have a marked effect on pelvic floor muscle strength, which may help in diagnosing trauma.

**Effect of biofeedback training on paradoxical pelvic floor movement in children with dysfunctional voiding.** *de Jong TP, Klijn AJ, Vijverberg MA et al. Urology. 2007;70:790.* Pelvic floor dysfunction occurs frequently in children with dysfunctional voiding and can be cured by dedicated physical therapy. The clinical importance of this phenomenon is not yet clear.

### 2 – FUNCTIONAL ANATOMY

**The contribution of the levator ani nerve and the pudendal nerve to the innervation of the levator ani muscles; a study in human fetuses.** *Wallner C, van Wissen J, Maas Cpet al. Eur Urol. 2007 Nov 20; epub.* The levator ani muscle (LAM) often has a dual somatic innervation with the levator ani nerve as its constant and main neuronal supply. Fetal pelves were studied individually and 3D reconstructions were prepared. The levator ani nerve innervated the LAM in every pelvis, whereas a contribution of the pudendal nerve to the innervation of the LAM could be demonstrated in only 10 pelvic halves (56%). No sex differences were observed.

**Anatomic relationships of the tension-free vaginal mesh trocars.** *Chen CC, Gustilo-Ashby AM, Jelovsek JE, Paraiso MF. Am J Obstet Gynecol. 2007;197:666.* The bladder (mean distance 0.7 cm, range, 0.4-1.1) and medial branch of the obturator vessel (0.8 cm, range 0.6-1.0) may be at risk of injury during the passage of the anterior trocars, whereas the rectum (0.8 cm range 0.6-1.0) and inferior rectal vessels were at 0.9 cm (range 0.7-1.1), may be at risk during the passage of the posterior trocar (study in 8 frozen cadavers).

**Anatomic variations of the pelvic floor nerves adjacent to the sacrospinous ligament: a female cadaver study.** *Lazarou G, Grigorescu BA, Olson TR eeet al. Int Urogynecol J Pelvic Floor Dysfunct. 2007 Nov 24; epub.* The pudendal nerve (PN) was found to pass medial to the ischial spine (IS) and posterior to the sacrospinous ligament (SSL) at a mean distance of 0.6 cm in 80% of 15 female cadavers. In 40% of cadavers, an inferior rectal nerve (IRN) variant pierced the SSL at a distance of 1.9 cm medial to the IS. The levator ani nerve (LAN), coursed over the superior surface of the SSL-coccygeus muscle complex at a mean distance of 2.5 cm medial to the IS. Anatomic variations were found which challenge the classic description. A nerve-free zone is situated in the medial third of the SSL.

### 3 – DIAGNOSTICS

**Analysis of a computer based simulator as an educational tool for cystoscopy: subjective and objective results.** *Gettman MT, Le CQ, Rangel LJ, Slezak JM. J Urol. 2007 Nov 12; epub.* Resident education in cystoscopy has traditionally relied on clinical instruction. However, simulators are now available outside the clinical setting. We evaluated a simulator (UroMentor, Simbionix, Lod, Israel) for flexible and rigid cystoscopy with 30 novice and 27 expert cystoscopists on a computer based cystoscopic simulator. Objectively, expert and novice performance of cystoscopic tasks can be distinguished. Subjective assessments suggest ongoing refinement of the simulator as a learning tool for cystoscopic skills training.

### 4 – PROLAPSES

**Transperineal rectocele repair with polyglycolic acid mesh: a case series.** *Leventoglu S, Mentes BB, Akin M, et al. Dis Colon Rectum. 2007 Nov 30; epub.* In 83 females with predominant, symptomatic rectocele a transperineal rectocele repair was done using polyglycolic acid (Soft PGA Felt(R)) mesh. Preoperatively, 39 patients had Stage II and 44 patients had Stage III rectocele with a mean total symptom score 9.87 ± 1.93, reduced to 1.62 ± 0.59 at six-month follow-up postoperatively and anatomic cure in 89.2 percent. Hemorrhage (3.6 percent) and wound infection (4.8 percent) were the surgical complications observed.

**Uterosacral ligament suspension sutures: anatomic relationships in unembalmed female cadavers.** *Wieslander CK, Roshanravan SM, Wai CY, et al. Am J Obstet Gynecol. 2007;197:672.* The of uterosacral ligament suspension (USLS) sutures can directly injure the ureters, rectum, and neurovascular structures in the pelvic walls. Their anatomic relationships were examined in 15 unembalmed female cadavers. The mean distance of the proximal sutures to the ureters and rectal lumen was 14 (0-33) and 10 mm (0-33), of the distal ones to the ureters 14 (4-33) and to the rectal lumen 13 mm (3-23). Right sutures were at the level of S1 in 37.5%, S2 in 37.5%, and S3 in 25% of specimens, left sutures at S1 in 50%, S2 in 29.2%, and S3 in 20.8%. Of 48 sutures passed, 1 entrapped the S3 nerve, and in 4.1% of specimens the pelvic sidewall vessels were perforated.

**Does supracervical hysterectomy provide more support to the vaginal apex than total abdominal hysterectomy?** *Rahn DD, Marker AC, Corton MM et al. Am J Obstet Gynecol. 2007;197:650.* In unembalmed cadavers, it appears that total abdominal hysterectomy and supracervical hysterectomy provide equal resistance to forces applied to the vaginal apex.

**Bladder symptoms 1 year after abdominal sacrocolpopexy with and without Burch colposuspension in women without preoperative stress incontinence symptoms.** *Burgio KL, Nygaard IE, Richter HE, Brubaker L et al. Am J Obstet Gynecol. 2007;197:647.* One year after abdominal sacrocolpopexy (ASC), irritative, obstructive, and stress urinary incontinence (SUI) symptoms were assessed in 305 women using Urogenital Distress Inventory subscales. A composite "stress endpoint" combined SUI symptoms, positive stress test, and retreatment. ASC reduced bothersome irritative and obstructive symptoms and prophylactic Burch reduced stress and urge incontinence.

**Bowel symptoms in women 1 year after sacrocolpopexy.** *Bradley CS, Nygaard IE, Brown MB et al. Am J Obstet Gynecol. 2007;197:642.* Most bowel symptoms improve in women with moderate to severe pelvic organ prolapse after sacrocolpopexy. In a randomized trial of sacrocolpopexy with or without Burch colposuspension in stress continent women with stages II-IV prolapse, in addition subjects underwent

posterior vaginal or perineal procedures (PR) at each surgeon's discretion. The preoperative and 1 year postoperative Colorectal-anal Distress Inventory (CRADI) scores were compared within and between groups using Wilcoxon signed-rank and rank-sum tests, respectively. The sacrocolpopexy + PR group (n = 87) had more baseline obstructive colorectal symptoms than the sacrocolpopexy alone group (n = 211). CRADI total, obstructive, and pain/irritation scores significantly improved in both groups.

**Stapled haemorrhoidopexy versus Ferguson haemorrhoidectomy: a prospective study with 2-year postoperative follow-up.** *Sabanci U, Ogun I, Candemir G. J Int Med Res. 2007;35:917.* Patients with grade III or IV haemorrhoids underwent stapled haemorrhoidopexy (50) or Ferguson haemorrhoidectomy (50) between 2000 and 2003. Six patients (12.0%) receiving stapled haemorrhoidopexy experienced complications (bleeding, haematoma, anal fissure) and recurrence in 2.0%. Of those undergoing Ferguson haemorrhoidectomy urinary retention was seen in three patients (6.0%) We conclude that Ferguson haemorrhoidectomy was safer than stapled haemorrhoidopexy for bleeding complications, but stapled haemorrhoidopexy was superior to the Ferguson technique in terms of postoperative pain, duration of hospital stay and time to return to normal activities.

**Proctalgia in a patient with staples retained in the puborectalis muscle after STARR operation.** *De Nardi P, Bottini C, Faticanti Scucchi L et al. Tech Coloproctol. 2007 Nov 30; epub.* Stapled transanal rectal resection is a surgical technique for the treatment of intussusception and rectocele causing obstructed defecation. The case of a patient complaining of persistent pain, tenesmus and fecal urgency after STARR is described. The patient also had an external rectal prolapse requiring an Altemeier rectosigmoid resection; during the operation several staples were removed that had stuck to the puborectalis muscle with some degree of muscle inflammation at histology.

**Total rectal lumen obliteration after stapled haemorrhoidopexy: a cautionary tale.** *Brown S, Baraza W, Shorthouse A. Tech Coloproctol. 2007 Nov 30; epub.* The obliteration of the rectal lumen during stapled haemorrhoidopexy in a patient with marked mucosal prolapse was recognised immediately and continuity was restored by performing a limited Delorme's procedure.

**Transanal haemorrhoidal dearterialisation: nonexcisonal surgery for the treatment of haemorrhoidal disease.** *Dal Monte PP, Tagariello C, Giordano P et al. Tech Coloproctol. 2007 Dec 3; epub.* Transanal haemorrhoidal dearterialisation (THD) is a nonexcisional surgical technique for the treatment of piles, consisting in the ligation of the distal branches of the superior rectal artery, resulting in a reduction of blood flow and decongestion of the haemorrhoidal plexus. From 2000 to 2006 THD was performed in 330 patients (180 men; mean age, 52.4 years), including 138 second, 162 third and 30 fourth-degree haemorrhoids. There were 23 postoperative complications (bleeding, thrombose, rectal haematoma, anal fissure, dysuria, haematuria, needle rupture). The mean postoperative pain score was 1.32 on a VAS. 219 patients were followed for a mean of 46 months (range, 22-79). The operation completely resolved the symptoms in 92.5% of the patients with bleeding and in 92% with prolapse.

**Modified Longo's stapled hemorrhoidopexy with additional traction sutures for the treatment of residual prolapsed piles.** *Chen CW, Kang JC, Wu CC et al. Int J Colorectal Dis. 2007 Nov 20; epub.* Residual prolapsed piles is a problem after the stapled hemorrhoidopexy, especially in large third- or fourth-degree hemorrhoids. We have developed a method using additional traction sutures, and this contributed to reduce the residual internal hemorrhoids, but a randomized trial and long-term follow-up are needed to determine possible surgical and functional outcome.

**5 – RETENTIONS**

**Sacral neuromodulation for urinary retention after pelvic plexus injury.** *Garg T, Machi G, Guralnick ML, O'Connor RC. Urology. 2007;70:811.* Injury to the pelvic plexus with resultant urinary retention is a known complication of colectomy. A case of urinary retention after colectomy successfully treated with the insertion of a pelvic neuromodulator is described.

**Mortality in men admitted to hospital with acute urinary retention: database analysis.** *Armitage JN, Sibanda N, Cathcart PJ. BMJ. 2007;335:1199.* Mortality in men admitted to hospital with acute urinary retention is high and increases strongly with age and comorbidity.In 100 067 men with spontaneous acute urinary retention, the one year mortality was 4.1% in men aged 45-54 and 32.8% in those aged 85 and over. In 75 979 men with precipitated acute urinary retention, mortality was 9.5% and 45.4%, respectively. Patients might benefit from multidisciplinary care to identify and treat comorbid conditions.

**A novel surgical approach to slow-transit constipation: report of two cases.** *Pinedo G, Leon F, Molina ME, Dis Colon Rectum. 2007 Nov 21; epub.* A laparoscopic colonic bypass with an ileorectal anastomosis to the rectosigmoid junction, leaving the colon in situ, was offered and accepted by the two patients who had reject because of morbidity the surgical procedure of choice of total abdominal colectomy. After a 4 and 2 months of close follow-up they have one to four bowel movements per day with mild abdominal distension and pain.

**Risk factors for chronic constipation and a possible role of analgesics.** *Chang JY, Locke GR, Schleck CD et al. eurogastroenterol Motil. 2007;19:905.* Constipation has an estimated prevalence of 15% in the general population. A study to identify potentially novel risk factors for chronic constipation was done with a valid self-report questionnaire. People reporting symptoms of IBS were excluded. Among 523 subjects chronic constipation was reported by 18% of the respondents. No association was detected for age, gender, body mass index, marital status, smoking, alcohol, coffee, education level, food allergy, exposure to pets, stress, emotional support, or water supply, but with use of acetaminophen, aspirin and non-steroidal anti-inflammatory drugs. The explanation of these associations requires further investigation.

**Constipation as cause of acute abdominal pain in children.** *Loening-Baucke V, Swidsinski A. J Pediatr. 2007;151:666.* Objective: Nine percent of the 962 children that had a visit for acute abdominal pain, with significantly more girls (12%) than boys (5%), acute and chronic constipation were the most frequent causes of the pain, occurring in 48% of subjects. A surgical cause was present in 2% of subjects.

**What is the best treatment for chronic constipation in the elderly?** *Kalish VB, Loven B, Sehgal M. J Fam Pract. 2007;56:1050.* There is no one best evidence-based treatment for chronic constipation in the elderly. While the most common first-line treatments are dietary fiber and exercise, the evidence is insufficient to support this approach in the geriatric population: dietary fiber, herbal supplements, biofeedback, lubricants, polyethylene glycol. A newer agent, lubiprostone (Amitiza), appears to be effective.

**Outcomes of surgical management of total colonic aganglionosis.** *Choe EK, Moon SB, Kim HY et al. World J Surg. 2007 Nov 9; epub.* Total colonic aganglionosis is difficult to diagnose; but once it is diagnosed correctly and treated by corrective surgery, outcomes seem promising. Martin's operation brought about a good outcome and enabled patients to have acceptable bowel habits. The prognosis is highly dependent on the extent of aganglionosis.

**Constipation in pregnancy: prevalence, symptoms, and risk factors.** *Bradley CS, Kennedy CM, Turcea AM et al. Obstet Gynecol. 2007;110:1351.* Constipation measured using the Rome II criteria (presence of at least two of the following symptoms for at least one quarter of defecations: straining, lumpy or hard stools, sensation of incomplete evacuation, sensation of anorectal obstruction, manual maneuvers to facilitate defecation, and fewer than three defecations per week) affects up to one fourth of women throughout pregnancy and at 3 months postpartum with a prevalence rates of 24%. Iron supplements and past constipation treatment are associated with constipation during pregnancy.

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**6 – INCONTINENCES**

**The impact of fecal (FI) and urinary incontinence (UI) on quality of life 6 months after childbirth.** *Handa VL, Zyczynski HM, Burgio KL et al. Am J Obstet Gynecol. 2007;197:636.* With validated questionnaires 759 primiparous women were assessed for FI and UI six months postpartum, measuring QOL with SF-12 summary scores, health utility index score (a measure of self-rated overall health), and the modified Manchester Health Questionnaire. Women with FI and those with UI had worse scores than women without incontinences or flatal incontinence only. FI and UI together have a greater impact than either condition alone.

**The impact of tension-free vaginal tape on overactive bladder symptoms in women with stress urinary incontinence: significance of detrusor overactivity.** *Choe JH, Choo MS, Lee KS. J Urol. 2007 Nov 12; epub.* Evaluating the results of the TVT in 549 women (2003 to 2004) it is concluded that the tension-free vaginal tape procedure can be performed in women with stress urinary incontinence and overactive bladder including urge incontinence even if the patient has detrusor overactivity on urodynamic study. However, patients should be fully advised of the possibility of persistent overactive bladder symptoms and treatment for those symptoms after tension-free vaginal tape should be o

**Myoblast and fibroblast therapy for post-prostatectomy urinary incontinence: 1-year followup of 63 patients.** *Mitterberger M, Marksteiner R, Margreiter E et al. J Urol. 2007 Nov 12; epub.* Transurethral ultrasound guided injections of autologous fibroblasts and myoblasts obtained from skeletal muscle biopsies were done in 63 patients with stress urinary incontinence after radical prostatectomy were treated with. One year after implantation 41 patients were continent, 17 showed improvement and 5 failed. Thickness and contractility of the rhabdosphincter were significantly improved postoperatively.

**Behavioral comorbidity differs in subtypes of enuresis and urinary incontinence.** *Zink S, Freitag CM, Gontard AV. J Urol. 2007 Nov 13; epub.* Different subtypes of enuresis and urinary incontinence demonstrate differences in behavioral problems and psychiatric comorbidity. The highest rates of psychiatric comorbidity were found in the group of children with voiding postponement and the lowest were in children with monosymptomatic nocturnal enuresis. Screening for comorbid psychiatric disorders in children with enuresis and urinary incontinence is highly recommended, and further investigations in large groups of children are necessary.

**Evaluation and outcome measures in the treatment of female urinary stress incontinence: International Urogynecological Association (IUGA) guidelines for research and clinical practice.** *Ghoniem G, Stanford E, Kenton K et al. Int Urogynecol J Pelvic Floor Dysfunct. 2008;19:5.*

**The age distribution, rates, and types of surgery for stress urinary incontinence (SUI) in the USA.** *Shah AD, Kohli N, Rajan SS, Hoyte L. Int Urogynecol J Pelvic Floor Dysfunct. 2008;19:89.* The distribution of SUI surgery across age groups in the USA in 2003 was studied: 129,778 women underwent 165,776 surgical procedures. Of these women, 12.2, 53.0, 30.4, and 4.5% belonged to reproductive, perimenopausal, postmenopausal, and elderly age groups, respectively. Surgical rates (per 10,000 women) were 4, 17, 19, and 9 in these age groups, respectively. Complications occurred most frequently in reproductive age women. Women at all stages of reproductive life may seek surgical treatment for SUI, but the greatest percentage of surgical procedures occurred in perimenopausal women.

**Clinical and urodynamic outcomes of pubovaginal sling procedure with autologous rectus fascia for stress urinary incontinence.** *Mitsui T, Tanaka H, Moriya K et al. Int J Urol. 2007;14:1076.* Pubovaginal sling surgery with autologous rectus fascia was done in 29 consecutive women with SUI. Overall SUI was cured in 23 patients and improved in 3 patients. Three patients who developed persistent urinary retention or severe voiding difficulty after surgery underwent urethrolysis. Of 17 patients who had urgency before the pubovaginal sling, urgency was cured postoperatively in seven, while de novo urgency appeared in one patient. Postvoid residual urine volume (PVR) >100 mL and Qmax </=20 mL/s before surgery are risk factors for postoperative voiding difficulty.

**Mixed urinary incontinence: continuing to confound?** *Hockey J. Curr Opin Obstet Gynecol. 2007;19:521.* Mixed incontinence is a complex clinical problem for urogynaecologists and generalists alike, as research for new treatments tend to focus on single-symptom groups. Those with mixed symptoms form a diverse group, which is difficult to study precisely. Recent studies, however, have aimed to classify the subgroups into predominant types to determine the response to treatment with greater accuracy.

**Transobturator tapes for stress urinary incontinence: results of the Austrian registry.** *Tamussino K, Hanzal E, Kolle D et al. Am J Obstet Gynecol. 2007;197:634.* Data on a total of 2543 operations with 11 different tape systems were collected. Intraoperative complications were noted for 120 procedures (4.7%): increased bleeding, vaginal, bladder and urethral perforations. Reoperations attributable to the tape procedure were reported for 57 patients (24 tapes cut or loosened for voiding dysfunction, 11 vaginal erosions, 7 abscesses with erosions). Significant postoperative pain was reported for 12 patients (0.5%).

**National audit of continence care for older people: management of urinary incontinence.** *Wagg A, Potter J, Peel P et al. Age Ageing. 2007 Nov 21; epub.* A national audit was conducted across England, Wales and Northern Ireland. The results indicate that assessment and care by professionals directly looking after the older person were often lacking. There is an urgent need to re-establish the fundamentals of continence care into the practice of medical and nursing staff and action needs to be taken with regard to the establishment of truly integrated, quality services in this neglected area of practice.

**The inside-out trans-obturator sling: a novel surgical technique for the treatment of male urinary incontinence.** *de Leval J, Waltregny D. Eur Urol. 2007 Nov 20; epub.* A new polypropylene sling procedure for treating stress urinary incontinence (SUI) after radical prostatectomy (RP) is pulled for compressing the bulbar urethra upward and tied to each other across the midline. Patients with detrusor overactivity are excluded. At 6 months 45% patients were cured and 40% improved (1pad/d), so this procedure appears to be safe and efficient at short term. Further studies are warranted to determine long-term outcome.

**Long-term follow-up of a transvaginal Burch urethropexy for stress urinary incontinence.** *Rardin CR, Sung VW, Hampton BS et al. Am J Obstet Gynecol. 2007;197:656.* A vaginal Burch urethropexy for urodynamic stress urinary incontinence with urethral hypermobility was performed in 66 women using a suture carrier device. Concurrent prolapse repairs were performed as indicated. Mean follow-up time was 20.9 +/- 18.9 months. Objective failure was observed in 16 patients (24.2%). Subjective failure was reported by 21.2% of patients, with 50% and 28.8% reporting success and improvement, respectively. Six patients (9%) experienced febrile illness, 4 (6%) intraoperative hemorrhage, 1 pelvic abscess, 12 (18.2%) suture erosion; half required surgical revision or excision. It is concluded that vaginal Burch urethropexy is well tolerated but is associated with poor long-term success and high suture erosion rates.

**Complication rates of tension-free midurethral slings in the treatment of female stress urinary incontinence: a systematic review and meta-analysis of randomized controlled trials comparing tension-free midurethral tapes to other surgical procedures.** *Novara G, Galfano A, Boscolo-Berto R, Secco S, Cavalleri S, Ficarra V, Artibani W. Eur Urol. 2007 Nov 8; epub.* To evaluate the complication rates of tension-free midurethral slings compared with other surgical treatments for stress urinary incontinence a systematic review of the literature using MEDLINE, EMBASE, and Web of Science identified 33 randomized controlled trials reporting data on complication rates. Tension-free slings were followed by lower risk of reoperation compared with Burch colposuspension, whereas pubovaginal sling and tension-free midurethral slings had similar complication rates. With regards to different tension-free tapes, voiding LUTS and reoperations were more common after SPARC, whereas bladder perforations, pelvic haematoma, and storage LUTS were less common after transobturator tapes. The quality of many evaluated studies was limited.

**Botulinum toxin A (Botox((R)) intradetrusor injections in adults with neurogenic detrusor overactivity/neurogenic overactive bladder (NDO/NOAB): a systematic literature review.** *Karsenty G, Denys P, Amarenco G et al. Eur Urol. 2007 Oct 16; epub.* A total of 18 articles evaluating the efficacy or safety of Botox in patients resistant to antimuscarinic therapy, with or without clean intermittent self-catheterisation (CIC), were selected. Most of the studies reported a significant improvement in clinical (approximately 40-80% of patients became completely dry between CICs) as well as urodynamic (in most studies mean maximum detrusor pressure was reduced to </=40cm H(2)O) variables and in the patients' quality of life, without major adverse events. However, more adequately powered, well-designed, randomised, controlled studies evaluating the optimal dose, number and location of injections, impact on antimuscarinic regimen and CIC use, duration of effect, and when to perform repeat injections are warranted.

**Urinary incontinence at orgasm: relation to detrusor overactivity and treatment efficacy.** *Serati M, Salvatore S, Uccella S, Cromi A, Khullar V, Cardozo L, Bolis P. Eur Urol. 2007 Nov 20; epub.* This is the first study showing an inferior efficacy of antimuscarinic treatment in women with DO complaining of incontinence at orgasm or at penetration.

**Intermediate-term outcome of the simplified laparoscopic antegrade continence enema procedure: less is better.** *Nanigian DK, Kurzrock EA. J Urol. 2007 Nov 13; epub.* The Malone antegrade continence enema procedure revolutionized the surgical management of fecal incontinence. Laparoscopic antegrade continence enema is an effective means of treating intractable fecal incontinence and constipation. Our technique of using in situ appendix without cecoplication requires minimal mobilization and manipulation of the blood supply. Secondary ischemia, adhesions and scar formation are reduced, alleviating the most common complication, stomal stenosis. Our results show that cecoplication is not necessary to maintain stomal continence.

**A patient-centered approach to developing a comprehensive symptom and quality of life assessment of anal incontinence.** *Cotterill N, Norton C, Avery KN et al. Dis Colon Rectum. 2007 Nov 15; epub.* To identify question items required for a comprehensive symptom and quality of life assessment for individuals with anal incontinence is rather difficult. A consensus is reached that assessment should include the type, frequency and severity of incontinence, whether passive or associated with urgency, ability to delay and discriminate stool type, and "normal" bowel pattern with five key issues: unpredictability, toilet location, coping strategies, embarrassment, and social activity restriction. The currently available questionnaires do not captures comprehensive information on the issues identified as important by patien

**Surgical strategies for faecal incontinence - a decision analysis between dynamic graciloplasty, artificial bowel sphincter and end stoma.** *Tan EK, Vaizey C, Cornish J et al. Colorectal Dis. 2007 Nov 12; epub.* Artificial bowel sphincter (ABS) and dynamic graciloplasty (DG) and a permanent end stoma (ES) are surgical options for faecal incontinence (FI). All three procedures are cost-effective: ABS is the most cost-effective after 10 years, ES is most cost-effective over 5 years, DG maybe considered as an alternative in specialist centres.

**The ProTect device in the treatment of severe fecal incontinence: preliminary results of a multicenter trial.** *Giamundo P, Altomare D, De Nardi P et al. Tech Coloproctol. 2007 Dec 3; epub.* ProTect consists of a pliable, silicone catheter with an inflatable balloon that seals the rectum at the anorectal junction, acting like an anal plug. The proximal part of the catheter incorporates two contacts that monitor the rectum for the presence of feces. The patient is alerted to an imminent bowel movement and, hence, a potential fecal accident, through a beeper. In 11 subjects an overall significant improvement in the quality of life and a significant reduction in incontinence scores were demon

**Correlation between anal sphincter defects and anal incontinence following obstetric sphincter tears: assessment using scoring systems for sonographic classification of defects.** *Norderval S, Markskog A, Rossaak K, Vonen B. Ultrasound Obstet Gynecol. 2007 Dec 5; epub.* There is a positive correlation between the extent of sphincter defects and the degree of anal incontinence following primary repair of obstetric sphincter tears. Our findings highlight the importance of adequate reconstruction of the anal sphincters during primary repair.

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**National trends and costs of surgical treatment for female fecal incontinence.** *Sung VW, Rogers ML, Myers DL et al. Am J Obstet Gynecol. 2007;197:652.* This study describes national trends, hospital charges, and costs of inpatient surgical treatment for female fecal incontinence in the United States. From 1998 to 2003 21,547 women underwent inpatient surgery for fecal incontinence. This number has remained stable, with 3423 procedures in 1998 and 3509 procedures in 2003. The overall risk of complications was 15.4% and the risk of death was 0.02%. Total charges increased from $34 million in 1998 to $57.5 million in 2003, a significant economic impact on the health care system.

**Prevalence and risk factors of fecal incontinence (FI) in women undergoing stress incontinence (IU) surgery.** *Markland AD, Kraus SR, Richter HE. Am J Obstet Gynecol. 2007;197:662.* Women enrolled in a stress UI surgical trial have high rates of FI. Potential risk factors for (at least) monthly fecal incontinence (FI) in women presenting for stress urinary incontinence (UI) surgery are decreased anal sphincter contraction, perimenopausal status, prior incontinence surgery/treatment, and increased UI bother.

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**7 – PAIN**

**Comparative measurement of pelvic floor pain sensitivity in chronic pelvic pain.***Tu FF, Fitzgerald CM, Kuiken T et al. Obstet Gynecol. 2007;110:1244.* Women with pelvic pain conditions exhibit enhanced somatic pain sensitivity at extragenital sites. Whether comparable differences exist for pelvic floor or vaginal pain sensitivity is unknown. Comparing 14 women with chronic pelvic pain to 30 healthy women without this condition and using a prototype vaginal pressure algometer, we recorded continuous ascending pressure and determined each subject's pressure-pain threshold at each of eight paired pelvic floor sites and two adjacent vaginal sites. Thresholds were significantly lower in women with pelvic pain (at iliococcygeus). Pelvic floor and vaginal site pain detection thresholds had moderate-to-strong correlations with each other.

**Re-imagining interstitial cystitis.** *Hanno PM. Urol Clin North Am. 2008;35:91.* An "antiproliferative factor" has been postulated in the etiologic pathway of the painful bladder syndrome/interstitial cystitis, but without any dramatic breakthroughs in the field. Other looks with regard to epidemiology, etiology, and clinical treatment are being taken.

**Chronic prostatitis/chronic pelvic pain syndrome.** *Pontari MA. Urol Clin North Am. 2008;35:81.* Prostatitis is not any more referred to inflammation in the prostate, often attributed to an infection, but rather to a chronic pain syndrome for which the presence of inflammation and involvement of the prostate are not always certain. The article discusses this syndrome and the various factors associated with diagnosis and treatment.

**Vulvodynia: new thoughts on a devastating condition.** *Gunter J. Obstet Gynecol Surv. 2007;62:812.* The article explores 3 factors that may contribute to inconsistent results with therapy; the hypothesis that vulvodynia is a systemic disorder; the idea that failure to address the psychological or emotional aspect or chronic pain may affect outcome; and the concept that chronic vulvar pain, like headache, is not a single condition but is a diverse group of disorders that produce the same symptom.

**Vulvodynia: case report and review of literature.** *Gumus II, Sarifakioglu E, Uslu H, Turhan NO. Gynecol Obstet Invest. 2007;65:155.* Vulvodynia is a chronic pain syndrome affecting up to 18% of the female population, defined as chronic vulvar burning, stinging, rawness, soreness or pain in the absence of objective clinical or laboratory findings. A case accompanying somatoform disorder and depression is presented.

**Painful bladder syndrome/interstitial cystitis and vulvodynia: a clinical correlation.** *Peters K, Girdler B, Carrico D et al. Int Urogynecol J Pelvic Floor Dysfunct. 2007 Nov 24; epub.* Vulvodynia affects 25% of women with painful bladder syndrome/interstitial cystitis (PBS/IC). To clinically evaluate the association of PBS/IC and vulvodynia and possible contributing factors, a group of 70 women were divided in 2 subgroups with and without vulvodynia for comparison. Average levator pain levels were significantly greater in those with vulvodynia and there were no differences in number of pelvic surgeries, sexually transmitted infections, vaginitis or abuse history.

**Serum paraoxonase-1 activity in women with endometriosis and its relationship with the stage of the disease.** *Verit FF, Erel O, Celik N. Hum Reprod. 2007 Nov 13; epub.* Oxidative stress may play a role in the pathophysiology of endometriosis. Serum paraoxonase-1 (PON-1) is a high-density lipoprotein (HDL) associated enzyme that prevents oxidative modification of low-density lipoprotein (LDL). The serum PON-1 activity in women with endometriosis was significantly lower compared to controls and a negative correlation was found with the stage of the disease.

**8 – FISTULAE**

**Limited anterior cystotomy: a useful alternative to the vaginal approach for vesicovaginal fistula repair.** *Hellenthal NJ, Nanigian DK, Ambert L, Stone AR. Urology. 2007;70:797.* Most vesicovaginal fistulas are corrected using a transvaginal approach. A novel abdominal approach is described, using a small anterior cystotomy and omental pedicle interposition.

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## Pelvic Floor Digest

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**Initial experience on efficacy in closure of cryptoglandular and Crohn's transsphincteric fistulas by the use of the anal fistula plug.** *Schwandner O, Stadler F, Dietl O et al. Int J Colorectal Dis. 2007 Nov 22; epub.* The success rate for the Cook Surgisis(R) AFPtrade mark anal fistula plug for the closure of complex anorectal fistulas both in cryptoglandular and Crohn's associated fistulas was 61% (12 of 18 patients). Further analysis is needed to explain the definite role of this innovative technique in comparison to traditional surgical techniques.

**The role of transperineal ultrasonography in the assessment of the internal opening of cryptogenic anal fistula.** *Kleinubing H Jr, Jannini JF, Campos AC et al.Tech Coloproctol. 2007 Dec 3; epub.* Transperineal ultrasonography and hydrogen-peroxide injection are superior to physical examination in the identification of internal openings in anal fistulas.

**9 – BEHAVIOUR, PSYCHOLOGY, SEXOLOGY**

**Abuse in women and men with and without functional gastrointestinal disorders (FGID).** *Alander T, Heimer G, Svardsudd K, Agreus L.. Dig Dis Sci. 2007 Nov 30; epub.* Women with FGID had a higher risk of having a history of some kind of abuse. Women with a history of abuse and FGID had reduced health-related quality of life. Thus previous abuse must be considered by the physician for diagnosis and treatment of the FGID.

**The effects of bilateral caudal epidural S2-4 neuromodulation on female sexual function.** *Zabihi N, Mourtzinos A, Maher MG et al. Int Urogynecol J Pelvic Floor Dysfunct. 2007 Nov 30; epub.* Stimulation of S2-4 by bilateral caudal epidural neuromodulation in this small group of women with voiding dysfunction, retention, and/or pelvic pain resulted in self-reported improvements in sexual function.

**Female sexual dysfunction: what's new?** *Mayer ME, Bauer RM, Schorsch I et al. Curr Opin Obstet Gynecol. 2007;19:536.* Future research may provide new diagnostic, treatment algorithms (pharmacological and nonpharmacological) suitable for use in daily clinical practice to approach the different categories of female sexual dysfunction symptoms.

**Sexual function following anal sphincteroplasty for fecal incontinence.** *Pauls RN, Silva WA, Rooney CM et al. Am J Obstet Gynecol. 2007;197:618.* Sexual activity and function was similar following anal sphincteroplasty, compared with controls, despite symptoms of fecal incontinence. Fecal incontinence of solid stool and depression related to fecal incontinence were correlated with poorer sexual H

**Sexual function after vaginal surgery for pelvic organ prolapse and urinary incontinence.** *Pauls RN, Silva WA, Rooney CM et al. Am J Obstet Gynecol. 2007;197:622.* The most bothersome barrier to sexual activity before repair is vaginal bulging, postoperatively vaginal pain. Sexual function is unchanged following vaginal reconstructive surgery (49 cases) despite anatomic and functional improvements; lack of benefit may be attributable to postoperative dyspareunia.

**Sexual function before and after sacrocolpopexy for pelvic organ prolapse.** *Handa VL, Zyczynski HM, Brubaker L et al. Am J Obstet Gynecol. 2007;197:629.* Most women (224 cases) reported improvements in pelvic floor symptoms that previously interfered with sexual function. The addition of Burch colposuspension did not adversely influence sexual function.

**10 – MISCELLANEOUS**

**Anal intraepithelial neoplasia and other neoplastic precursor lesions of the anal canal and perianal region.** *Shepherd NA. Gastroenterol Clin North Am. 2007;36:969.* Anal intraepithelial neoplasia is closely linked to human papillomavirus infection and is particularly common in homosexuals and in immunosuppressed patients. High grades of anal intraepithelial neoplasia may remain static for long periods of time in immunocompetent patients, but those with HIV/AIDS show early and rapid malignant transformation. In general most anal pre-neoplastic conditions are best diagnosed by biopsy and treated by surgical excision, although local recurrence is a problem.