1 – THE PELVIC FLOOR 2005 11

Functional bowel and anorectal disorders in patients with pelvic organ prolapse and incontinence.
Jelovsek JE, Barber MD, Paraiso MF, Walters MD
Am J Obstet Gynecol 2005 Dec;193(6):2105-11.
The purpose of this study was 1) to determine the prevalence of functional bowel and anorectal disorders as defined by the Rome II criteria in patients with advanced pelvic organ prolapse (POP) and urinary incontinence (UI), and (2) to determine if the extent of prolapse on gynecologic examination is related to the subtypes of constipation or any functional anorectal pain disorder. There is a high prevalence of constipation and anorectal pain disorders in women with urinary incontinence and pelvic organ prolapse. However, patients with stage 3 or 4 pelvic organ prolapse have similar rates of constipation compared with those with urinary incontinence. Constipation and its subtypes are not related to the stage of pelvic organ prolapse. It appears that either constipation is not a significant contributor to prolapse, or constipation contributes equally to the development of both urinary incontinence and pelvic organ prolapse.

Epidemiology of prolapse and incontinence questionnaire: validation of a new epidemiologic survey.
Lukacz ES, Lawrence JM, Buckwalter JG, Burchette RJ, Luber KM. Int Urogynecol J Pelvic Floor Dysfunct 2005;16(4):272-84
The epidemiology of prolapse and incontinence questionnaire (EPIQ) was developed to screen for female pelvic floor disorders (PFD). Content and face validity, reliability, internal consistency and criterion validity of the EPIQ to detect the presence of pelvic organ prolapse (POP), stress urinary incontinence (SUI), overactive bladder (OAB) and anal incontinence (AI) is presented. Cronbach's alpha; Spearman's, kappa, intraclass correlations, factor analysis and Chi-Squared tests were used for analysis. Questions related to PFD proved internally consistent (alpha = 0.91) and reproducible (correlations >0.70) for all but three items on the EPIQ. Positive and negative predictive values of the EPIQ to detect PFD were: POP = 76% and 97%, SUI = 88% and 87%, OAB = 77% and 90% and AI = 61% and 91% respectively. EPIQ is a psychometrically validated screening instrument that may identify women at high risk of having pelvic floor disorders in large undiagnosed populations.

2 – FUNCTIONAL ANATOMY 2005 11

Rectoceles and the anatomy of the posteriorvaginal wall: revisited.
Kleeman SD, Westermann C, Karram MM. Am J Obstet Gynecol 2005 Dec;193(6):2050-5.
OBJECTIVE: The purpose of this study was to histologically evaluate the posterior aspect of the pelvis, specifically, the relationship between the perineum, posterior vagina, anterior rectum, and all other intervening tissue. STUDY DESIGN: The perineum, posterior vaginal wall, and upper part of the rectum were removed en bloc from 4 fresh cadavers without pelvic prolapse. Length of the specimens ranged from 6 to 7.9 cm and width 3 to 4 cm. Seven to 26 serial sections were taken from each cadaver. Sections were stained with hematoxylin and eosin (H&E), Masson trichrome, and Verhoeff Von Gieson elastic stain. RESULTS: All 4 specimens showed dense connective tissue and no plane of cleavage for 3 to 3.5 cm proximally from the posterior forchette. Proximal to this, all 4 specimens showed space between the muscular wall of the vagina and the muscular wall of the rectum, which was composed of adipose tissue with discontinuous bands of fibrous tissue or loose areolar tissue. This appears to be a natural line of cleavage. Histologically, no evidence of fascia or a rectovaginal septum was identified. CONCLUSION: Histologically, there is no evidence of a distinct fascial layer between the posterior vaginal wall and anterior wall of the rectum. Clinically, it is the splitting of the adventitia and fibromuscular layers of the vagina that are used in defect-specific rectocele repairs to support the anterior rectal wall.

Anatomy of pudendal nerve at urogenital diaphragm--new critical site for nerve entrapment.
Hruby S, Ebmer J, Dellon AL, Aszmann OC. Urology 2005 Nov;66(5):949-52.
OBJECTIVES: To investigate the relations of the pudendal nerve in this complex anatomic region and determine possible entrapment sites that are accessible for surgical decompression. Entrapment neuropathies of the pudendal nerve are an uncommon and, therefore, often overlooked or misdiagnosed clinical entity. The detailed relations of this nerve as it exits the pelvis through the urogenital diaphragm and enters the mobile part of the penis have not yet been studied. METHODS: Detailed anatomic dissections were performed in 10 formalin preserved hemipelves under 3.5x loupe magnification. The pudendal nerve was dissected from the entrance into the Alcock canal to the dorsum of the penis. The branching pattern of the nerve and its topographic relationship were recorded and photographs taken. RESULTS: The anatomic dissections revealed that the pudendal nerve passes through a tight osteofibrotic canal just distal to the urogenital diaphragm at the entrance to the base of the penis. This canal is, in part, formed by the inferior

ramus of the pubic bone, the suspensory ligament of the penis, and the ischiocavernous body. In two specimens, a fusiform pseudoneuromatous thickening was found. CONCLUSIONS: The pudendal nerve is susceptible to compression at the passage from the Alcock canal to the dorsum of the penis. Individuals exposed to repetitive mechanical irritation in this region are especially endangered. Diabetic patients with peripheral neuropathy can have additional compression neuropathy with decreased penile sensibility and will benefit from decompression of the pudendal nerve.

Pelvic anatomy and MRI.
Paramasivam S, Proietto A, Puvaneswary M. Best Pract Res Clin Obstet Gynaecol 2005 Nov 4;.
An in-depth knowledge of the anatomy of the pelvis and pelvic sidewall is necessary before a gynaecologist can even contemplate making an initial examination and start management in cases of pelvic pathology or malignancy. This chapter provides basic information on gross pelvic anatomy structures that are of clinical relevance and discusses their correlation with medical imaging, especially magnetic resonance imaging (MRI). MRI is an ideal non-invasive technique in the assessment of normal anatomy and tissue characterization of pelvic pathology. The excellent soft-tissue contrast and the ability to direct multiplanar imaging and to demonstrate blood vessels without the use of intravenous contrast make MRI superior to other imaging modalities in the evaluation of pelvic abnormalities. The anatomical relation of the visceral organs, the differential zonal anatomy of the corpus uteri and the cyclical endometrial changes during the menstrual cycle are well depicted with MRI.

Anatomy of the sigmoid colon, rectum, and the rectovaginal pouch in women with enterocele and anterior rectal wall procidentia.
Baessler K, Schuessler B. Clin Anat 2005 Nov 14;.
This study describes the anatomy of the rectovaginal pouch, the sigmoid colon, and rectum in women with posterior enterocele and anterior rectal wall procidentia. The anatomy of rectovaginal pouch, sigmoid colon, and rectum was described in 36 women with an enterocele (group A) and compared with those of 43 women (group B) without pelvic organ prolapse. Women with previous incontinence or prolapse surgery were excluded. The mean age in group A was 58 years (40-75) and in group B 35 years (19-64; $P < 0.001$). There were 15 nulliparas in group B. Nine women in group A had an internal anterior rectal wall procidentia, and one woman had an external anterior rectal wall procidentia. In group A, the rectovaginal pouch was significantly deeper, the sigmoid mesocolon at S1 shorter and showed more often a straight course ($P < 0.05$). These characteristics (termed "grande fosse pelvienne") were present in 23 women (64%) in group A and in 6 (14%) in group B, three of the latter were young nulliparas ($P < 0.001$). Age, parity, menopausal status, body mass index, constipation, and varicose veins were not associated with a grande fosse pelvienne. The typical anatomy in women with an enterocele and anterior rectal wall procidentia was a sigmoid colon with a straight course and a short mesentery at S1 and a rectovaginal pouch that covered more than half of the vaginal length. It may be a congenital condition and important in the development of an enterocele and rectal wall procidentia.

Magnetic resonance imaging and 3-dimensional analysis of external anal sphincter anatomy.
Hsu Y, Fenner DE, Weadock WJ, Delancey JO
Obstet Gynecol 2005 Dec;106(6):1259-65.
There were 3 components of the EAS that met criteria as being "separate" structures. The main body (EAS-M) is separated from the subcutaneous external anal sphincter (SQ-EAS) by a clear division that could be observed in all (100%) of the MRI scans reviewed. The wing-shaped end (EAS-W) has fibers that do not cross the midline ventrally, but have lateral origins near the ischiopubic ramus. This EAS-W component was visible in 76% of the nulliparas reviewed.

[PET-CT studies of the support system and continence function of pelvic organs The pivotal importance of Denonvilliers' fascia for surgical procedures.]
Stelzner F, Biersack HJ, von Mallek D, Reinhardt M. Chirurg 2005 Dec;76(12):1168-74.
Like all other organs in the chest or abdominal cavities, pelvic organs are not suspended by specialized ligaments such as those in the skeletomuscular system. In spite of this, the organs of the pelvis remain well suspended within their cavity even during evacuation. This support system for these organs consists of inconspicuous smooth muscle elements scattered throughout pelvic structural fat tissue and fascial structures, in particular Denonvilliers' fascia. We used PET-CT studies to identify spontaneous muscle activity in the pelvis, which is strongest at Denonvilliers' fascia. We were able to correlate continence function, filling, and evacuation of pelvic organs with this spontaneous muscle activity that leads to stiffening and relaxation of the muscular walls of these organs. During the course of different disease processes such as visceral prolapse, these pelvic support structures are prone to fail gradually. Surgical interventions should

take the pelvic support system into account to avoid therapeutic errors.

3 – DIAGNOSTICS 2005 11

Appearance of the levator ani muscle in pregnancy as assessed by 3-D MRI.
Boreham MK, Zaretsky MV, Corton MM, Alexander JM, McIntire DD, Twickler DM
Am J Obstet Gynecol 2005 Dec;193(6):2159-64.

Ultrasonography, computed tomography and magnetic resonance imaging in the assessment of pelvic pathology.
Balan P. Eur J Radiol 2005 Nov 8;.
Ultrasound (US) is the primary imaging modality in the investigation of pelvic pathology in women however it can be very inaccurate. MRI and CT provide a more detailed pelvic examination and hence we compared their accuracies with that of ultrasound to find out if these two modalities should be used more often. PATIENTS AND METHODS: 136 women who had MRI examination of the pelvis for investigation of probable pelvic pathology were studied. Hundred and twenty-five of these women had an initial ultrasound scan and 23 had an initial CT. Diagnostic accuracy was assessed against histopathology or clinical follow-up. RESULTS: Histopathology was available in 127/136 women. Overall 36% of the lesions were malignant. The overall accuracy of MRI, US and CT were 97%, 77% and 87%, respectively. MRI confidently identified the tissue of origin in 94% compared to only 66% for US. There was a significant difference in accuracy between MRI and US in diagnosing adnexal and uterine pathology. MRI was better than CT and US in diagnosing peritoneal metastases whereas CT was superior in diagnosing omental infiltration. CONCLUSION: We suggest that all women with a pelvic abnormality identified on US or in whom there is a strong clinical suspicion of disease should undergo MR pelvic imaging in preference to CT because of its better soft tissue resolution and multi-planar capability.

Assessment of pelvic floor movement using transabdominal and transperineal ultrasound.
Thompson JA, O'Sullivan PB, Briffa K, Neumann P, Court S. Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):285-92.
The aims of the study were (1) to assess the reliability of transabdominal (TA) and transperineal (TP) ultrasound during a pelvic floor muscle (PFM) contraction and Valsalva manoeuvre and (2) to compare TA ultrasound with TP ultrasound for predicting the direction and magnitude of bladder neck movement in a mixed subject population. A qualified sonographer assessed 120 women using both TA and TP ultrasound. Ten women were tested on two occasions for reliability. The reliability during PFM was excellent for both methods. TP ultrasound was more reliable than TA ultrasound during Valsalva. The percentage agreement between TA and TP ultrasound for assessing the direction of movement was 85% during PFM contraction, 100% during Valsalva. There were significant correlations between the magnitude of the measurements taken using TA and TP ultrasound and significant correlations with PFM strength assessed by digital palpation.

Atrophy and Defects Detection of the External Anal Sphincter: Comparison Between Three-Dimensional Anal Endosonography and Endoanal Magnetic Resonance Imaging.
Cazemier M, Terra MP, Stoker J, de Lange-de Klerk ES, Boeckxstaens GE, Felt-Bersma RJ. Dis Colon Rectum 2005 Nov 23;.
Three-dimensional anal endosonography can be used for detecting external anal sphincter atrophy. Both endoanal techniques are comparable in detecting atrophy and defects of the external anal sphincter, although there is a substantial difference in grading of external anal sphincter atrophy. Correlation between three-dimensional anal endosonography and magnetic resonance imaging for thickness and length measurements is poor. Inconsistency between the two methods needs to be evaluated further.

Rectal Perforations After Barium Enema: A Review.
de Feiter PW, Soeters PB, Dejong CH. Dis Colon Rectum 2005 Nov 23;.
Rectal perforations after barium enema are rare. The overall mortality rate decreased in recent decades from approximately 50 to 35 percent as the result of advances in supportive and intensive care. Because of these advances, more aggressive surgical strategies were undertaken. With the advent of endoscopy, less barium enemas are performed. Consequently, the absolute incidence of complications has decreased. It is expected that in the future barium enemas will be replaced by more sensitive and less risky techniques, such as CT colonography and magnetic resonance colonography.

Sonographic Investigation of the Rectoanal Inhibitory Reflex: A Qualitative Pilot Study in Healthy

Females.
Orno AK, Marsal K. Dis Colon Rectum 2005 Dec 8;.
The rectoanal inhibitory reflex can readily be visualized with ultrasound as a wave of rectal contents entering the anal canal. The transport into the anal canal was not of voluntary origin and could be either noticed or not noticed by the subjects. The observed retrograde transportation in the anal canal was not noted by the subjects; it is related to a contraction in the internal anal sphincter and visualized for the first time using ultrasound.

Anorectal manometry: are fatigue rate and fatigue rate index of any clinical importance?
Bilali S, Pfeifer J. Tech Coloproctol 2005 Nov 21;.
Loss of voluntary contraction of the external anal sphincter is thought to be a factor in fecal incontinence. During anal manometry, computerized systems produce several parameters including fatigue rate (FR), which is the basis for calculating the fatigue rate index (FRI). Our aim was to evaluate FR and FRI and their clinical importance in patients suffering from fecal incontinence or severe constipation. FR and FRI were compared in patients suffering from fecal incontinence (group I) and severe constipation (group II). FR and FRI do not seem to be helpful in routine colorectal practice for evaluating the strength of the external anal sphincter.

4 – PROLAPSES 2005 11

Anatomic relationships of infracoccygeal sacropexy (posterior intravaginal slingplasty) trocar insertion.
Jelovsek JE, Sokol AI, Barber MD, Paraiso MF, Walters MD. Am J Obstet Gynecol 2005 Dec;193(6):2099-104.
OBJECTIVE: The purpose of this study was to describe the distances of the major bony, vascular, neurologic, and visceral structures to the path of the infracoccygeal sacropexy trocar and to determine the point of trocar entry into the vagina. STUDY DESIGN: Infracoccygeal sacropexy trocars were inserted bilaterally into 6 fresh frozen cadavers. Dissection was performed and the maximal length of the vagina, ischiorectal fossa, and pararectal spaces were measured bilaterally. Mean distances with 95% CIs to important anatomic structures were made from fixed points along the trocar's path. RESULTS: The path of the trocar began dorsal and lateral to the anus, passed through the ischiorectal fossa, iliococcygeus muscle, into the pararectal space, and into the posteriolateral vagina. Along this course, the mean distance (95% CI) to the pudendal vessels at the exit of Alcock's canal was 2.8 cm (2.1 to 3.4 cm) and rectum was 0.5 cm (0.2 to 0.9 cm). The closest inferior rectal vessel was 0.1 cm (0 to 0.3 cm). In the pararectal space, the mean distance to the ischial spine was 2.6 cm (1.7 to 3.5 cm). In 12 of 12 trocar passages, the inferior rectal branches of the pudendal artery and the rectum were within 1 cm or less of the trocar. The mean distance of trocar entry into the vagina was only 4.8 cm (4.3 to 5.4 cm) proximal to the hymenal ring compared with a mean total vaginal length of 8.7 cm (8.0 to 9.3 cm). CONCLUSION: This anatomic study suggests that the rectum and the inferior rectal branches of the pudendal neurovascular bundle may be at risk of injury during infracoccygeal sacropexy trocar placement. Additionally, this procedure appears to provide support to the mid-posterior vaginal wall, not the vaginal apex.

Abdominal sacral suspensions: analysis of complications using permanent mesh.
Bensinger G, Lind L, Lesser M, Guess M, Winkler HA. Am J Obstet Gynecol 2005 Dec;193(6):2094-8.
This study was undertaken to determine the complication rates of abdominal sacral suspensions (ASC) using polypropylene mesh and to compare the erosion rates in women who underwent ASC at the time of supracervical hysterectomy (SCH) versus total abdominal hysterectomy (TAH) versus ASC in women who had previously undergone TAH. ASC with polypropylene mesh is a safe surgical procedure for vaginal vault prolapse with low complication rates. Mesh erosion occurred in 8.2% of patients who underwent TAH with concurrent ASC. Patients having ASC at the time of TAH had a 7-fold increased risk for mesh erosion compared with patients who underwent SCH with ASC.

Evolution of the female pelvis and relationships to pelvic organ prolapse.
Schimpf M, Tulikangas P. Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):315-20. Epub 2005 Jan 15.
The female pelvis provides support for the lower limbs as well as for the gastrointestinal tract, the bladder, and the reproductive organs. It must also serve as a passageway for defecation, urination, and, possibly, delivery of an infant. The bones, ligaments, and muscles of the human female pelvis have evolved from our early ancestors. Pelvic organ prolapse may occur because of the limitations involved with adapting the pelvic bones, muscles, and ligaments previously used for other purposes into a supportive role. Here we review

these changing roles and functions of nonhuman primate and human female anatomy.

Uterus-sparing vaginal surgery of genitourinary prolapse employing biocompatible material.
Nicita G, Li Marzi V, Filocamo MT, Dattolo E, Marzocco M, Paoletti MC, Villari D. Urol Int 2005;75(4):314-8.
The study presents an original uterus sparing technique for transvaginal repair of total genitourinary prolapse. The technique employs a synthetic mesh of mixed polypropylene and 910 polyglactin fibers. Methods: The prosthesis creates a support for the cystocele, the cervix and the enterocele. It has four anchoring sites: two at the rear in the sacrospinous ligaments and two at the front in the arcus tendineous of the levator ani muscle. Between February 2001 and December 2004, 24 patients (mean age 66.9 years), presenting symptoms of uterine prolapse, cystocele and enterocele (POP-Q stage III-IV Aa associated to II-III-IV C), were treated with our procedure. Pre- and postoperative parameters were evaluated statistically. Results: No patient had any serious complications. The mean follow-up was 31.1 months (range 6-52). 19 patients (79.1%) have shown excellent results and have been completely cured. In 5 other cases (20.8%), the cystocele was completely cured and there was a significant improvement in the hysterocele and the enterocele. One patient required surgical treatment for postoperative stress incontinence. Statistical analysis of data regarding the pre- and postoperative prolapse stage demonstrated a high degree of objective cure rates ($p < 0.0001$). Conclusions: While hysterectomy remains the habitual treatment for severe uterine prolapse, our technique provides a promising alternative solution. It is also significant that there were no complications of erosion or infection associated with the prosthesis.

Anatomical outcome and quality of life following posterior vaginal wall prolapse repair using collagen xenograft.
Altman D, Lopez A, Gustafsson C, Falconer C, Nordenstam J, Zetterstrom J. Int Urogynecol J Pelvic Floor Dysfunct 2005;16(4):298-303
The aim of this study was to evaluate quality of life, sexual function, and anatomical outcome after posterior vaginal wall prolapse repair using a collagen xenograft. Thirty-three patients were evaluated preoperatively and at 6 and 12 months follow-up (FU). Quality of life and sexual function were assessed using a self-reported questionnaire. Prolapse staging was performed using the pelvic organ prolapse quantification system (POPQ). Preoperatively 3 patients had stage I, 26 patients stage II, and 4 patients stage III prolapse of the posterior vaginal wall. Prolapse of the posterior vaginal wall > or = stage II was observed in 7 patients (21%) at the 6-month FU and in 13 patients (39%) at the 12-month FU. Mean point Bp was reduced from -1.1 preoperatively to -2.5 at 6 months FU ($p < 0.01$) and -1.8 at 12 months FU ($p < 0.01$). Previous abdominal surgery was associated with a less favorable anatomical outcome (odds ratio: 2.0, 95% confidence interval: 1.5-3.8). There were no significant changes in sexual function or dyspareunia during the 1-year FU. Preoperatively 76% of the patients reported a negative impact on quality of life as a result of genital prolapse. There was a significant improvement in several variables associated with quality of life at 6 and 12 months FU. Posterior vaginal wall prolapse repair using a collagen xenograft was associated with an unsatisfying anatomical outcome at 1-year FU although several quality of life-associated variables affecting psychosocial function were improved. Improvement was not restricted to postoperative restoration of vaginal topography, and previous surgery had a negative effect on anatomical outcome.

Safety and effectiveness of Colpexin Sphere in the treatment of pelvic organ prolapse.
Lukban JC, Aguirre OA, Davila GW, Sand PK. Int Urogynecol J Pelvic Floor Dysfunct 2005 Nov 19;:1-6.
Our objective was to determine the safety and effectiveness of Colpexin Sphere in women with advanced genital prolapse. A total of 39 subjects were enrolled in our prospective multicenter clinical trial, and 27 completed the full 16-week assessment. At baseline, subjects were fitted with a sphere, instructed on insertion and removal, and educated on a regimen of pelvic floor muscle exercises performed with the device in place. Efficacy was evaluated by a baseline vs 16-week comparison of pelvic organ prolapse staging and pelvic floor muscle strength assessment. Safety evaluation included, but was not limited to, an assessment of vaginal mucosal integrity. Subjects also completed a patient satisfaction questionnaire at the end of the study. Improvement in the prolapse of at least one vaginal segment was seen in 81.5% of the subjects, while 63% exhibited improved muscle function on digital examination at 16 weeks. Twenty-five (92.6%) would recommend the device to treat prolapse, and most found it easy to insert (96.3%) and remove (100%). In short-term usage, problems with urination (29.6%) and defecation (72%) were reported, primarily due to device displacement. Two subjects developed superficial vaginal mucosal ulceration, which resolved spontaneously. No significant adverse events were reported.

Experience of 3711 stapled haemorrhoidectomy operations.
Ng KH, Ho KS, Ooi BS, Tang CL, Eu KW. Br J Surg 2005 Dec 1;.

Stapled haemorrhoidectomy has been routinely performed in the Department of Colorectal Surgery, Singapore General Hospital since 1999. Considerable experience of stapled haemorrhoidectomy confirms it as a safe and effective procedure.

Anal Fissure and Minor Anorectal Sepsis After Stapled Hemorrhoidectomy.
Dis Colon Rectum 2005 Nov 16;.

Stapled Hemorrhoidopexy: An Alternative Technique for the Treatment of Bleeding Anorectal Varices. Report of a Case.
Parvaiz A, Azeem S, Singh RK, Lamparelli M. Dis Colon Rectum 2005 Dec 8;.

Stapled Hemorrhoidopexy: A New Device and Method of Performance Without Using A Pursestring Suture.
Hoffman GH. Dis Colon Rectum 2005 Nov 16;.
PURPOSE: This study was designed to develop a more reliable device and technique that will allow for the safer and reproducibly consistent performance of a stapled hemorrhoidopexy without using a pursestring suture. This device and technique must allow the surgeon to be able to control the volume of tissue drawn into the stapler center chamber during the performance of the procedure. In a porcine model the performance of each procedure required approximately one minute. CONCLUSIONS: A procedure and device have been developed that allow for the rapid, safe, and reliable performance of a sutureless stapled hemorrhoidopexy by using a new mucosal impalement device and technique in the porcine model. It was used successfully in the porcine model under simulated diverse clinical circumstances. The procedure is easy to teach and learn and has potential applicability for use in humans.

New devices for stapled rectal mucosectomy: a multicenter experience.
Pinheiro Regadas FS, Murad Regadas SM, Rodrigues LV, Misici R, Tramujas I, Barreto JB, Alvaro Lins M, Roberto Silva F, Regadas Filho FS. Tech Coloproctol 2005 Nov 21;.

Submucosal reconstructive hemorrhoidectomy (Parks' operation): a 20-year experience.
Rosa G, Lolli P, Piccinelli D, Vicenzi L, Ballarin A, Bonomo S, Mazzola F. Tech Coloproctol 2005 Nov 21;.

5 – RETENTIONS 2005 11

Chronic urinary retention and pelvic floor hypertonicity after surgery for endometriosis: a case series.
Gehrich AP, Aseff JN, Iglesia CB, Fischer JR, Buller JL. Am J Obstet Gynecol 2005 Dec;193(6):2133-7.
OBJECTIVE: The purpose of this study was to evaluate 4 cases of chronic urinary retention and pelvic floor muscle spasms after surgery for endometriosis. STUDY DESIGN: These patients underwent a complete history, physical exam, and diagnostic work- up. The results were analyzed with regards to type and extent of inciting surgery, diagnostic findings, postoperative recovery, and treatment success. RESULTS: The patients' mean age was 39.5 years and all had undergone various surgical interventions for endometriosis. In addition to urinary retention, all developed debilitating pelvic floor muscle spasm postoperatively. Physical exam revealed pelvic floor hypertonicity and urodynamics indicated hypoactive detrusor contractility. Neurodiagnostic testing gave evidence of neuropathy in all subjects. CONCLUSION: Extensive endometriosis surgery may pose a risk for postoperative bladder dysfunction and pelvic floor muscle spasm.

Laparoscopic subtotal colectomy with cecorectal anastomosis for slow-transit constipation.
Iannelli A, Fabiani P, Mouiel J, Gugenheim J. Surg Endosc 2005 Nov 24;.
Subtotal colectomy with cecorectal anastomosis represents an interesting alternative to total colectomy with ileorectal anastomosis. Several technical variants to the methods for performing the anastomosis between the cecum and the rectal stump after subtotal colectomy have been reported. The mechanical, antiperistaltic, end-to-end cecorectal anastomosis is safe and easy to perform. The authors aimed to assess the safety and feasibility of this technique performed laparoscopically in a series of four patients. All the procedures were completed laparoscopically. The mean time for surgery was 200 min (range, 180-220 min). There was no mortality and no postoperative complications. The mean hospital stay was 4 days (range, 3-5 days). This technique can be performed laparoscopically with all the advantages inherent to the minimally invasive approach.

6 – INCONTINENCES 2005 11

Urinary and Anal Incontinence in Morbidly Obese Women Considering Weight Loss Surgery.

Richter HE, Burgio KL, Clements RH, Goode PS, Redden DT, Varner RE. Obstet Gynecol 2005 Dec;106(6):1272-1277.
To estimate prevalence and correlates of urinary and anal incontinence in morbidly obese women undergoing evaluation for laparoscopic weight loss surgery, from October 2003 to February 2005, 180 women with body mass index (BMI) of 40 or greater underwent evaluation for laparoscopic weight loss surgery. Using an established Web site, questionnaires were completed to assess symptoms of urinary incontinence, including the Medical, Epidemiological, and Social Aspects of Aging Questionnaire (MESA). Anal incontinence was assessed by asking, "Do you have any uncontrolled anal leakage?" A number of clinical and demographic variables were examined as potential risk factors for urinary incontinence and anal incontinence. RESULTS: Mean age was 39.8 years (range 16-55). Body mass index ranged from 40 to 81 (mean 49.5). Prevalence of urinary incontinence was 66.9% and anal incontinence was 32.0% (45.6% loss of gas only, 21.1% liquid stool only, 24.6% gas and liquid stool only, 8.8% solid stool). In simple logistic regression, presence of urinary incontinence was associated with age (odds ratio [OR] 1.05, 95% confidence interval [CI] 1.01-1.09), number of children (OR 1.54, 95% CI 1.15-2.07), anal incontinence (OR 6.34, 95% CI 2.52-15.93), arthritis (OR 6.04, 95% CI 1.76-20.78), and sleep apnea (OR 2.30, 95% CI 1.21-4.37). Multivariable logistic regression identified 3 factors independently associated with urinary incontinence: number of children (OR 1.55, 95% CI 1.12-2.12), arthritis (OR 5.46, 95% CI 1.51-19.73), and anal incontinence (OR 6.27, 95% CI 2.42-16.26). Presence of anal incontinence was associated only with the presence of urinary incontinence (OR 6.34, 95% CI 2.52-15.93). CONCLUSION: Prevalence of urinary and anal incontinence is high in this group of morbidly obese women as compared with the general population. Studies are needed to determine the effect of weight loss on urinary and anal incontinence symptoms in the morbidly obese woman. LEVEL OF EVIDENCE: III.

Anal incontinence in women with and those without pelvic floor disorders.
Nichols CM, Ramakrishnan V, Gill EJ, Hurt WG. Obstet Gynecol 2005 Dec;106(6):1266-71.
To compare the prevalence of anal incontinence and anal sphincter injury in women with pelvic floor disorders (cases) with those in a group of normal control subjects and to evaluate the relationship between sphincter injury and anal incontinence in each group. METHODS: We previously reported the results of a cross-sectional study of 100 women with pelvic floor disorders (>/= stage II pelvic organ prolapse and/or urinary incontinence). In this study, we compared those cases with 90 controls (stage 0 or I pelvic organ prolapse and no urinary incontinence) who completed the Rockwood-Thompson fecal incontinence severity index, in which scoring (0-61) is based on the frequency and type of anal incontinence. All women underwent endoanal ultrasonography, and the internal and external anal sphincters were reported as intact versus disrupted. Chi-square test, Student t test, and logistic regression were used for statistical analysis. RESULTS: Women with pelvic floor disorders were significantly more likely to report anal incontinence (54% versus 17.8%, odds ratio [OR] 5.4, 95% confidence interval [CI] 2.8-10.6, P < .001) and had higher mean fecal incontinence severity index scores (22.3 +/- 13 versus 12.7 +/- 6.3, P = .006) than controls. Cases demonstrated higher rates of anal sphincter defects on ultrasound examination than did controls (52% versus 30%, P = .007). Anal incontinence was significantly associated with anal sphincter injury in women with pelvic floor disorders (OR 36.4, 95% CI 12-114, P < .001) and in controls (OR 5.9, 95% CI 3-11, P = .002). CONCLUSION: Anal incontinence was more common in women with pelvic floor disorders than normal controls and may be due to higher rates of anatomic anal sphincter disruption in this group. LEVEL OF EVIDENCE: II-2.

Combined urinary and faecal incontinence.
Kapoor DS, Thakar R, Sultan AH Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):321-8. Epub 2005 Feb 24.
Combined urinary and faecal (liquid or solid) incontinence (double incontinence) is the most severe and debilitating manifestation of pelvic floor dysfunction. The community prevalence is 9-19% (urinary) and 5-10% (faecal), increasing with age. Pathophysiological factors include childbirth-associated external anal sphincter injury and pudendal nerve damage, pelvic floor descent, menopause, collagen disorders and multiple sclerosis-like conditions. The presence of crossed reflexes between the bladder, urethra, anorectum and pelvic floor in animal studies may explain the comorbidity of urinary and faecal urgency. Surgical treatment is based on aetiology and combined optimum techniques such as colposuspension or suburethral sling with overlapping sphincteroplasty. Other methods for improving sphincteric control include sacral nerve neuromodulation, bulking agents and artificial sphincters.

Risk factors for obstetrical anal sphincter lacerations.
Dandolu V, Chatwani A, Harmanli O, Floro C, Gaughan JP, Hernandez E. Int Urogynecol J Pelvic Floor Dysfunct 2005;16(4):304-7

Episiotomy in the absence of instrumental delivery seems to be protective with an OR of 0.9 [95% confidence interval (CI): 0.88-0.93]. Instrumental vaginal delivery, particularly forceps delivery, appears to be an important risk factor for anal sphincter tears. The risk previously attributed to episiotomy is probably due to its association with instrumental vaginal delivery. Forceps delivery is associated with higher occurrence of anal sphincter injury compared to vacuum delivery.

The extent of endosonographic anal sphincter defects after primary repair of obstetric sphincter tears increases over time and is related to anal incontinence.
Starck M, Bohe M, Valentin L. Ultrasound Obstet Gynecol 2005 Nov 22;.
OBJECTIVE: To describe and classify endosonographic obstetric sphincter defects at 1 week, 3 months and 1 year after primary repair, and to relate the endosonographic results to anal sphincter pressure and to symptoms of anal incontinence over time. METHODS: Forty-one women who had suffered a third- or fourth-degree perineal tear at delivery underwent anal endosonography and anal manometry 1 week, 3 months and 1 year after primary suture of the tear. The extent of the endosonographic defects was described using defect scores ranging from 0 (no defect) to 16 (maximal defect), the score taking into account the location and the longitudinal and circumferential extent of the defect. The women answered a questionnaire with regard to bowel function 1 and 4 years after delivery, the degree of incontinence being expressed as a Wexner score. RESULTS: Some 90% (37/41) of the women had endosonographic defects at 1 week, 3 months and 1 year. The endosonographic defect scores increased significantly between the first and second examinations and then remained unchanged. At 1 year there was a negative correlation between endosonographic sphincter defect score and sphincter pressure. At 1 and 4 years, 54% (22/41) and 61% (25/41) of the women, respectively, had a Wexner score >/= 1. There was a positive correlation between the endosonographic sphincter defect score at 1 week, 3 months and 1 year and the Wexner incontinence score at 1 and 4 years. The endosonographic sphincter defect score at 1 week was the variable that was most predictive of the Wexner score at 4 years (r = 0.48, P = 0.002). CONCLUSION: The higher the endosonographic sphincter defect score after primary repair of an obstetric sphincter tear the lower the sphincter pressure and the higher the risk of anal incontinence.

Does pelvic organ prolapse quantification exam predict urethral mobility in stages 0 and I prolapse?
Noblett K, Lane FL, Driskill CS. Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):268-71. Epub 2005 Apr 26.
OBJECTIVE: To determine if women with anterior support stages 0 or I by pelvic organ prolapse quantification (POP-Q) system require Q-tip testing to assess urethral mobility. METHODS: A prospective study of 134 women presenting for urogynecologic evaluation were examined and assigned stages of anterior wall support according to the POP-Q system. A Q-tip test was performed and urethral hypermobility was defined as a straining angle > or =30 degrees. The Spearman correlation coefficient was used to assess degree of correlation between POP-Q point Aa position and Q-tip values. RESULTS: The correlation coefficient between point Aa position and Q-tip angle was r = 0.787 (P < 0.001). Urethral hypermobility was noted in 91% of stage I and 100% of stage II-IV patients. The positive predictive value of Q-tip angle > or =30 degrees in stage I-IV prolapse was 99%. CONCLUSION: The POP-Q system is highly predictive of straining urethral angle in all stages of prolapse.

The direct cost of stress urinary incontinence among women in a Medicaid population.
Kinchen KS, Long S, Chang S, Girts TK, Pantos B. Am J Obstet Gynecol 2005 Dec;193(6):1936-44.
OBJECTIVE: To describe health care utilization and costs for women diagnosed with stress urinary incontinence in a Medicaid population. STUDY DESIGN: We utilized a pooled database of claims for women enrolled in Medicaid in 1 of 3 states. Health care utilization and costs were compared for 12 months before and 12 months after a woman's urinary incontinence diagnosis. Additional analyses utilized data from a fourth state. RESULTS: Of 13,672 women with diagnosed stress urinary incontinence, average urinary incontinence-related costs were approximately 800 dollars in the 12-month study period, less than 0.1% of total Medicaid spending. Thirteen percent of women underwent a surgery for stress urinary incontinence in the study period, with sling procedures performed most commonly. CONCLUSION: Although population prevalence estimates of any stress urinary incontinence symptoms often are high, diagnosis and health care utilization in the Medicaid population is low. Overall costs of stress urinary incontinence treatment in Medicaid currently are minimal. Further efforts to understand the appropriate detection, diagnosis, and treatment of women with stress urinary incontinence are needed.

Sacral neuromodulation for the treatment of refractory urinary urge incontinence after stress incontinence surgery.
Sherman ND, Jamison MG, Webster GD, Amundsen CL. Am J Obstet Gynecol 2005 Dec;193(6):2083-7.

Sacral neuromodulation is a viable option for the treatment of refractory urinary urge incontinence that occurs after stress urinary incontinence surgery. Older women with no pelvic floor activity who are remote from their incontinence surgery may have a suboptimal response.

Suburethral sling materials: best outcome with autologous tissue.
Simsiman AJ, Powell CR, Stratford RR, Menefee SA. Am J Obstet Gynecol 2005 Dec;193(6):2112-6.
Autograft has a significantly higher cure rate when used for suburethral slings.

Diabetes and urinary incontinence in 50- to 90-year-old women: a cross-sectional population-based study.
Lewis CM, Schrader R, Many A, Mackay M, Rogers RG Am J Obstet Gynecol 2005 Dec;193(6):2154-8.
OBJECTIVE: The purpose of this study was to examine the association between urinary incontinence and diabetes in a large community-based population of women. STUDY DESIGN: The Health and Retirement Study is a large multistage area probability sample of households in the United States. Data were collected from 10,678 women aged 50 to 90 years. Dependent variables were no, mild, and severe incontinence. Independent variables consisted of demographic and health data. Diabetes was dichotomized into insulin-requiring (IRDM) and non-insulin-requiring disease (NIRDM). Survey-based ordered logistic regression was used to simultaneously analyze associations between incontinence groups. RESULTS: Urinary incontinence was reported by 22% (2319/10,678) of women. IRDM was associated with urinary incontinence (odds ratio [OR] 1.63; 95% CI 1.28-2.09), but NIRDM was not (OR 1.20; 95% CI 1.00-1.45). CONCLUSION: IRDM is independently associated with urinary incontinence in women ages 50 to 90 years, independent of patient body mass index, comorbidities, or age.

Suburethral sling using the transobturator approach: a quality-of-life analysis.
Lukban JC. Am J Obstet Gynecol 2005 Dec;193(6):2138-43.

Urinary incontinence in nulliparous women and their parous sisters.
Buchsbaum GM, Duecy EE, Kerr LA, Huang LS, Guzick DS. Obstet Gynecol 2005 Dec;106(6):1253-8.
Vaginal birth does not seem to be associated with urinary incontinence in postmenopausal women. Considering the high concordance in continence status between sister pairs, and considering that the majority of parous women are continent, an underlying familial predisposition toward the development of urinary incontinence may be present. LEVEL OF EVIDENCE: II-2.

Women's narratives of long-term urinary incontinence.
Bradway C. Urol Nurs 2005 Oct;25(5):337-44.
Study findings suggest (a) long-term female UI is primarily conceptualized as a condition integrated into a larger life story, (b) women with long-term UI relate stories that follow a narrative format, and (c) long-term, female UI is heterogeneous. Findings go beyond existing literature by suggesting that women's UI narratives serve an important function in understanding the lived experience and the meaning of UI.

Self-monitoring and pelvic floor muscle exercises to treat urinary incontinence.
Kincade JE, Dougherty MC, Busby-Whitehead J, Carlson JR, Nix WB, Kelsey DT, Smith FC, Hunter GS, Rix AD. Urol Nurs 2005 Oct;25(5):353-63.
Urinary incontinence (UI) is a common chronic condition among women. Treatment of UI can involve behavioral techniques, pharmacological strategies, or surgical intervention. Clinically, treatment strategies should start with the simplest and least invasive measures. To overcome the deficiencies in previous research and provide definitive information for clinical practice, a randomized clinical trial is currently underway. This clinical trial uses a pretest-posttest design to first determine the effectiveness of self-monitoring techniques before subjects are randomized into one of two treatment groups or an attentional control group with a 1-year followup. The study design, sampling plan, and interventions used in an ongoing clinical trial to assess the effectiveness of self-monitoring and efficacy of biofeedback to treat UI in women are described. Innovative techniques to assess adherence to the pelvic muscle exercise protocol are addressed.

Vaginal mesh extrusion associated with use of Mentor transobturator sling.
Siegel AL. Urology 2005 Nov;66(5):995-9.
OBJECTIVES: To describe my experience of vaginal mesh extrusion using the monofilament polypropylene transobturator sling, the Mentor ObTape. The Mentor ObTape was the first transobturator sling developed as an alternative to the retropubic commercially available suburethral slings for providing mid-urethral support as treatment of female stress urinary incontinence. METHODS: Thirty patients underwent transobturator

suburethral sling placement for anatomic stress urinary incontinence using the ObTape from October 2003 to January 2005. A retrospective chart review was performed to retrieve data on the safety, efficacy, complications, and outcomes using this product. RESULTS: Six patients (20%) to date have presented with defective vaginal healing manifested by extrusion of the sling material. Five patients required surgical removal of the sling material, and one underwent a trial of conservative management. No urethral erosions were noted. CONCLUSIONS: In my experience, the Mentor ObTape sling, which uses a nonwoven, minimally elastic, micropore, monofilament polypropylene mesh, incurs an unacceptably high rate of defective vaginal wound healing and mesh extrusion.

Lower urinary tract symptoms after total and subtotal hysterectomy: results of a randomized controlled trial.
Gimbel H, Zobbe V, Andersen BJ, Sorensen HC, Toftager-Larsen K, Sidenius K, Moller N, Madsen EM, Vejtorp M, Clausen H, Rosgaard A, Villumsen J, Gluud C, Ottesen BS, Tabor A. Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):257-62.
The aim of this Danish multicenter trial was to compare the proportion of women with lower urinary tract symptoms after total abdominal hysterectomy (TAH) and subtotal abdominal hysterectomy (SAH) for benign uterine disorders. A total of 319 women were randomized to TAH (n = 158) or SAH (n = 161). Women were followed up for 1 year by strict data collection procedures, including postal questionnaires. Results were analyzed by intention-to-treat analyses. Urinary incontinence was found less often among TAH women than among SAH women. This was due to a larger reduction of the number of women with stress and urinary incontinence in the TAH group. No other differences were found between the two operation methods. The number of women with urinary incontinence and frequency was reduced from study entry for follow-up, while double/triple voiding was increased. Incontinent women had significantly lower quality of life scores than continent women.

Minimally invasive surgical techniques for stress incontinence surgery.
Morley R, Nethercliffe J. Best Pract Res Clin Obstet Gynaecol 2005 Dec;19(6):925-40. Epub 2005 Nov 7.

Anatomical and functional significance of urogenital hiatus in primary urodynamic stress incontinence.
Huang WC, Yang SH, Yang JM. Ultrasound Obstet Gynecol 2005 Dec 1;.
In primary urodynamic stress incontinence, an increased resting genitohiatal distance or genitohiatal angle on sonographic imaging implies anterior vaginal wall prolapse. In addition, an increased genitohiatal distance is associated with functional impairment of urethral closure.

Management of ureteral injuries associated with vaginal surgery for pelvic organ prolapse.
Kim JH, Moore C, Jones JS, Rackley R, Daneshgari F, Goldman H, Vasavada S. Int Urogynecol J Pelvic Floor Dysfunct 2005;30:1-5.
Due to the anatomic proximity of the urinary and genital tracts, iatrogenic ureteral injury during pelvic organ prolapse repairs is a serious complication that we have managed in increasing number at our institution. However, few centers have reported on their experience with ureteric injuries associated with gynecologic reconstructive surgery. These ureteral injuries may lead to much morbidity, in particular the formation of ureterovaginal fistula, and the potential loss of renal function especially when diagnosed postoperatively. It is necessary, therefore, for surgeons to have a thorough knowledge of ureteral anatomy and to take precautions to prevent such injuries. The purpose of this article is to review this pertinent anatomy and the key principles of management of ureteric complications of transvaginal surgery for pelvic organ prolapse. The present study illustrates the application of our treatment algorithm based on the time of presentation and the patient condition.

Prospective randomized comparison of transobturator suburethral sling (Monarc) vs suprapubic arc (Sparc) sling procedures for female urodynamic stress incontinence.
Wang AC, Lin YH, Tseng LH, Chih SY, Lee CJ. Int Urogynecol J Pelvic Floor Dysfunct 2005 Dec 3;:1-5.
Monarc and Sparc suburethral taping proved to be equally safe and posed no remarkable impact on voiding function in a short term postoperative follow up. However, intraoperative urethrocystoscopy is recommended for safety in both the Monarc and Sparc procedures.

Preliminary results of peripheral transcutaneous neuromodulation in the treatment of idiopathic fecal incontinence.
Queralto M, Portier G, Cabarrot PH, Bonnaud G, Chotard JP, Nadrigny M, Lazorthes F. Int J Colorectal Dis 2005 Dec 6;:1-3.

Few therapeutic tools are available for treating idiopathic anal incontinence. Sacral neuromodulation appears to be effective in selected patients but requires surgical implantation of a permanent electrical stimulator. The aim of this work was to assess the efficiency of posterior tibial nerve (PTN) transcutaneous electrical nerve stimulation (TENS) in the treatment of anal idiopathic incontinence. METHODS: Ten women were treated by PTN TENS, 20 min a day for 4 weeks. Functional results were evaluated by Wexner's incontinence score and anorectal manometry. RESULTS: Eight of the ten patients showed a 60% mean improvement of their incontinence score after 4 weeks. This improvement remained stable over the 12-week follow-up period. Manometric parameters did not differ before and after stimulation. CONCLUSION: PTN neuromodulation without surgically implanted electrode could represent a safe and low-cost alternative to permanent sacral neuromodulation for idiopathic anal incontinence.

Fecal incontinence in US women: a population-based study.
Melville JL, Fan MY, Newton K, Fenner D. Am J Obstet Gynecol 2005 Dec;193(6):2071-6.
OBJECTIVE: The purpose of this study was to determine the prevalence of fecal incontinence (FI) and associated risk factors in a broad age range of community-dwelling women. STUDY DESIGN: This was a population-based, age-stratified postal survey of 6000 women aged 30 to 90 years enrolled in a large HMO in Washington State. Sample was linked to longitudinal automated medical data. FI was defined as loss of liquid or solid stool at least monthly. RESULTS: The response rate was 64%. The prevalence of FI was 7.2%; prevalence increased notably with age. Women with FI reported significant lifestyle alteration and functional disability. Older age (adjusted odds ratio [OR] 2.11-2.22), major depression (OR 2.73), urinary incontinence (OR 2.32), medical comorbidity (OR 1.76-2.58), and operative vaginal delivery (OR 1.52) were significantly associated with increased odds of FI. CONCLUSION: In this large report of US community-dwelling women, FI was a prevalent condition. Age, major depression, urinary incontinence, medical illness, and operative vaginal delivery were strongly associated with likelihood of FI.

Antegrade continence enema in the treatment of obstructed defaecation with or without faecal incontinence.
Hirst GR, Arumugam PJ, Watkins AJ, Mackey P, Morgan AR, Carr ND, Beynon J. Tech Coloproctol 2005 Nov 21;.

7 – PAIN 2005 11
Laparoscopic Management of Rectal Endometriosis.
Jatan AK, Solomon MJ, Young J, Cooper M, Pathma-Nathan N. Dis Colon Rectum 2005 Dec 8;.
Patients with complex endometriosis of the rectum can be safely managed laparoscopically using a multidisciplinary approach. This case series suggests that a history of rectal pain during defecation that occurs only during menstruation is predictive of females with more extensive rectal disease.

A randomized, double-blind, placebo-controlled trial of duloxetine in the treatment of women with fibromyalgia with or without major depressive disorder.
Arnold LM, Rosen A, Pritchett YL, D'Souza DN, Goldstein DJ, Iyengar S, Wernicke JF. Pain 2005 Nov 16;.
This was a 12-week, randomized, double-blind, placebo-controlled trial to assess the efficacy and safety of duloxetine, a selective serotonin and norepinephrine reuptake inhibitor, in 354 female patients with primary fibromyalgia, with or without current major depressive disorder. Bboth duloxetine 60mg QD and duloxetine 60mg BID were effective and safe in the treatment of fibromyalgia in female patients with or without major depressive disorder.

Cortical representation of experimental tooth pain in humans. BIONDETTI
Jantsch HH, Kemppainen P, Ringler R, Handwerker HO, Forster C. Pain 2005 Nov 12;.
Cortical processing of electrically induced pain from the tooth pulp was studied in healthy volunteers with fMRI. In a first experiment, cortical representation of tooth pain was compared with that of painful mechanical stimulation to the hand. The contralateral S1 cortex was activated during painful mechanical stimulation of the hand, whereas tooth pain lead to bilateral activation of S1. The S2 and insular region were bilaterally activated by both stimuli. In S2, the center of gravity of the activation during painful mechanical stimulation was more medial/posterior compared to tooth pain. In the insular region, tooth pain induced a stronger activation of the anterior and medial parts. The posterior part of the anterior cingulate gyrus was more strongly activated by painful stimulation of the hand. Differential activations were also found in motor and frontal areas including the orbital frontal cortex where tooth pain lead to greater activations. In a second experiment, we compared the effect of weak with strong tooth pain. A significantly greater activation by more painful tooth stimuli was found in most of those areas in which tooth pain had induced more activation than

hand pain. In the medial frontal and right superior frontal gyri, we found an inverse relationship between pain intensity and BOLD contrast. We concluded that tooth pain activates a cortical network which is in several respects different from that activated by painful mechanical stimulation of the hand, not only in the somatotopically organized somatosensory areas but also in parts of the 'medial' pain projection system.

For fibromyalgia, which treatments are the most effective?
Yousefi P, Coffey J. J Fam Pract 2005 Dec;54(12):1094-5.
There is no single most effective modality for the treatment of fibromyalgia syndrome, and no objective comparison of the results from the different studies is available. Low-dose tricyclic antidepressants (TCAs) improve sleep quality and global well-being and have a moderate beneficial effect on tenderness and stiffness (strength of recommendation [SOR]: A, based on a systematic review of randomized controlled trials [RCTs]). Selective serotonin reuptake inhibitors (SSRIs) may moderately improve fibromyalgia-related symptoms (SOR: B, based on a few RCTs). The serotonin and norepinephrine reuptake inhibitors (SNRIs) duloxetine (Cymbalta) and milnacipran (Ixel, not currently available in the US) improve pain and other symptoms (SOR: B, based on single RCTs). Tramadol (Ultram) improves pain and other outcomes (SOR: A, based on a few RCTs). Cyclobenzaprine (Flexeril) improves both pain and sleep quality (SOR: A, based on a systematic review of RCTs). Aerobic exercise improves overall functional capacity and sense of well-being for patients with fibromyalgia (SOR: A, based on a systematic review of RCT). Cognitive behavioral therapy improves patients' self-reported symptoms (SOR: A, based on RCTs).

Is a negative colonoscopy associated with reassurance or improved health-related quality of life in irritable bowel syndrome?
Spiegel BM, Gralnek IM, Bolus R, Chang L, Dulai GS, Naliboff B, Mayer EA. Gastrointest Endosc 2005 Dec;62(6):892-899.
Although colonoscopy is rarely of clinical use in irritable bowel syndrome (IBS), it is, nonetheless, frequently performed. Proponents contend that a normal colonoscopy provides reassurance and improves health-related quality of life (HRQOL). However, no previous data have measured these effects. We sought to measure the association of a normal colonoscopy with reassurance and HRQOL in patients with IBS aged <50 years. The role of colonoscopy in IBS may be limited but requires confirmation in prospective trials.

8 – FISTULAE 2005 11

Superiority of Asymmetric Modified Limberg Flap for Surgical Treatment of Pilonidal Disease.
Cihan A, Ucan BH, Comert M, Cesur A, Cakmak GK, Tascilar O. Dis Colon Rectum 2005 Dec 8;.
PURPOSE: Cases treated surgically using wide excision plus classic Limberg flap or wide excision plus asymmetric modified Limberg flap were compared with respect to complications and patient comfort in the postoperative period. METHODS: In this prospective, randomized study, 68 of 70 patients were followed for a mean of 29.22 (range, 6-44) months after wide excision plus classic Limberg flap (Group 1, n = 35) and after asymmetric modified Limberg flap closure (Group 2, n = 33). RESULTS: There were significantly more macerations in Group 1 ($P < 0.001$). All macerations were detected on the lower part of the incision left on the intergluteal sulcus, and infections occurred subsequent to maceration. The infection rate was statistically higher in Group 1 than in Group 2 ($P = 0.028$). We noted that as a result of these complications, time to suture removal ($P = 0.001$), discharge from hospital ($P = 0.001$), and time off from work ($P = 0.001$) were significantly longer for Group 1 than for Group 2. There were two recurrences in the inferior part of the suture line in Group 1 and none in Group 2, which showed no statistical difference ($P = 0.493$). CONCLUSIONS: The deep intergluteal sulcus and midline gap were slightly flattened over the anococcygeal region. The vacuum effect was decreased, and there were less macerations and fewer infections. Time off from work and discharge time from hospital were shortened by eliminating the moisture effect and reducing complications by lateralizing the lower part of the suture line.

Management of Pilonidal Sinus Disease With Oblique Excision and Primary Closure: Results of 493 Patients.
Mentes O, Bagci M, Bilgin T, Coskun I, Ozgul O, Ozdemir M. Dis Colon Rectum 2005 Nov 16;.
The ideal operation for pilonidal sinus disease treatment must be simple and effective. The technique of oblique excision and primary closure may be considered an alternative operation for pilonidal. At the end of the follow-up period, the recurrence rate was 5.6 percent.

Meta-analysis of randomized clinical trials comparing drainage alone vs primary sphincter-cutting procedures for anorectal abscess-fistula.
Quah HM, Tang CL, Eu KW, Chan SY, Samuel M. Int J Colorectal Dis 2005 Nov 30;:1-8.

There is no conclusive evidence if simple drainage or sphincter-cutting procedure is better in the treatment of anorectal abscess-fistula.

9 – BEHAVIOUR, PSYCHOLOGY, SEXOLOGY 2005 11

Sexual abuse history: prevalence, health effects, mediators, and psychological treatment.
Leserman J. Psychosom Med 2005 Nov-Dec;67(6):906-15.
OBJECTIVE: Lifetime history of sexual abuse is estimated to range between 15% and 25% in the general female population. People who are sexually abused are at greater risk for a whole host of physical health disorders that may occur many years after the abusive incident(s). Despite the high prevalence of this trauma and its association with poor health status, abuse history often remains hidden within the context of medical care. The aims of this review are to determine which specific health disorders have been associated with sexual abuse in both women and men, to outline the types of sexual abuse associated with the worst health outcome, to discuss some possible explanations and mediators of the abuse/health relationship, to discuss when and how to talk about abuse within a clinical setting, and to present evidence for which psychological treatments have been shown to improve the mental health of patients with past sexual abuse. METHOD: To meet these objectives, we have reviewed a wide literature on the topic of sexual abuse. RESULTS: We demonstrate that abuse appears to be related to greater likelihood of headache and gastrointestinal, gynecologic, and panic-related symptoms; that the poor health effects associated with abuse are also seen in men; that abuse involving penetration and multiple incidents appears to be the most harmful, and that exposure-type therapies with and without cognitive behavioral therapy hold promise for those with abuse history. CONCLUSION: We need more research examining psychological treatments that might be efficacious in treating the physical health problems associated with sexual abuse history.

Genital herpes: a review.
Beauman JG. Am Fam Physician 2005 Oct 15;72(8):1527-34.

Family violence.
Tolan P, Gorman-Smith D, Henry D. Annu Rev Psychol 2006;57:557-83.

Effects of pregnancy and childbirth on postpartum sexual function: a longitudinal prospective study.
Connolly A, Thorp J, Pahel L. Int Urogynecol J Pelvic Floor Dysfunct 2005 Jul-Aug;16(4):263-7.

10 – MISCELLANEOUS 2005 11

Hysterectomy.
Clayton RD. Best Pract Res Clin Obstet Gynaecol 2005 Nov 4;.
Hysterectomy is one of the most commonly performed major surgical procedures; approximately 100 000 are performed in the UK each year. Hysterectomy can be total or subtotal. The postulated benefits of subtotal hysterectomy-better pelvic floor and sexual function-have not been confirmed in randomised trials. Traditionally, hysterectomy was performed using either an abdominal or vaginal approach. More recently, laparoscopic techniques have been used. The decision about the technique used is often related to the surgeon's training and expertise, as the indications for each technique overlap. Vaginal hysterectomy is probably the preferred route because it is quicker and cheaper than laparoscopic hysterectomy, with no other clear differences in outcome measures. Laparoscopic hysterectomy has a number of advantages over abdominal hysterectomy: specifically, shorter hospital stay and quicker return to normal activities; complication rates, however, appear to be greater. This also seems to be the case with radical hysterectomy performed for cervical cancer.

Elevated anal squamous cancer risk associated with benign inflammatory anal lesions.
Nordenvall C, Nyren O, Ye W. Gut 2005 Nov 18;.
The role of benign anal lesions, including fissures, fistulas, perianal abscesses, and hemorrhoids, remains undefined. Few data from large cohort studies are available. Inflammatory benign anal lesions are associated with a significantly increased long-term risk for anal cancer. By contrast, hemorrhoids appear not to be a risk factor for this malignancy.

Local recurrence after curative resection for rectal cancer is associated with anterior position of the tumour.
Chan CL, Bokey EL, Chapuis PH, Renwick AA, Dent OF. Br J Surg 2005 Nov 21;.
Mobilization of rectal cancer can be difficult if the tumour is located anteriorly and may result in a higher incidence of local recurrence. The aim of this study was to determine whether local recurrence and survival

following curative resection of rectal cancer were associated with the position of the tumour. Anterior position is an independent negative prognostic factor for both local recurrence and survival after curative resection of rectal cancer.