FORUM

Pelvic floor digest.
This section's aim is to stimulate readers of Techniques in Coloproctology to increase their interest in problems of the front and middle pelvic floor regions. Articles can be submitted to the Journal on any of these topics. The section publishes a small sample of the Pelvic Floor Digest. The PFD reproduces online (www.pelvicfloordigest.org) titles and abstracts selected from about 200 journals, divided into 10 sections. Its goal is to develop in the single individual an interdisciplinary culture in this field.

Paranoia over privacy.
Neubauer RL

Understanding the Peer Review Process.
Thomas RJ
World J Surg. 2006 Jul 21;. e-pub

The Journal of the Future Is Here Today.
Hunter JG
World J Surg. 2006 Jul 21;. e-pub
Scientific publishing has undergone a complete transformation in the last two decades. While the process of peer review may differ little from what it was during the last 50 years, electronic indexing, electronic access, and now electronic submission of scientific manuscripts has transformed the surgical journal in the last decade. In fact, the editorial office of the journal has contracted to a workstation, a fax machine, a telephone, and a storage locker for the aging paper records.

Postnatal myocardial augmentation with skeletal myoblast-based fetal tissue engineering.
Fuchs JR, Nasseri BA, Vacanti JP, Fauza DO
BACKGROUND: Cardiac anomalies constitute the most common birth defects, many of which involve variable myocardial deficiencies. Therapeutic options for structural myocardial repair remain limited in the neonatal population. This study was aimed at determining whether engineered fetal muscle constructs undergo milieu-dependent transdifferentiation after cardiac implantation, thus becoming a potential means to increase/support myocardial mass after birth. METHODS: Myoblasts were isolated from skeletal muscle specimens harvested from fetal lambs, labeled by transduction with a retrovirus-expressing green fluorescent protein, expanded in vitro, and then seeded onto collagen hydrogels. After birth, animals underwent autologous implantation of the engineered constructs (n = 8) onto the myocardium as an onlay patch. Between 4 and 30 weeks postoperatively, implants were harvested for multiple analyses. RESULTS: Fetal and postnatal survival rates were 89% and 100%, respectively. Labeled cells were identified within the implants at all time points by immunohistochemical staining for green fluorescent protein. At 24 and 30 weeks postimplantation, donor cells double-stained for green fluorescent protein and Troponin I, while losing skeletal (type II) myosin expression. CONCLUSIONS: Fetal skeletal myoblasts engraft in native myocardium up to 30 weeks after postnatal, autologous implantation as components of engineered onlay patches. These cells also display evidence of time-dependent transdifferentiation toward a cardiomyocyte-like lineage. Further analysis of fetal skeletal myoblast-based constructs for the repair of congenital myocardial defects is warranted.

Biomaterials and strategies for nerve regeneration.
Huang YC, Huang YY
Nerve regeneration is a complex biological phenomenon. Once the nervous system is impaired, its recovery is difficult and malfunctions in other parts of the body may occur because mature neurons do not undergo cell division. To increase the prospects of axonal regeneration and functional recovery, researches have
focused on designing "nerve guidance channels" or "nerve conduits." When developing ideal tissue-engineered nerve conduits, several components come to mind. They include a biodegradable and porous channel wall, the ability to deliver bioactive growth factors, incorporation of support cells, an internal oriented matrix to support cell migration, intraluminal channels to mimic the structure of nerve fascicles, and electrical activities. This article reviews the factors that are critical for nerve repair, and the advanced technologies that are explored to fabricate nerve conduits. To more accurately mimic natural repair in the body, recent studies have focused on the use of various advanced approaches to create ideal nerve conduits that combine multiple stimuli in an effort to better mimic the complex signals normally found in the body.

**Sham nepotism as a result of intrinsic differences in brood viability in ants.**
Holzer B, Kummerli R, Keller L, Chapuisat M
Not only in the human universities, etc, but also "in animal societies, cooperation for the common wealth and latent conflicts due to the selfish interests of individuals are in delicate balance. In many ant species, colonies contain multiple breeders and workers interact with nestmates of varying degrees of relatedness. Therefore, workers could increase their inclusive fitness by preferentially caring for their closest relatives, yet evidence for nepotism in insect societies remains scarce and controversial. We experimentally demonstrate that workers of the ant Formica exsecta do not discriminate between highly related and unrelated brood, but that brood viability differs between queens. We further show that differences in brood viability are sufficient to explain a relatedness pattern that has previously been interpreted as evidence for nepotism. Hence, our findings support the view that nepotism remains elusive in social insects and emphasize the need for further controlled experiments".

**Mast cells facilitate local VEGF release as an early event in the pathogenesis of postoperative peritoneal adhesions.**
Cahill RA, Wang JH, Soohkai S, Redmond HP
BACKGROUND: Peritoneal injury sustained at laparotomy may evoke local inflammatory responses that result in adhesion formation. Peritoneal mast cells are likely to initiate this process, whereas vascular permeability/endothelial growth factor (VEGF) may facilitate the degree to which subsequent adhesion formation occurs. METHODS: Mast cell deficient mice (WBB6F1-/-), along with their mast cell sufficient counterparts (WBB6F1+/+), underwent a standardized adhesion-inducing operation (AIS) with subsequent sacrifice and adhesion assessment 14 days later in a blinded fashion. Additional CD-1 and WBB6F1+/+, and WBB6F1-/- mice were killed 2, 6, 12, and 24 hours after operation for measurement of VEGF by ELISA in systemic serum and peritoneal lavage fluid. Two further groups of CD-1 mice underwent AIS and received either a single perioperative dose of anti-VEGF monoclonal antibody (10 mug/mouse) or a similar volume of IgG isotypic antibody and adhesion formation 2 weeks later was evaluated. RESULTS: WBB6F1-/- mice had less adhesions then did their WBB6F1+/+ counterparts (median [interquartile range] adhesion score 3[3-3] vs 1.5[1-2] respectively; P < .003). Local VEGF release peaked 6 hours after AIS in both WBB6F1+/+ and CD-1 mice whereas levels remained at baseline in WBB6F1-/- mice. CD-1 mice treated with a single dose of anti-VEGF therapy during operation had less adhesions than controls (2[1.25-2] vs 3[2.25-3], P = .0002). CONCLUSIONS: Mast cells and VEGF are central to the formation of postoperative intra-abdominal adhesions with mast cells being responsible, either directly or indirectly, for VEGF release into the peritoneal cavity after operation. In tandem with the recent clinical success of anti-VEGF monoclonal antibodies in oncologic practice, our observations suggest an intriguing avenue for research and development of anti-adhesion strategy.

**Analysis of surgical errors in closed malpractice claims at 4 liability insurers.**
Rogers SO Jr, Gawande AA, Kwaan M, Puopolo AL, Yoon C, Brennan TA, Studdert DM
BACKGROUND: The relative importance of the different factors that cause surgical error is unknown. Malpractice claim file analysis may help to identify leading causes of surgical error and identify opportunities for prevention. METHODS: We retrospectively reviewed 444 closed malpractice claims, from 4 malpractice liability insurers, in which patients alleged a surgical error. Surgeon-reviewers examined the litigation file and
medical record to determine whether an injury attributable to surgical error had occurred and, if so, what factors contributed. Detailed descriptive information concerning etiology and outcome was recorded. RESULTS: Reviewers identified surgical errors that resulted in patient injury in 258 of the 444 (58%) claims. Sixty-five percent of these cases involved significant or major injury; 23% involved death. In most cases (75%), errors occurred in intraoperative care; 25% in preoperative care; 35% in postoperative care. Thirty-one percent of the cases had errors occurring during multiple phases of care; in 62%, more than 1 clinician played a contributory role. Systems factors contributed to error in 82% of cases. The leading system factors were inexperience/lack of technical competence (41%) and communication breakdown (24%). Cases with technical errors (54%) were more likely than those without technical errors to involve errors in multiple phases of care (36% vs 24%, P = .03), multiple personnel (83% vs 63%, P < .001), lack of technical competence/knowledge (51% vs 29%, P < .001) and patient-related factors (54% vs 33%, P = .001). CONCLUSIONS: Systems factors play a critical role in most surgical errors, including technical errors. Closed claims analysis can help to identify priority areas for intervening to reduce errors.

Malpractice crisis: Causes of escalating insurance premiums, and implications for you.
Henley E
What has led to the current malpractice crisis? There are 2 main theories. Physicians, insurers, and hospitals generally blame lawyers and the litigation system for increasing the number of claims filed (claim frequency) and the average payout on claims (claims severity). Attorneys and consumer groups argue that malpractice insurance goes through natural cycles in costs and charges. For the rise in premiums in the current crisis, they particularly blame decreased investment returns and poor pricing decisions by insurers.

Robotic surgical education: a systematic approach to training urology residents to perform robotic-assisted laparoscopic radical prostatectomy.
Rashid HH, Leung YY, Rashid MJ, Oleyourryk G, Valvo JR, Eichel L

Robotics in urologic surgery: An evolving new technology.
Rapid technological developments in the past two decades have produced new inventions such as robots and incorporated them into our daily lives. Today, robots perform vital functions in homes, outer space, hospitals and on military installations. The development of robotic surgery has given hospitals and health care providers a valuable tool that is making a profound impact on highly technical surgical procedures. The field of urology is one area of medicine that has adopted and incorporated robotic surgery into its armamentarium. Innovative robotic urologic surgical applications and techniques are being developed and reported everyday. Increased utilization and development will ultimately fuel the discovery of newer applications of robotic systems in urologic surgery. Herein we provide an overview of the history, development, and applications of robotics in surgery with a focus on urologic surgery.

1 – THE PELVIC FLOOR 2006 07
Urogynecology: The Importance of Long-Term Follow-up.
Nygaard I

Histologic evaluation of human cadaveric fascia lata in a rabbit vagina model.
Walter AJ, Morse AN, Leslie KO, Hentz JG, Cornella JL
The purpose of this study was to evaluate the histologic response of human cadaveric fascia lata after vaginal implantation. Freeze-dried, gamma-irradiated cadaveric fascia lata from three lots was implanted between the rectovaginal membrane and vaginal epithelium in New Zealand white rabbits. Rabbits were killed at 2, 4, 8, and 12 weeks after implantation. At necropsy, gross findings were described and specimens
for routine cultures were taken. Histologic evaluation determined graft integrity, neovascularization, inflammatory response, and host tissue incorporation. Nine rabbits were available for histologic analysis and 14 for gross and microbiologic analysis. Vaginal erosions occurred with three grafts. The remainder were adherent to the surrounding tissues. Erosion was associated with bacterial colonization of the graft. Autolysis of one graft occurred at 4 weeks. Over time, the inflammatory response decreased and neovascularization increased; by 12 weeks, the graft collagen was replaced by host collagen. Cadaveric fascia lata serves as scaffolding for host tissue incorporation with replacement by host collagen.

[Development and validation of a model of training at home to the laparoscopy]

[Vaginal prolapse and stress urinary incontinence: combined treatment by a single prosthesis]
Sergent F, Resch B, Diguet A, Verspyck E, Marpeau L
OBJECTIVES: To evaluate the efficacy and possible short-term and medium-term complications of vaginal prosthetic surgery with transobturator fixation to treat prolapse and stress urinary incontinence (SUI) that are often associated in a single operation. MATERIAL AND METHOD: From February 2002 to August 2004, 45 patients with a mean age of 66 +/- 11 years presenting essentially stage 3 or 4 cystocele associated with SUI (documented for 40 cases and revealed by reduction of the prolapse for the other five) were operated according to the transobturator infracoccygeal sling technique. RESULTS: With a mean follow-up of 31 +/- 9 months, the success rate of the technique was estimated to be 98% anatomically (only one failure) and 91% in terms of urinary symptoms (73% of patients were cured, 18% were improved and 9% failed). No cases of urinary retention were observed, except for one patient with a secondarily infected pelvic haematoma requiring evacuation and the partial removal of the prosthesis. The mean residual urine on discharge was 83 ml. Two patients developed de novo overactive bladder. The prostheses exposure rate was 18%. CONCLUSION: Combined treatment of vaginal prolapse and associated urinary incontinence is possible by the use of a single transvaginal prosthesis. The medium-term anatomical results are very good. The results on continence are good and a subsequent specific procedure is almost always possible in the case of failure or insufficient improvement. The prostheses exposure rate is similar to that observed with synthetic transvaginal prostheses.

Re: Biocompatible properties of surgical mesh using an animal model.
Papadimitriou J, Petros PE

Hyaluronic Acid/Carboxymethylcellulose Membrane Barrier versus Taurolidine for the Prevention of Adhesions to Polypropylene Mesh.
Erpek H, Tuncyurek P, Soyder A, Boylu S
Background: A hyaluronic acid/carboxymethylcellulose (HA/CMC) membrane is an effective measure to prevent polypropylene mesh induced adhesions. We hypothesized that taurolidine 2% solution might be a cost-effective alternative to decrease adhesion formation. Materials and Methods: Twenty-four rats were randomized into three groups: mesh alone (group 1), mesh + taurolidine 2% (group 2), and mesh + HA/CMC (group 3). Polypropylene mesh (4 cm(2)) was used to repair surgically induced anterior abdominal wall defects. Taurolidine 2% or a HA/CMC membrane was used as an antiadhesive measure. The animals were sacrificed 6 weeks after the operation, and adhesions to the prosthetic material were evaluated with digital image analysis. Results: Group 1 (mesh alone) had the highest adhesion ratio (58.5 +/- 4.8%) compared with groups 2 and 3 (p < 0.05). The differences between groups 2 (mesh + taurolidine 2%; adhesion ratio 42.9 +/- 1.6%) and 3 (mesh + HA/CMC; adhesion ratio 40.3 +/- 3.0%) were not significant (p > 0.05). Conclusions: The animals of both treatment groups (2 and 3) had lower adhesion ratios compared with the controls (group 1). In particular, the HA/CMC membrane did not present with a superior antiadhesive effect compared with taurolidine. Therefore, taurolidine is a cost-effective alternative to HA/CMC membranes when a polypropylene mesh is used in direct contact with the abdominal viscera. Copyright (c) 2006 S. Karger AG,
Visualisation of the endopelvic fascia by transrectal three-dimensional ultrasound.

Reisinger E, Stummvoll W


The aim of our pilot study was to explore the feasibility of visualizing the endopelvic fascia by transrectal three-dimensional (3D) ultrasound. Transrectal 3D ultrasound was performed in 12 nulliparous women and 11 women with a history of vaginal delivery. A 6-10 MHz volume probe was used to examine the suburethral anterior vaginal wall. In all women, an echogenic layer was identified at an average of 3-5 mm from the vaginal surface. This echogenic layer was found to be contiguous to the lateral pelvic sidewall and uninterrupted in 10 of 12 nulliparous women, whereas gaps in this layer were identified in all 11 parous women. We hypothesize that this echogenic layer may represent the suburethral component of the endopelvic fascia. Depending on the number and localization of the interruptions in this echogenic layer, the mechanical support of the pelvic floor seems to be weakened corresponding to a higher incidence of descensus of the anterior vaginal wall, which frequently was associated with urinary incontinence.

Gastrointestinal motility: an academic and research perspective.

Quigley EM


While, in the past, gastrointestinal motility may have been viewed as a narrow and restricted field, confined to the study of twitches in muscle baths and squiggles on smoke drums, it has, of late and belatedly, entered into the mainstream of gastroenterology and medicine. As a consequence, this field, now more correctly and appropriately described as neurogastroenterology, concerns itself with a vast spectrum of clinical disorders of varying pathophysiology, presentation and management. Never before has this area offered so many opportunities to the budding academician and researcher.

Reliability and agreement of urodynamics interpretations in a female pelvic medicine center.

Whiteside JL, Hijaz A, Imrey PB, Barber MD, Paraiso MF, Rackley RR, Vasavada SP, Walters MD, Daneshgari F


OBJECTIVE: To estimate the reliability and interobserver consistency of urodynamic interpretations of female bladder and urethral function. METHODS: Three urogynecologists and three female urologists at a tertiary care medical center reviewed masked, abstracted clinical and urodynamic information from 100 charts, selected for adequate completeness from a consecutive series of 135 women referred for urodynamic testing. For each of the 100 cases, the reviewers assigned International Continence Society filling and voiding phase diagnoses, and overall clinical diagnoses. Raw agreement proportions and weighted kappa chance-corrected agreement statistics (kappa) were used jointly to describe both reliability and interobserver agreement. Reliability was estimated from duplicate reviews, masked and separated by at least 4 months, of each case by each physician. Interobserver agreement was estimated from comparisons of all pairs of responses from different physicians. RESULTS: For clinical diagnosis of stress incontinence (present, absent, indeterminate), the within- and across-physician weighted kappa's were, respectively, 0.78 and 0.68. Corresponding results were 0.40 and 0.13 for detrusor overactivity without incontinence, 0.58 and 0.38 for detrusor overactivity with incontinence, and 0.51 and 0.26 for voiding dysfunction. Standard errors of each kappa were between 0.023 and 0.043. CONCLUSION: In our group, lower urinary tract diagnoses of stress urinary incontinence from both clinical and urodynamic data demonstrated substantial reliability and interobserver agreement. However, by conventional interpretation of kappa-statistics, reliability of diagnoses of detrusor overactivity or voiding dysfunction was only moderate, and interobserver agreement on these diagnoses was no better than fair. Urodynamic interpretations may not be satisfactorily reproducible for these diagnoses. LEVEL OF EVIDENCE: II-2.
Vaginal speculum examinations without stirrups.
Barr WB

Screening Colonoscopy Use Among Individuals at Higher Colorectal Cancer Risk.
Longacre AV, Cramer LD, Gross CP
GOALS: To describe screening colonoscopy use in those with a family history of colorectal cancer (CRC).
BACKGROUND: Colonoscopy is an effective means of screening for CRC and is preferred for individuals at higher risk. We therefore derived population-based estimates of colonoscopy use and analyzed how individual characteristics and family history correlate with colonoscopy. STUDY: Individuals between the ages of 41 and 75 years who responded to the Cancer Control Module of the 2000 National Health Interview Study were analyzed. Screening colonoscopy was defined as having a colonoscopy for screening purposes within the last 10 years. Screening colonoscopy was the dependent variable and family history was the independent variable in a logistic regression model that included self-described sociodemographic characteristics. RESULTS: Of the 13,160 individuals in the analysis, 6.8% had a family history of CRC, corresponding to approximately 5.5 million individuals in the United States. Those with a family history were significantly more likely to report screening colonoscopy (27.8%) than those without a family history (7.7%; P<0.001). In those with a family history, screening colonoscopy significantly correlated with tobacco use, education, and age. There was no trend for increased screening colonoscopy with having multiple family members or a young family member with CRC. CONCLUSIONS: Over 5.5 million people in the US have a family history of CRC, and only in 4 report having had a screening colonoscopy by the year 2000. Improving knowledge about CRC and addressing other barriers to screening in this group will be important components of improving screening colonoscopy utilization.

Interaction among apical support, levator ani impairment, and anterior vaginal wall prolapse.
Chen L, Ashton-Miller JA, Hsu Y, Delancey JO
OBJECTIVE: To use a biomechanical model to explore how impairment of the pubovisceral portion of the levator ani muscle, the apical vaginal suspension complex, or both might interact to affect anterior vaginal wall prolapse severity. METHODS: A biomechanical model of the anterior vaginal wall and its support system was developed and implemented. The anterior vaginal wall and its main muscular and connective tissue support elements, namely the levator plate, pubovisceral muscle, and cardinal and uterosacral ligaments were included, and their geometry was based on midsagittal plane magnetic resonance scans. Material properties were based on published data. The change in the sagittal profile of the anterior vaginal wall during a maximal Valsalva was then predicted for different combinations of pubovisceral muscle and connective tissue impairment. RESULTS: Under raised intra-abdominal pressure, the magnitude of anterior vaginal wall prolapse was shown to be a combined function of both pubovisceral muscle and uterosacral and cardinal ligament (“apical supports”) impairment. Once a certain degree of pubovisceral impairment was reached, the genital hiatus opened and a prolapse developed. The larger the pubovisceral impairment, the larger the anterior wall prolapse became. A 90% impairment of apical support led to an increase in anterior wall prolapse from 0.3 cm to 1.9 cm (a 530% increase) at 60% pubovisceral muscle impairment, and from 0.7 cm to 2.4 cm (a 240% increase) at 80% pubovisceral muscle impairment. CONCLUSION: These results suggest that a prolapse can develop as a result of impairment of the muscular and apical supports of the anterior vaginal wall. LEVEL OF EVIDENCE: II-2.

Pessary use in advanced pelvic organ prolapse.
The objective of this study was to review our experience with pessary use for advanced pelvic organ prolapse. Charts of patients treated for Stage III and IV prolapse were reviewed. Comparisons were made between patients who tried or refused pessary use. A successful trial of pessary was defined by continued
use; a failed trial was defined by a patient's discontinued use. Thirty-two patients tried a pessary; 45 refused. Patients who refused a pessary were younger, had lesser degree of prolapse, and more often had urinary incontinence. Most patients (62.5%) continued pessary use and avoided surgery. Unsuccessful trial of pessary resorting to surgery included four patients (33%) with unwillingness to maintain, three patients (25%) with inability to retain and two patients (17%) with vaginal erosion and/or discharge. Our findings suggest that pessary use is an acceptable first-line option for treatment of advanced pelvic organ prolapse.

### The history and evolution of pessaries for pelvic organ prolapse.

Shah SM, Sultan AH, Thakar R


The use of pessaries for the treatment of genital prolapse dates back prior to the days of Hippocrates and their use has been documented in early Egyptian papyruses. Throughout the centuries remedies such as honey, hot oil, wine and fumes have been used as treatment. Mechanical methods included succussion and leg binding. Pomegranates were also common remedies. In the middle ages, linen and cotton wool soaked in many different potions were used. As new materials were discovered, pessaries evolved and began to resemble those used today. Cork and brass were soon replaced with rubber. Modern day pessaries are made of non-reactive silicone and come in various designs and sizes to suit each individual. Pessaries can be used as an interim measure for women who wish to complete childbearing or women awaiting surgery. It can also be used as a permanent measure for women who are unsuitable for surgery. It remains to be established whether the use of modern pessaries over prolonged periods of time can prevent progression of or even cure, prolapse.

### Vaginal pessaries in managing women with pelvic organ prolapse and urinary incontinence: patient characteristics and factors contributing to success.

Hanson LA, Schulz JA, Flood CG, Cooley B, Tam F


**OBJECTIVE:** An aging population has resulted in higher prevalence of urinary incontinence (UI) and pelvic organ prolapse (POP). This study examines a nurse-run clinic and analyzes the factors contributing to successful pessary use. **STUDY DESIGN:** A retrospective chart review of 1,216 patients was completed. History, pelvic examination and pessary fitting was done. Data was analyzed utilizing a categorical model of maximum-likelihood estimation to investigate relationships. **RESULTS:** Median patient age was 63 years. Median number of pessaries tried was two. Eighty-five percent of post-menopausal women were on hormone replacement therapy (HRT) prior to fitting. Highest success rate of 78% was in the group on both systemic and local HRT. Success rates ranged from 58% for urge incontinence to 83% for uterine prolapse. Prior vaginal surgery was a factor impacting success. In our series highest success rates for fitting were obtained with ring pessaries, ring with support, and gelhorns. **CONCLUSIONS:** This model is a viable, option for the conservative management of UI and POP. Local HRT plays an important role in successful pessary fitting. Complications are rare.

### Surgical management of anterior vaginal wall prolapse: an evidence-based literature review.

Maher C, Baessler K


The aim of this review is to summarize the available literature on surgical management of anterior vaginal wall prolapse. A Medline search from 1966 to 2004 and a hand-search of conference proceedings of the International Continence Society and International Urogynecological Association from 2001 to 2004 were performed. The success rates for the anterior colporrhaphy vary widely between 37 and 100%. Augmentation with absorbable mesh (polyglactin) significantly increases the success rate for anterior vaginal wall prolapse. Abdominal sacrocolpopexy combined with paravaginal repair significantly reduced the risk for further cystocele surgery compared to anterior colporrhaphy and sacrospinous colpopexy. The abdominal and vaginal paravaginal repair have success rates between 76 and 100%, however, no randomized trials have been performed. There is currently no evidence to recommend the routine use of any graft in primary repairs, and possible improved anatomical out-comes have to be tempered against complications including mesh erosions, infections and dyspareunia.

[www.pelvicfloordigest.org](http://www.pelvicfloordigest.org)
A 2-year anatomical and functional assessment of transvaginal rectocele repair using a polypropylene mesh.

de Tayrac R, Picone O, Chauveaud-Lambling A, Fernandez H 


This study reports the 2-year results of an original technique for rectocele repair by the vaginal route, using a combined sacrospinous suspension and a polypropylene mesh. Twenty-six women were successively operated between October 2000 and February 2003. Mean age was 63.7 years [range 35-92]. 19 women had had previous pelvic surgery for prolapse and/or urinary incontinence (73.1%), but none had had a previous rectocele repair. Patients underwent physical examination staging of prolapse in the international pelvic organ prolapse staging system. Eleven women had stage 2 posterior vaginal wall prolapse (42.3%), seven had stage 3 (26.9%) and eight had stage 4 (30.8%). The procedure included a bilateral sacrospinous suspension and a polypropylene mesh (GyneMesh, Gynecare, Ethicon France) attached from the sacrospinous ligaments to the perineal body. We did not perform any associated posterior fascial repair, nor myorrhaphy. Patients were followed up for 10-44 months, with a median follow-up (+/- SD) of 22.7 +/- 9.2 months. Functional results and sexual function were evaluated using the PFDI, the PFIQ and the PISQ-12 self-questionnaires. Twenty-five women returned for follow-up (96.2%). At follow-up, 24 women were cured (92.3%) and one had asymptomatic stage 2 rectocele. All the patients but one had symptoms and impact on quality of life improved. No postoperative infection of the mesh or rectovaginal fistula was found, but there were three vaginal erosions (12%) and one out of 13 had de novo dyspareunia (7.7%).

Uterosacral ligament vault suspension: five-year outcomes.

Silva WA, Pauls RN, Segal JL, Rooney CM, Kleeman SD, Karram MM 


OBJECTIVE: To evaluate the five-year anatomic and functional outcomes of the high uterosacral vaginal vault suspension. METHODS: One hundred ten patients with advanced symptomatic uterovaginal or posthysterectomy prolapse treated between January 1997 and January 2000 were identified and 72 (65%) consented to participate in this study. Anatomic outcomes were obtained by Pelvic Organ Prolapse Quantification. Functional results were obtained subjectively and with quality-of-life questionnaires, including the short-form Incontinence Impact Questionnaire (IIQ) and Urogenital Distress Inventory (UDI), and Female Sexual Function Index. RESULTS: The mean follow-up period was 5.1 years (range 3.5-7.5 years). Vaginal hysterectomy (37.5%), anterior colporrhaphy (58.3%), posterior colporrhaphy (87.5%), and suburethral slings (31.9%) were performed as indicated. Surgical failure (symptomatic recurrent prolapse of stage 2 or greater in one or more segments) was 11 of 72 (15.3%). Two patients (2.8%) had recurrence of apical prolapse of stage 2 or greater. For those sexually active preoperatively and postoperatively (n=34), mean postoperative Female Sexual Function Index scores for arousal, lubrication, orgasm, satisfaction, and pain were normal, whereas the desire score was abnormal (mean= 3.2). However, 94% (n=29) were currently satisfied with their sexual activity. Postoperative IIQ/UDI scores were significantly improved in all three domains (irritative, P= .01; obstructive, P<.001; stress, P=0.03) and overall (IIQ-7, P<.001; UDI, P<.001) compared with preoperatively. Bowel dysfunction occurred 33.3% preoperatively compared with 27.8% postoperatively (P=.24). CONCLUSION: Uterosacral ligament vaginal vault fixation seems to be a durable procedure for vaginal repair of enterocele and vaginal vault prolapse. Lower urinary tract, bowel, and sexual function may be maintained or improved. LEVEL OF EVIDENCE: II-3.

The Vascular Nature of Hemorrhoids.


The arterial blood supply of the internal hemorrhoidal plexus is commonly believed to be associated with the pathogenesis of hemorrhoids. Ultrasound-supported proctoscopic techniques with Doppler-guided ligature of submucosal rectal arteries have been introduced for the therapy of hemorrhoids. The present investigation focuses on caliber and flow changes of the terminal branches of the superior rectal artery (SRA) supplying the corpus cavernosum recti (CCR) in patients with hemorrhoids. Forty-one outpatients (17 female, 24 male; mean age 48 years) with hemorrhoids of Goligher grades I-IV were compared with 17 healthy volunteers (nine female, eight male; mean age 29 years) by means of transperineal color Doppler ultrasound. The mean caliber of the arterial branches in the study group with hemorrhoids was 1.87 +/- 0.68 mm (range, 0.6 to 3.60
mm) and 0.92 +/- 0.15 mm (range, 0.6 to 1.2 mm) in the control group (P < 0.001). The arterial blood flow was significantly higher in patients with hemorrhoids than in the control group (mean 33.9 vs. 11.9 cm/second, P < 0.01). Our findings demonstrate that increased caliber and arterial blood flow of the terminal branches of the SRA are correlated with the appearance of hemorrhoids. We suggest that the hypervascularization of the anorectum contributes to the growth of hemorrhoids rather than being a consequence of hemorrhoids. Transperineal color Doppler ultrasound (CDUS) is an appropriate method to assess these findings in patients with hemorrhoids.

**Stapled hemorrhoidopexy followed by fecal urgency and tenesmus: methodological complication or surgeon's mistake?**
Filingeri V, Gravante G

**Randomized controlled study: radiofrequency coagulation and plication versus ligation and excision technique for rectal mucosal prolapse.**
Gupta PJ
BACKGROUND: A novel technique of radiofrequency ablation and plication of the rectal mucosa (RAMP) as a treatment for rectal mucosal prolapse is reported. The results of this technique are compared with the conventional ligature and excision procedure (LEP). METHODS: Radiofrequency ablation was performed using an Elman radiofrequency generator. Patients with rectal mucosal prolapse were randomized to undergo either LEP or RAMP. The intra- and postoperative outcomes and complications were recorded. RESULTS: RAMP on average resulted in reduced operation time, shorter hospitalization, and significantly less postoperative pain. Return to work was earlier and wound healing times were shorter than that of patients in the control group. The complication rates also were significantly shorter (9% in the RAMP group and 29% in the conventional LEP group). CONCLUSION: The procedure of radiofrequency ablation and plication of rectal mucosa is safe, effective, and swift. It can be proposed as an effective alternative to conventional surgical procedures.

5 – RETENTIONS 2006 07
[Comparative study of the acceptability of the SpeediCath Set and Actreen set catheterization sets in patients performing self-catheterization]
OBJECTIVE: To compare SpeediCath Set to Actreen Set in terms of performance, acceptability and safety, in patients performing self-catheterization. MATERIAL AND METHODS: Four questionnaires were completed during this multicentre, randomized, crossover study: initial, after having tested each of the two products and patient preference at the end of the study. RESULTS: Analysis was based on 29 men performing self-catheterization. The SpeediCath Set was found to be superior to the Actreen Set in terms of ease of introduction (p=0.0055), ease of emptying (p=0.0157), quality of lubricant (p<0.0001), urethral tolerance and possibility of catheterization in bed (p= 0.0157). The patients' global assessment was clearly in favour of SpeediCath Set (70 +/- 2.3 versus 5.7 +/- 2.5; p=0.0156) and 65.5% of patients preferred to use SpeediCath Set in the future. CONCLUSION: SpeediCath Set facilitates catheterization and improves the urethral tolerance compared to Actreen Set, with a marked patient preference in favour of SpeediCath Set.

A prospective study on whether a tension-free urethropexy procedure affects the residual urine and flow up to 4 years after the operation.
Glavind K, Bjork J, Nohr M, Jaquet A, Glavind L
Background. Sling procedures performed for urinary stress incontinence can be complicated by urinary retention and flow problems. The aim of this study was to evaluate the flow and the residual urine before and after a tension-free vaginal urethropexy procedure performed for stress urinary incontinence. Methods. A
total of 72 women were included in the study. For voiding phase assessment, patients had spontaneous flow and residual urine measurements performed before the operation and 3 months and 1, 2, 3, and 4 years after the operation. Results. The patients experienced an increase in residual urine 3 months postoperatively, but returned toward preoperative values in the following 4 years. A statistically significant decrease in maximum flow, average flow, and corrected maximum flow was observed 3 months after the operation, which was unchanged in time and thus did not increase over the years. Conclusion. The tension-free urethropexy operation had an influence on flow which did not deteriorate over the years. Whether this change in flow will have any influence on the detrusor function or create voiding problems in years to come is unknown.

A nationwide analysis of transvaginal tape release for urinary retention after tension-free vaginal tape procedure.
Laurikainen E, Kilholma P
The role of transvaginal release procedure (TRP) for the treatment of urinary retention after TVT operation in Finland by the end of the year 2002 was evaluated. Questionnaires regarding the TVTs and the TRPs were sent to 56 hospitals. A retrospective review of the records of 48 women undergoing the TRP was available for analysis. TVT was performed on 9040 patients under local (94%), spinal (4%) or general (2%) anesthesia. TRP was made under local (48%), light (48%) or spinal (4%) anesthesia. The number of TRPs was 50/9040 (0.6%) in the whole country. Forty-nine percent of the patients were completely cured of their retention and remained continent after TRP by subjective report and by stress test. The retention following a TVT did not resolve in four patients (12%) who underwent TRP. This nationwide analysis proved that half of the patients remained continent after TRP, which is in our opinion an important information for all proceduralists.

Hand-assisted laparoscopic vs. open total colectomy in treating slow transit constipation.
Zhang LY

Is pseudomelanosis coli a marker of colonic neuropathy in severely constipated patients?
To study relationships between the number of pseudomelanosis coli cells and that of colonic enteric neurons and interstitial cells of Cajal, which are significantly reduced compared with controls in severely constipated patients. Pseudomelanosis coli is frequent in patients using anthraquinone laxatives. It is not known whether the prolonged use of these compounds damages the enteric nervous system in constipated patients. The relationship between the number of pseudomelanosis coli cells and that of colonic enteric neurons (as well as that of apoptotic enteric neurons) and of interstitial cells of Cajal was assessed by histological and immunohistochemical methods in 16 patients with chronic use of anthraquinone laxatives undergoing surgery for severe constipation unresponsive to medical treatment. No relationship was found between the number of pseudomelanosis coli cells and that of enteric neurons (and that of the apoptotic ones), nor of interstitial cells of Cajal, in either the submucosal or the myenteric plexus. The use of anthraquinone laxatives, leading to the appearance of pseudomelanosis coli, is probably not related to the abnormalities of the enteric nervous system found in severely constipated patients.

Biofeedback is superior to laxatives for normal transit constipation due to pelvic floor dyssynergia.
Van Outryve M, Pelckmans P

Clinical case: chronic constipation.
Kamm MA

Rho kinase as a novel molecular therapeutic target for hypertensive internal anal sphincter.

www.pelvicfloordigest.org
Rattan S, De Godoy MA, Patel CA
BACKGROUND & AIMS: An increase in Rho kinase (ROK) activity has been associated with agonist-induced sustained contraction of the smooth muscle, but its role in the pathophysiology of spontaneously tonic smooth muscle is not known. METHODS: Present studies examined the effects of ROK inhibitor Y-27632 in the tonic smooth muscle of the rat internal anal sphincter (IAS) versus in the flanking phasic smooth muscle of the rectum. In addition, studies were performed to determine the relationship between the decreases in the basal IAS tone and the ROK activity. Confocal microscopic studies determined the cellular distribution of the smooth muscle-predominant isoform of ROK (ROCK-II) in the smooth muscle cells (SMCs). RESULTS: In in vitro studies using neurohumoral inhibitors and tetrodotoxin and the use of SMCs demonstrate direct relaxation of the IAS SMCs by Y-27632. The ROK inhibitor was more potent in the IAS than in the rectal smooth muscle. The IAS relaxation by Y-27632 correlated specifically with the decrease in ROK activity. Confocal microscopy revealed high levels of ROCK-II toward the periphery of the IAS SMCs. In vivo studies, the lower doses of Y-27632 caused a potent and selective decrease in the IAS pressures without any adverse cardiovascular systemic effects. The ROK inhibitor also caused potent relaxation of the hypertensive IAS. CONCLUSIONS: RhoA/ROK play a crucial role in the maintenance of the basal tone in the IAS, and ROK inhibitors have a therapeutic potential in the IAS dysfunction characterized by the hypertensive IAS.

Practical symptom-based evaluation of chronic constipation.
Bleser SD
A symptom-based approach is the best means for diagnosing chronic constipation. Extensive diagnostic testing is seldom necessary unless alarm features are present. Encourage routine colon cancer screening tests for all patients aged 50 years or older.

Prevalence and correlates of perineal dermatitis in nursing home residents.
Bliss DZ, Savik K, Harms S, Fan Q, Wyman JF
BACKGROUND: Perineal dermatitis is an adverse outcome of incontinence, which is common in older nursing home residents; yet knowledge about perineal dermatitis in this population is sorely lacking. OBJECTIVES: To determine the prevalence and significant correlates of perineal dermatitis in older nursing home residents. METHODS: Assessment data from 59,558 records in the Minimum Data Set (MDS) were linked with 2,883,049 orders in the medical record which enabled definition of variables related to perineal dermatitis, identification of cases, and determination of the prevalence of perineal dermatitis. Data from two subsamples, each with the records of 10,215 older nursing home residents, were analyzed using logistic regression to identify the significant correlates of perineal dermatitis. RESULTS: Perineal dermatitis was found in 5.7% (n = 3,405) of residents and 73% of these were incontinent. Having perineal dermatitis was significantly associated with (a) impairments in tissue tolerance (i.e., more health problems, presence of a fever, requiring nutrition support, and having more problems of diminished perfusion or oxygenation); (b)problems of the perineal environment (i.e., having fecal incontinence only, double incontinence, and more items associated with mechanical chafing); and (c) altered toileting ability from daily use of restraints. DISCUSSION: Several correlates of perineal dermatitis (mechanical chafing, fecal and double incontinence, and use of restraints) appear modifiable through nursing intervention. Clinical interventions should consider the complex health status of this population.

Transvaginal suture placement for bleeding control with the tension-free vaginal tape procedure.
Neuman M
Tension-free vaginal tape (TVT) is a well-established surgical procedure for the treatment of female urinary stress incontinence. The operation, described by Ulmsten in 1995, is based on a midurethral Prolene tape support. TVT is accepted as an easy-to-learn and safe minimally invasive surgical technique. Intraoperative
Bleeding was described as complicating former surgical methods for correction of female urinary stress incontinence as well as TVT. The aim of this paper was to describe a simple transvaginal hemostatic suture placement to control accidental intraoperative hemorrhage. Of 566 patients undergoing TVT and followed for up to 68 months, 9 (1.6%) had intraoperative bleeding of 200-800 ml, all of which were diagnosed and corrected among the first 466 procedures. The last 100 patients had a transvaginal hemostatic suture placed whenever more than minimal bleeding occurred and hemostasis was achieved immediately with all. The benefit of this minimal, fast, and simple surgical step is assessed and discussed.

In vivo comparison of suburethral sling materials.
Slack M, Sandhu JS, Staskin DR, Grant RC
In vivo tissue responses were compared for three commercially available polypropylene suburethral slings that differ markedly in fabric structure and in size of resulting interstices and pores. All three elicited the same basic inflammatory response; however, individual fabric structures produced distinct differences in tissue formation within each mesh. The presence of numerous, closely spaced, small diameter filaments prevented formation of extensive fibrous connective tissue within two slings (ObTape and IVS Tunneller mesh). The much larger diameter monofilament and open knit structure of the Monarc sling permitted the most extensive fibrous tissue integration. These differences may be of interest to physicians considering clinical use.

Bladder wall abscess following midurethral sling procedure.
Madjar S, Frischer Z, Nieder AM, Waltzer WC
Midurethal sling procedures are gaining popularity as the treatment of choice for stress urinary incontinence. Complications that were described include bladder perforation, urinary retention, pelvic hematoma and suprapubic wound infection. Sling erosion and pelvic abscess are rare complications of midurethral slings. We report the first case of an abscess formed within the wall of the urinary bladder, 7 months following a midurethral sling procedure.

The efficacy of the tension-free vaginal tape in the treatment of five subtypes of stress urinary incontinence.
Segal JL, Vassallo BJ, Kleeman SD, Hungler M, Karram MM
PURPOSE: To determine the efficacy of tension-free vaginal tape (TVT) for the treatment of five sub-types of stress urinary incontinence (SUI). MATERIALS AND METHODS: A retrospective review was performed from November 1998 to November 2001 on all patients with SUI who underwent a TVT procedure either alone or with other reconstructive pelvic procedures. The patients were subdivided into five categories. Intrinsic sphincter deficiency (ISD) was defined by a maximum urethral closure pressure < 20 cm H2O or a mean Valsalva leak point pressure < 60 cm H2O above baseline. Urethral hypermobility (UH) was defined by a straining Q-tip angle greater than 30 degrees from the vertical. Cure was defined as the subjective resolution of SUI without the development of voiding dysfunction or de novo urge incontinence. Improvement was defined as the subjective improvement of SUI without complete resolution or the subjective resolution of SUI occurring with the development of prolonged voiding dysfunction lasting greater than 6 weeks or de novo urge incontinence. Failure was defined as the subjective lack of improvement of SUI, the need for an additional procedure to correct SUI or the need for revision or takedown of the TVT for persistent voiding dysfunction or mesh erosion. RESULTS: The cure, improvement and failure rates for each of the following groups are respectively as follows: group 1 (+UH, -ISD) (n = 121): 101 (83.5%), 13 (10.7%), 7 (5.8%); group 2 (-UH, +ISD) (n = 22): 17 (77.3%), 3 (13.6%), 2 (9.1%); group 3 (+UH, +ISD) (n = 32): 26 (81.3%), 4 (12.5%), 2 (6.2%); group 4 (-UH, -ISD) (n = 25): 21 (84.0%), 3 (12.0%), 1 (4.0%); group 5 (occult SUI) (n = 67): 57 (85.1%), 10 (14.9%), 0 (0%). CONCLUSION: This study shows that the TVT is effective in treating all five sub-types of SUI.

TVT versus SPARC: comparison of outcomes for two midurethral tape procedures.
To compare the subjective and objective cure rates in women who underwent either the SPARC or the TVT midurethral sling for the treatment of stress urinary incontinence. This retrospective study included all 122 consecutive women undergoing a TVT or SPARC midurethral sling procedure for objective stress urinary incontinence between January 2000 and March 2003 at the Evanston Continence Center. Primary outcomes were subjective and objective stress incontinence cure rates. Subjects underwent multichannel urodynamics preoperatively and 14 weeks postoperatively, and stress testing at last follow-up. The two groups were compared using univariate and multivariate analyses. Seventy-three subjects underwent a TVT and 49 subjects had a SPARC procedure. There were no statistical differences in demographic factors between the two groups. Subjects undergoing SPARC were more likely to void by Valsalva effort. One hundred and seven women returned for objective postoperative evaluation after surgery. The TVT procedure was associated with higher subjective (86 vs. 60%, P = 0.001) and objective (95 vs. 70%, P < 0.001) stress incontinence cure rates. There was no difference between the TVT and SPARC groups in the resolution of subjective and objective urge urinary incontinence. TVT was associated with a higher stress urinary incontinence cure rate than SPARC in this retrospective study. As new midurethral sling products are introduced, prospective randomized controlled trials should be conducted to evaluate their relative efficacy and safety.

[Surgical management of chronic refractory pain after TVT treatment for stress urinary incontinence]
Misrai V, Chartier-Kastler E, Cour F, Mozer P, Almeras C, Richard F
OBJECTIVE: To evaluate the results of surgical treatment of iatrogenic pelviperineal pain following TVT treatment for stress urinary incontinence (SUI). MATERIAL AND METHODS: Eight patients developed chronic pain after TVT that was refractory to symptomatic medical treatment. Pain was characterized by clinical interview and clinical examination and an aetiological assessment demonstrated the role of TVT in pathogenesis of the pain. TVT was removed by open surgery or by laparoscopy. Pain and continence were evaluated postoperatively. RESULTS: TVT was completely (n = 3) or partially (n = 5) removed. With a mean follow-up of 31 months, no patient has experienced pain recurrence. Five patients have remained continent and 3 patients were treated for recurrent urinary incontinence. CONCLUSION: Although medical treatment may be disappointing, surgical resection provides good results on refractory pain, but preservation of continence is inconstant.

Role of bladder neck mobility and urethral closure pressure in predicting outcome of tension-free vaginal tape (TVT) procedure.
The effectiveness of the TVT sling appears to depend on adequate postoperative urethral mobility and urethral closure pressure.

Tension-free vaginal tape surgery for stress urinary incontinence: a prospective multicentered study in Japan.
The TVT surgery was promising for the treatment of stress incontinence because of minimal surgical invasiveness and satisfactory surgical results. Women with type III incontinence resulted in fewer satisfactory outcomes than those with type I or II incontinence.

Comparison of the efficacy, safety, and tolerability of propiverine and oxybutynin for the treatment of overactive bladder syndrome.
AIM: To compare the effects of propiverine and oxybutynin on ambulatory urodynamic monitoring (AUM) parameters, safety, and tolerability in patients with overactive bladder. METHODS: This was a randomized, double-blind, placebo-controlled, multicentre, crossover study. Patients (n = 77) received two of the following treatments during two 2-week periods: propiverine 20 mg once daily, propiverine 15 mg three times daily,
oxybutynin 5 mg three times daily, and placebo. AUM parameters, salivary flow, visual near point, and heart rate were assessed. RESULTS: A consistent order in the efficacy between active treatment groups was observed for the reduction in mean involuntary detrusor contractions (IDCs; oxybutynin 15 mg ≤ propiverine 45 mg ≤ propiverine 20 mg). Differences between the oxybutynin and propiverine 20 mg groups were statistically significant for several AUM endpoints. Statistically significant differences between the oxybutynin and both propiverine groups were also noted in salivary flow rate and heart rate (oxybutynin 15 mg < both propiverine regimens) and in heart rate variability (both propiverine regimens < oxybutynin 15 mg). All active treatments lengthened visual near point. The incidence of dry mouth was significantly more pronounced in the oxybutynin group than in either propiverine group. Treatment with propiverine 45 mg resulted in the highest rates of constipation, lengthening of the visual near point, and effects on heart rate. CONCLUSIONS: Oxybutynin 15 mg was more effective than propiverine 20 mg in reducing symptomatic and asymptomatic IDCs in ambulatory patients. The primary differences between the two drugs were the incidence and type of adverse events, which varied with the antimuscarinic receptor specificity of each agent.

Risk of stress urinary incontinence twelve years after the first pregnancy and delivery.
Viktrup L, Rortveit G, Lose G
Onset of stress urinary incontinence during first pregnancy or puerperal period carries an increased risk of long-lasting symptoms.

Short- and long-term results of the tension-free vaginal tape procedure in the treatment of female urinary incontinence.
Ankardal M, Heiwall B, Lausten-Thomsen N, Carnelid J, Milsom I
The subjective cure rate was 83% after 1 year and 73% after 5 years. The objective cure rate was 83% in the subgroup after 5 years. Surgical time was 30+/-9 min (mean+/-SD). The rate of bladder perforations was 1.7%. In patients with MUI the cure rate was lower than in patients with SUI (after 5 years 54.9% versus 81.0%). The TVT procedure, performed in over 700 women at a single gynecological unit, was found to be a safe and efficient surgical procedure. Type of incontinence was the only independent variable found to predict for outcome of surgery.

Is HCl duloxetine effective in the management of urinary stress incontinence after radical prostatectomy?
Zahariou A, Papaioannou P, Kalogirou G
The use of HCl duloxetine results in mild increase of MUCP and in significant reduction of urine loss. Its action on the extrinsic sphincter does not provide a complete treatment option for postprostatectomy incontinence.

Efficacy of sacral nerve stimulation for fecal incontinence: results of a multicenter double-blind crossover study.
Ripetti V
Tech Coloproctol. 2006 Jul;10(2):159-60; discussion 160.

Functional fecal soiling without constipation, organic cause or neuropsychiatric disorders?
Pakarinen MP, Koivusalo A, Rintala R J
BACKGROUND: The aetiology of fecal incontinence in children has traditionally been attributed to idiopathic constipation, structural defects or neuropsychiatric disorders. We describe a new subgroup of otherwise healthy children who have fecal soiling without any underlying cause for the incontinence. METHODS: The hospital records of children with fecal incontinence were screened to detect patients without any history, signs or symptoms of constipation or an organic, neurological or psychiatric cause for the incontinence. Anorectal manometry findings were compared with those of age-matched children with idiopathic constipation and soiling. RESULTS: Eight boys and 5 girls were identified. The median age at diagnosis was...
7.9 years. Soiling had lasted median of 4.1 years, occurred at least every other day in 9, at least once a week in 2 and occasionally in 2 and required change of underwear or use of protective pads. Abdominal x-ray and barium enema showed normal findings. Sacral x-ray and/or MRI of the spinal cord showed normal bony spine and spinal cord. Five children had coexisting night and/or daytime wetting. Impaired rectal sensation was the only identifiable abnormality that was detected. The median volume required for the first sensation was 45 mL (range, 15-100 mL; normal, <15 mL). Anorectal manometry alone was unable to differentiate patients with functional fecal soiling from those with idiopathic constipation associated soiling. The median follow-up time after the diagnosis was 9.1 months. Treatment of fecal soiling consisted of education, dietary modification or stimulatory laxatives to establish regular toileting routines. Treatment improved fecal continence in 6 out of 8 cases with follow-up longer than 6 months. CONCLUSIONS:: There is a small subgroup of children with fecal soiling who are otherwise healthy without constipation or any other underlying cause for the incontinence. These children seem to have isolated impairment of rectal sensation. In most, the prognosis is good with conservative treatment.

7 – PAIN 2006 07
Pulsed radiofrequency for the treatment of ilioinguinal neuralgia after inguinal herniorrhaphy.
Rozen D, Ahn J
PRF is non-neurodestructive and therefore less painful and without the potential complications of neuritis-like reactions and neuroma formation. Ilioinguinal neuralgia is challenging to treat. We have demonstrated the successful use of PRF for four out of five patients seen in our office.

Neuropathic pain: a practical guide for the clinician.
Gilron I, Watson CP, Cahill CM, Moulin DE
CMAJ. 2006 Aug 1;175(3):265-75.
Neuropathic pain, caused by various central and peripheral nerve disorders, is especially problematic because of its severity, chronicity and resistance to simple analogics. The condition affects 2%-3% of the population, is costly to the health care system and is personally devastating to the people who experience it. The diagnosis of neuropathic pain is based primarily on history (e.g., underlying disorder and distinct pain qualities) and the findings on physical examination (e.g., pattern of sensory disturbance); however, several tests may sometimes be helpful. Important pathophysiologic mechanisms include sodium-and calcium-channel upregulation, spinal hyperexcitability, descending facilitation and aberrant sympathetic-somatic nervous system interactions. Treatments are generally palliative and include conservative nonpharmacologic therapies, drugs and more invasive interventions (e.g., spinal cord stimulation). Individualizing treatment requires consideration of the functional impact of the neuropathic pain (e.g., depression, disability) as well as ongoing evaluation, patient education, reassurance and specialty referral. We propose a primary care algorithm for treatments with the most favorable risk-benefit profile, including topical lidocaine, gabapentin, pregabalin, tricyclic antidepressants, mixed serotonin-norepinephrine reuptake inhibitors, tramadol and opioids. The field of neuropathic pain research and treatment is in the early stages of development, with many unmet goals. In coming years, several advances are expected in the basic and clinical sciences of neuropathic pain, which will provide new and improved therapies for patients who continue to experience this disabling condition.

Symphysitis following transrectal biopsy of the prostate.

Hyperoxaluria in women with vulvar vestibulitis syndrome.
Greenstein A, Miltischer I, Chen J, Matzkin H, Lessing JB, Abramov L

Vulvodynia: a state-of-the-art consensus on definitions, diagnosis and management.
Vulvodynia is a chronic pain syndrome affecting up to 18% of the female population. Despite its high prevalence and associated distress, the etiology, diagnosis and clinical management of the disorder have not been clearly delineated. This “white paper” describes the findings and recommendations of a consensus conference panel based on a comprehensive review of the published literature on vulvodynia in addition to expert presentations on research findings and clinical management approaches. The consensus panel also identified key topics and issues for further research, including the role of inflammatory mechanisms and genetic factors and psychosexual contributors.

Efficacy of an encapsulated probiotic Bifidobacterium infantis 35624 in women with irritable bowel syndrome.
B. infantis 35624 is a probiotic that specifically relieves many of the symptoms of IBS. At a dosage level of 1 x 10(8) cfu, it can be delivered by a capsule making it stable, convenient to administer, and amenable to widespread use. The lack of benefits observed with the other dosage levels of the probiotic highlight the need for clinical data in the final dosage form and dose of probiotic before these products should be used in practice.

Treatment of diarrhea-predominant irritable bowel syndrome with traditional Chinese herbal medicine: a randomized placebo-controlled trial.
Chinese herbal medicine did not lead to global symptom improvement.

Chronic abdominal pain: not always irritable bowel syndrome.

Sex differences in irritable bowel syndrome in Japanese university students.
There was a strong relationship between IBS-C and female sex, and food sensitivity seemed to be an exacerbating factor for IBS-D.

Therapeutic strategies for functional dyspepsia and the introduction of the Rome III classification.
Although placebo response rates in clinical trials for functional dyspepsia (FD) are more than 30%, a recent meta-analysis based on randomized controlled trials (RCTs) showed that antisecretory drugs were more or less superior to placebos. On the other hand, large-scale RCTs on the efficacy of treatment with prokinetics on FD are still needed. Indications for antibiotic eradication therapy for Helicobacter pylori-positive FD are still controversial, but there seems to be a small but significant therapeutic gain achieved with H. pylori eradication. Since preprandial and postprandial symptomatic disturbances are very important targets for FD treatment, ghrelin, a novel appetite-promoting gastrointestinal peptide that also promotes gastric motility or basal acid secretion can be expected to be a therapeutic target. In the recently published Rome III classification, FD is redefined for patients with symptoms thought to originate from the gastroduodenal region, specifically epigastric pain or burning, postprandial fullness, or early satiation, and it is divided into the subcategories postprandial distress syndrome and epigastric pain syndrome. These new criteria are of value in clinical practice, for epidemiological, pathophysiological, and clinical research, and for the development of new therapeutic strategies.
8 – FISTULAE 2006 07

Fournier's gangrene: Report of thirty-three cases and a review of the literature.
Tahmaz L, Erdemir F, Kibar Y, Cosar A, Yalcyn O

Fournier's gangrene (FG) is an extensive fulminant infection of the genitals, perineum or the abdominal wall. The aim of this study is to share our experience with the management of this difficult infectious disease. Thirty-three male patients were admitted to our clinic with the diagnosis of FG between February 1988 and December 2003. The patient's age, etiology and predisposing factors, microbiological findings, duration of hospital stay, treatment, and outcome were analyzed. The patients were divided into two groups. The first 21 patients (Group I) were treated with broad-spectrum triple antimicrobial therapy, broad debridement, exhaustive cleaning, and then they underwent split-thickness skin grafts or delayed closure as needed. The other 12 patients (Group II) were treated with unprocessed honey (20-50 mL daily) and broad-spectrum triple antimicrobial therapy without debridement. Their wounds were cleaned with saline and then dressed with topical unprocessed honey. The wounds were inspected daily and the honey was reapplied after cleaning with normal saline. Then, the patients' scrotum and penis were covered with their own new scrotal skin. The mean age of the patients was 53.9 +/- 9.56 years (range = 23-71). The source of the gangrene was urinary in 23 patients, cutaneous in seven patients, and perirectal in three patients. The predisposing factors included diabetes mellitus for 11 patients, alcoholism for 10 patients, malnutrition for nine patients, and medical immunosuppression (chemotherapy, steroids, malignancy) for three patients. The mean duration of hospital stay was 41 +/- 10.459 (range = 14-54) days. Two patients in Group I died from severe sepsis. The clinical and cosmetic results were better in Group II than Group I. Necrotizing fasciitis of the perineum and genitalia is a severe condition with a high morbidity and mortality. Traditionally, good management is based on aggressive debridement, broad-spectrum antibiotics, and intensive supportive care but unprocessed honey might revolutionize the treatment of this dreadful disease by reducing its cost, morbidity, and mortality.

Nonoperative treatment of traumatic rectovesical fistula.
Thurairaja R, Whittlestone T

Caprioli F, Losco A, Vigano C, Conte D, Biondetti P, Forzenigo LV, Basilisco G

Anal ultrasound can be used to assess fistula track activity in patients with Crohn's disease. The diagnostic performance of the technique can be improved to values comparable with those of magnetic resonance imaging by using a computer-assisted evaluation of the anal ultrasound images.

Ishiyama S, Inoue S, Kobayashi K, Sano Y, Kushida N, Yamazaki Y, Yanaga K

9 – BEHAVIOUR, PSYCHOLOGY & SEXOLOGY 2006 07

The effect of nazism on medical progress in gastroenterology: the inefficiency of evil.
Cappell MS

While Nazism is almost universally recognized as a great evil, control of science and medicine by the totalitarian Nazi state might be viewed as increasing efficiency. Scientific methods are applied to semiquantitatively analyze the effects of Nazism on medical progress in gastroenterology to document its pernicious effects, and to honor outstanding gastroenterologists persecuted or murdered by the Nazis. This is a retrospective, quasi-case-controlled study. To disprove the null hypothesis that Nazism was efficient, retarded progress in gastroenterology is demonstrated by (1) enumerating the loss to Nazi Germany from 1933 to 1944 due to violent death, incarceration, or forced exile of key researchers in gastroenterology,
defined by authorship of at least one book or 10 articles in peer-reviewed journals or other outstanding scholarship; (2) demonstrating a statistically significantly greater loss in Nazi Germany than in non-Nazi (Weimar German Republic from 1921 to 1932) or anti-Nazi (democratic America from 1933 to 1944) control groups; and (3) demonstrating that each loss was directly due to Nazism (murder, incarceration, or exile due to documented threat of violence/death or revocation of medical license). Sources of error in analyzing events from 70 years ago are described. Nazi Germany and Nazi-occupied Europe gained 0 and lost 53 key gastroenterology researchers, including 32 lost due to forced exile, 11 murdered by the Nazis, 5 lost due to suicide under threat of violence, 3 in hiding from the Gestapo, and 2 for other reasons. Fifty-two of the gastroenterologists were persecuted solely because they were Jewish or of Jewish descent and one because he was a Christian anti-Nazi Polish patriot. Particularly severe losses occurred in endoscopy. The loss in Nazi Germany from 1933 to 1944 was significantly greater than that in non-Nazi Germany and Austria from 1921 to 1932 (53 versus 4; odds ratio = 25.27; 95% CI: 9.01-70.48; P < 0.0001) and was significantly greater than that in anti-Nazi America from 1933 to 1944 (53 versus 0; odds ratio > 104.0; 95% CI: 17.62-608.95; P < 0.0001). Lost physicians in Nazi Germany (with reasons for loss) included Ismar Boas, the father of modern gastroenterology (suicide after medical license revoked); Hans Popper, the father of hepatopathology (fled impending arrest); Rudolph Nissen, the father of antireflux surgery (fled after job dismissal); Rudolph Schindler, the father of semiflexible endoscopy (fled after incarceration); Heinrich Lamm, the first to experimentally demonstrate fiberoptic transmission and the first to suggest its applicability for gastroscopy (fled after medical license revoked); Hermann Strauss, a pioneer in rigid sigmoidoscopy (suicide in a concentration camp); A.A.H. van den Bergh, who discovered the van den Bergh reaction to differentiate direct from indirect bilirubin (died in hiding in Nazi-occupied Holland); and Kurt Isselbacher, subsequently the Chief of Gastroenterology at Harvard Medical School (fled in childhood after a grandfather murdered by Nazis). All four refugee physicians who were reexposed to Nazi domination, after a regime change in their country of refuge, fled again or committed suicide. The Nazi damage to German and Austrian gastroenterology was immense, e.g., 13 of 14 major international discoveries in diagnostic gastroscopy were made by Germans or Austrians before the Third Reich, versus only 1 of 8 subsequently (odds ratio = 91; 95%

Women's perception of sexuality during pregnancy and after birth.
Gerda T, Josef H, Uwe L, Edgar P

The biology of human sex differences.
Stanford JB

Penile prosthetic surgery and its role in the treatment of end-stage erectile dysfunction - an update.
Jain S, Terry TR
The treatment of erectile dysfunction has been revolutionised with the introduction of orally active phosphodiesterase inhibitors which are successful in 70-80% of men. However, there remain a group of men in whom conservative treatment fails and surgical insertion of a penile prosthesis is required. This type of surgery has in the past been associated with technical difficulties and a high complication rate. This has spurred numerous developments in prosthetic design and surgical technique with the field changing at a rapid pace. Perhaps the most significant is the use of antimicrobial coatings on prostheses that have been shown to reduce the infection rate significantly. This review highlights those developments reported in the last 5 years.

Childhood sexual abuse (CSA) experiences: an underestimated factor in perinatal care.
Leeners B, Neumaier-Wagner P, Quarg AF, Rath W
Background. Childhood sexual abuse can have several negative consequences on pregnancy, birth, and the early neonatal period. However, most obstetricians are not aware if their patients have a history of childhood sexual abuse. We therefore investigated childhood sexual abuse experiences in 226 women three to eight
months after delivery of a healthy child. Methods. 415 women were approached to answer a self-administered questionnaire including obstetrical questions and questions focusing on abuse experiences. 320 women agreed to participate, 226 (69.1% of the women fulfilling inclusion criteria) of which returned a completed questionnaire. Sexual abuse was explored using a modified version of a questionnaire developed by Wyatt. The complete questionnaire was designed in cooperation with the German "Frauennotruf", a society providing care for victims of sexual abuse. Results. The prevalence of childhood sexual abuse was a minimum of 11.5% and a maximum of 14.6% if women who were not sure about such experiences during their childhood were included. Another 1.3% of the women had experienced sexual abuse as an adult. Lifetime sexual abuse prevalence was 12.8% and 15.9%, respectively. Of the women with an experience of childhood sexual abuse, 42.3% mentioned an ongoing abuse situation for at least six months. Conclusions. As approximately every 9th woman presenting for obstetrical care has experienced childhood sexual abuse, and as those experiences may have a negative impact on fetal and maternal well-being, adequate counseling models should be offered to victims of sexual abuse.

Approaches to screening for intimate partner violence in health care settings: a randomized trial.


CONTEXT: Screening for intimate partner violence (IPV) in health care settings has been recommended by some professional organizations, although there is limited information regarding the accuracy, acceptability, and completeness of different screening methods and instruments. OBJECTIVE: To determine the optimal method for IPV screening in health care settings. DESIGN AND SETTING: Cluster randomized trial conducted from May 2004 to January 2005 at 2 each of emergency departments, family practices, and women's health clinics in Ontario, Canada. PARTICIPANTS: English-speaking women aged 18 to 64 years who were well enough to participate and could be seen individually were eligible. Of 2602 eligible women, 141 (5%) refused participation. INTERVENTION: Participants were randomized by clinic day or shift to 1 of 3 screening approaches: a face-to-face interview with a health care provider (physician or nurse), written self-completed questionnaire, and computer-based self-completed questionnaire. Two screening instruments—the Partner Violence Screen (PVS) and the Woman Abuse Screening Tool (WAST)—were administered and compared with the Composite Abuse Scale (CAS) as the criterion standard. MAIN OUTCOME MEASURES: The approaches were evaluated on prevalence, extent of missing data, and participant preference. Agreement between the screening instruments and the CAS was examined. RESULTS: The 12-month prevalence of IPV ranged from 4.1% to 17.7%, depending on screening method, instrument, and health care setting. Although no statistically significant main effects on prevalence were found for method or screening instrument, a significant interaction between method and instrument was found: prevalence was lower on the written WAST vs other combinations. The face-to-face approach was least preferred by participants. The WAST and the written format yielded significantly less missing data than the PVS and other methods. The PVS and WAST had similar sensitivities (49.2% and 47.0%, respectively) and specificities (93.7% and 95.6%, respectively). CONCLUSIONS: In screening for IPV, women preferred self-completed approaches over face-to-face questioning; computer-based screening did not increase prevalence; and written screens had fewest missing data. These are important considerations for both clinical and research efforts in IPV screening.

10 – MISCELLANEOUS 2006 07

Bladder-sparing surgery in locally advanced nonurological pelvic malignancy.

Siva Prasad G, Chacko KN, Antony D, Lionel G, Kekre NS, Gopalakrishnan G

INTRODUCTION: The urinary bladder is commonly involved in pelvic malignancy. The incidence of apparent extension into adjacent organs in locally advanced colorectal malignancy is 5-12%. It is not known with other pelvic malignancy. No guidelines are available for its management. Often a dilemma exists between cystectomy and a bladder-sparing procedure. We studied the validity of bladder-sparing surgery (BSS) in locally advanced nonurological pelvic malignancy. METHODS: Hospital records of patients who underwent BSS along with other surgeries (abdomino-perineal resection, anterior resection, anterior exenteration, debulking surgery and total pelvic exenteration) from January 1992 to May 2003 were reviewed. RESULTS:
BSS was done in 15 patients. 10 had locally advanced colorectal malignancy, 3 with soft tissue masses of the lateral pelvic wall, 1 had ovarian malignancy and the other had residual mass following radiotherapy and chemotherapy of cancer cervix. In those with locally advanced colorectal malignancy, symptoms suggestive of lower urinary tract involvement were present in 8 (80%). Urine examination and ultrasonography was not helpful in suggesting bladder involvement, unlike CT scan of abdomen and pelvis. Preoperative cystoscopy showed endoscopic evidence of bladder involvement in 7 (87.5%). Bladder was involved supratrigonally in 7. Partial cystectomy was done in 9 patients. The left ureter was involved in 6 patients, and they required ureteric reimplantation. Palliative transurethral resection was done in 1 patient with tumor infiltration at the bladder neck and prostate. 50% patients had bothersome lower urinary tract symptoms at 1 year. One patient died in the immediate postoperative period due to a nonurological cause. Overall 3-year survival rate was 40%. CONCLUSION: Unlike primary bladder cancers these lesions are not multifocal and hence en block conservative bladder-sparing surgery can be offered. Preoperative CT scan or MRI can predict lower urinary tract involvement and help in decision-making by both surgeon and patient. The ultimate decision for bladder sparing is based on intraoperative findings. Sparing the bladder might provide better quality of life by avoiding urinary diversion without altering survival.

Predictive risk score for infection after inguinal hernia repair.
This study demonstrates the efficacy of antibiotic prophylaxis in inguinal hernia surgery in the subgroup of high-risk patients.

Contemporary management of pelvic fractures.
Durkin A, Sagi HC, Durham R, Flint L
The central challenge for the clinician evaluating and managing a patient with a pelvic fracture is to determine the most immediate threat to life and control this threat. Treatment approaches will vary depending on whether the main threat arises from pelvic fracture hemorrhage, associated injuries, or both simultaneously. Functional outcomes in the long-term depend on the quality of the rigid fixation of the fracture, as well as associated pelvic neural and visceral injuries.

Cutaneous, perivulvar and perianal ulcerations induced by nicorandil.

Does pregnancy change the disease course? A study in a European cohort of patients with inflammatory bowel disease.
Pregnancy did not influence disease phenotype or surgery rates, but was associated with a reduced number of flares in the following years.

Latex intolerance. Basic science, epidemiology, and clinical management.
English J

Lee PK, Choi MS, Ahn ST, Oh DY, Rhie JW, Han KT
BACKGROUND: Soft-tissue reconstruction following vulvar cancer resection is a difficult challenge because of the functional, locational, and cosmetic importance of this region. Although numerous flaps have been designed for vulvar reconstruction, each has its disadvantages. METHODS: The authors introduce the gluteal fold fasciocutaneous V-Y advancement flap for vulvovaginoperineal reconstruction after vulva cancer
resection. This flap is supplied by underlying fascial plexus derived from perforators of the internal pudendal artery and musculocutaneous perforators of underlying muscle. The sensory supply of this flap comes from the posterior cutaneous nerve of the thigh and the pudendal nerve. An axis of V-shaped triangular flap is aligned to the gluteal fold. A total of 17 flaps were performed in nine patients. RESULTS: All flaps survived completely, with no complications except for small perineal wound disruption in three patients. CONCLUSIONS: This flap is thin, reliable, sensate, easy to perform, and has matched local skin quality and concealed donor-site scar on the gluteal fold. In addition, it can cover large vulvovaginal defects because it can be advanced farther as a result of the character of the gluteal fold area. In our experience, the gluteal fold fasciocutaneous V-Y advancement flap has proven very useful for vulvar reconstruction, especially at the point of donor-site scar, flap thickness, and degree of flap advancement.

A surgical skills laboratory improves residents’ knowledge and performance of episiotomy repair.

Banks E, Pardanani S, King M, Chudnoff S, Damus K, Freda MC

OBJECTIVE: This study was undertaken to assess whether a surgical skills laboratory improves residents’ knowledge and performance of episiotomy repair. STUDY DESIGN: Twenty-four first- and second-year residents were randomly assigned to either a surgical skills laboratory on episiotomy repair or traditional teaching alone. Pre- and posttests assessed basic knowledge. Blinded attending physicians assessed performance, evaluating residents on second-degree laceration/episiotomy repairs in the clinical setting with 3 validated tools: a task-specific checklist, global rating scale, and a pass-fail grade. RESULTS: Postgraduate year 1 (PGY-1) residents participating in the laboratory scored significantly better on all 3 surgical assessment tools: the checklist, the global score, and the pass/fail analysis. All the residents who had the teaching laboratory demonstrated significant improvements on knowledge and the skills checklist. PGY-2 residents did not benefit as much as PGY-1 residents. CONCLUSION: A surgical skills laboratory improved residents' knowledge and performance in the clinical setting. Improvement was greatest for PGY-1 residents.

Emergency Caesarean section: best practice*.

Levy DM

Good multidisciplinary communication is crucial to the safe management of women requiring non-elective Caesarean section. Anaesthetists should participate actively in resuscitation of the fetus in utero; relief of aortocaval compression is paramount. Epidural top-up with levobupivacaine 0.5% is the anaesthetic of choice for women who have been receiving labour epidural analgesia. If epidural top-up fails to provide bilateral light touch anaesthesia from S5 - T5, a combined spinal-epidural technique with small intrathecal dose of local anaesthetic is a useful approach. Pre-eclampsia is not a contra-indication to single-shot spinal anaesthesia, which is the technique of choice for most women presenting for Caesarean section without an epidural catheter in situ. Induction and maintenance doses of drugs for general anaesthesia should not be reduced in the belief that the baby will be harmed. Early postoperative observations are geared towards the detection of overt or covert haemorrhage.

Recurrent rectal diverticulitis.

Lundy JB, Edwards KD, Parker DM, Rivera DE

Diverticular involvement of the colon is very common in the United States. Patients present with asymptomatic diverticuli and may have complications of these, spanning the spectrum of uncomplicated diverticulitis to an acute surgical abdominal as a result of feculent peritonitis. We discuss a patient requiring low anterior resection for intractable symptoms resulting from recurrent rectal diverticulitis as well as a review of the limited literature on the subject of diverticular disease of the rectum.

Bilateral V-Y advancement flaps for the management of extensive defects of the perianal skin.

Kiran RP, Kalavagunta S, Berube M, Brown W, Richi AA, Dudrick SJ

Premalignant and malignant conditions of the skin may sometimes require excision of extensive areas of the
skin and subcutaneous tissues. Coverage of the ensuing raw area may be afforded by allowing healing by secondary intention, skin grafts, or flaps. Wide excision of the perianal skin poses special problems. We describe the use of bilateral V-Y advancement flaps for the management of an extensive defect resulting from the wide excision of squamous cell carcinoma arising in scarred perianal skin.

Efficacy and Safety of Botulinum Toxin A Injection Compared with Topical Nitroglycerin Ointment for the Treatment of Chronic Anal Fissure: A Prospective Randomized Study.
Fruehauf H, Fried M, Wegmueller B, Bauerfeind P, Thumshirn M
Am J Gastroenterol. 2006 Jul 18; e-pub

OBJECTIVES: To evaluate the efficacy and safety of botulinum toxin A injection compared with topical nitroglycerin ointment for the treatment of chronic anal fissure (CAF). METHODS: Fifty outpatients with CAF were randomized to receive either a single botulinum toxin injection (30 IU Botox(R)) or topical nitroglycerin ointment 0.2% b.i.d. for 2 wk. If the initial therapy failed, patients were assigned to the other treatment group for a further 2 wk. If CAF still showed no healing at wk 4, patients received combination therapy of botulinum toxin and nitroglycerin for 4 additional wk. Persisting CAF at wk 8 was treated according to the investigator's decision. Healing rates, symptoms, and side effects of the therapy were recorded at wk 2, 4, 8, 12, and 24 after randomization. RESULTS: The group initially treated with nitroglycerin showed a higher healing rate of CAF (13 of 25, 52%) as compared with the botulinum toxin group (6 of 25, 24%) after the first 2 wk of therapy (p < 0.05). At the end of wk 4, CAF healed in three additional patients, all receiving nitroglycerin after initial botulinum toxin injection. Mild side effects occurred in 13 of 50 (26%) patients, all except one were on nitroglycerin. CONCLUSIONS: Nitroglycerin ointment was superior to the more expensive and invasive botulinum toxin injection for initial healing of CAF, but was associated with more but mild side effects.