FORUM 2005 10

Principles and process in the development of the Mayo Clinic's individual and institutional conflict of interest policy.
Camilleri M, Gamble GL, Kopecky SL, Wood MB, Hockema ML
Mayo Clin Proc 2005 Oct;80(10):1340-6.
In 1995, federal regulations required all academic medical centers to implement policies to manage individual financial conflict of interest. At the Mayo Clinic, all staff are salaried, and all medically related intellectual property from the staff belongs to the clinic. Hence, it was necessary to develop a policy for institutional conflict of interest to complement the policy for individual conflicts of interest. This article addresses the principles and process that led to the development of the Mayo Clinic's policies that guide the management of conflict of interest of individuals and of the institution. Empowered by the Bayh-Dole Act, the Mayo Clinic participates in technology transfer through its entity Mayo Medical Ventures. Individual conflicts of interest arising from such technology transfer are associated with Institutional conflicts because all individual intellectual property belongs to the institution, per clinic policy. This policy addresses conflicts of interest that arise in research, leadership, clinical practice, investments, and purchasing. Associated with the statutory annual disclosure on personal consulting and other relationships with Industry, which are guided by federal regulations, all research protocols or grant applications require financial disclosure on initial submission and in annual progress reports. The clinic's Conflict of Interest Review Board was established to review each disclosure and recommend management of individual and institutional conflicts of interest according to policy.

Does anyone know who we are other than us?
Lucente V
Int Urogynecol J Pelvic Floor Dysfunct 2005 Oct 12;.

Unwanted foreign doctors: what is not being said about the brain drain.
Shafqat S, Zaidi AK
J R Soc Med 2005 Nov;98(11):492-3.

Brain drain from developing countries: how can brain drain be converted into wisdom gain?
Dodani S, Laporte RE
J R Soc Med 2005 Nov;98(11):487-91.
Brain drain is defined as the migration of health personnel in search of the better standard of living and quality of life, higher salaries, access to advanced technology and more stable political conditions in different places worldwide. This migration of health professionals for better opportunities, both within countries and across international borders, is of growing concern worldwide because of its impact on health systems in developing countries. Why do talented people leave their countries and go abroad? What are the consequences of such migrations especially on the educational sector? What policies can be adopted to stem such movements from developing countries to developed countries? This article seeks to raise questions, identify key issues and provide solutions which would enable immigrant health professionals to share their knowledge, skills and innovative capacities and thereby enhancing the economic development of their countries.

Informed consent: can a patient ever be fully informed?
Lupton M
Curr Opin Obstet Gynecol 2005 Dec;17(6):601-4.
PURPOSE OF REVIEW: The National Health Service Litigation Authority has issued a warning about the process of asking a patient for their consent prior to a medical procedure. This warning was issued in the light of the case of Chester v. Afshar. For the first time in English law the courts have appeared to state that failure to give a patient adequate information about a procedure is negligent per se. This article briefly examines the history of consent since the famous case of Bolam and reviews the recent legal commentary on the case of Chester. It will also consider a proposed solution to the question 'What is adequate information?' RECENT FINDINGS: The medicolegal literature traces the change in the legal test used to determine whether a patient has been adequately informed. It charts the evolution of a 'prudent patient' test and suggests ways in which medical practitioners might adequately fulfil their duty to inform patients properly. SUMMARY: Since the case of Chester v. Afshar it has become harder for a doctor to escape a charge of negligence if they have given inadequate information at the time of asking a patient for their consent to undergo a medical procedure. It is in everyone's interests - doctor and patient - to make the process of consent transparent and to an agreed national standard.

Developing the young academic surgeon.
Staveley-O'Carroll K, Pan M, Meier A, Han D, McFadden D, Souba W
J Surg Res 2005 Oct;128(2):238-42.
In the past, the process of developing the young academic surgeon was arguably less strategic, one that was often not deliberately managed and monitored, leading in some cases to academic drift and disillusionment. Once upon a time it was assumed that greatness was genetic and that the next triple threat would emerge when a pre-programmed set of genes was turned on. Today, as the complexities and vicissitudes of our work increase, it is practically impossible for even the most gifted young person to be successful without careful attention to career development. Faculty development must be deliberate and strategic--every junior faculty member is unique and will require a customized career development plan that is well thought out, linked to measurable goals, monitored routinely and buttressed by effective mentoring. This approach will require time and commitment--precious commodities that are in short supply as the demands on our time are only escalating. By recruiting the right people (those who fit with the organization's values and goals) and providing the right environment, we can optimize the growth and satisfaction of our young faculty and, in so doing, create departments that are leaders in carrying out our missions of research, education and patient care. We cannot afford to have our young people fail--it is simply too costly, both from a financial and a human perspective.

Statistical Power and Estimation of the Number of Required Subjects for a Study Based on the t-Test: A Surgeon's Primer(1).
Livingston EH, Cassidy L
J Surg Res 2005 Oct;128(2):207-17.
The underlying concepts for calculating the power of a statistical test elude most investigators. Understanding them helps to know how the various factors contributing to statistical power factor into study design when calculating the required number of subjects to enter into a study. Most journals and funding agencies now require a justification for the number of subjects enrolled into a study and investigators must present the principals of powers calculations used to justify these numbers. For these reasons, knowing how statistical power is determined is essential for researchers in the modern era. The number of subjects required for study entry, depends on the following four concepts: 1) The magnitude of the hypothesized effect (i.e., how far apart the two sample means are expected to differ by); 2) the underlying variability of the outcomes measured (standard deviation); 3) the level of significance desired (e.g., alpha = 0.05); 4) the amount of power desired (typically 0.8). If the sample standard deviations are small or the means are expected to be very different then smaller numbers of subjects are required to ensure avoidance of type 1 and 2 errors. This review provides the derivation of the sample size equation for continuous variables when the statistical analysis will be the Student's t-test. We also provide graphical illustrations of how and why these equations are derived.

Wound Healing Potential of Cassia fistula on Infected Albino Rat Model.
Senthil Kumar M, Sripriya R, Vijaya Raghavan H, Sehgal PK
J Surg Res 2005 Oct 19;.
BACKGROUND: Infection is the major problem to treat the wound. Antibiotic resistance by the pathogenic microorganism renders drug ineffective and calls for improved designing and development of new drugs. New approach has been developed to isolate active components from botanicals. Our aim was to investigate the potential of Cassia fistula to treat the infected wound on albino rat model. MATERIAL AND METHODS: The alcohol extract of C. fistula leaves was analyzed for antibacterial effect against Staphylococcus aureus ATCC 29213 and Pseudomonas aeruginosa ATCC 27853. Formulated ointment was topically applied on the infected wound. Wound reduction rate, histological analysis, biochemical analysis, and gelatin zymography were obtained to assess the healing pattern. RESULTS: C. fistula treated rats showed, better wound closure, improved tissue regeneration at the wound site, and supporting histopathological parameters pertaining to wound healing. Biochemical analysis and matrix metalloproteinases expression correlated well with the results thus confirming efficacy of C. fistula in the treatment of the infected wound. CONCLUSION: Along with the other activities such as antitumor, antioxidant, hypoglycemic, hepatoprotective, antibacterial, hypocholesterolaemic, and antidiabetic activity, the healing potential of C. fistula provides a scientific rationale for the traditional use of this plant in the management of infected dermal wound and can be further investigated as a substitute to treat infected wounds without using synthetic antibiotics.

1 – THE PELVIC FLOOR 2005 10
Descending Perineum Syndrome: Are Abdominal Hysterectomy and Bowel Habits Linked?

Pucciani F, Boni D, Perna F, Bassotti G, Bellini M
Dis Colon Rectum 2005 Sep 22;.
PURPOSE: This retrospective study evaluates the effect of abdominal hysterectomy on patients affected by descending perineum syndrome. METHODS: Eighty-nine female patients affected by descending perineum syndrome and one group of 10 healthy women with normal bowel habits were studied retrospectively. Thirty-two descending perineum syndrome patients (Group 1) had received an abdominal hysterectomy for benign diseases, while 57 descending perineum syndrome patients (Group 2) had not undergone this surgery. All 99 subjects underwent clinical evaluation, computerized anorectal manometry, and defecography. RESULTS: Dyschezia was found predominantly in Group 2 subjects (P < 0.05). Fecal incontinence was significantly higher in Group 1 than in Group 2 (P < 0.05). The worst anal resting pressure was found in the incontinent Group 1 patients (P < 0.01). Rectoanal intussusception was a significant defecographic sign in Group 1 subjects (P < 0.05). CONCLUSIONS: Clinical evaluation and instrumental data suggested a possible link between fecal incontinence and abdominal hysterectomy in patients affected by descending perineum syndrome.

Resting Anal Pressure Following Hemorrhoidectomy and Lateral Sphincterotomy.
Alper D, Ram E, Stein GY, Dreznik Z
Dis Colon Rectum 2005 Sep 22;.
PURPOSE: The role of high anal pressure in the pathophysiology of hemorrhoids and anal fissures is debated. We compared resting anal pressures following left lateral sphincterotomy and hemorrhoidectomy in a prospective manometric study with emphasis on the recovery of the internal anal sphincter activity. METHODS: Included in the study were 38 patients with third-degree or fourth-degree symptomatic hemorrhoids who underwent hemorrhoidectomy, 50 patients with anal fissure who underwent sphincterotomy, and 12 healthy patients who served as controls. All patients with anal fissure or hemorrhoids underwent periodic manometric evaluation: 1 month before surgery and 1, 3, 6, and 12 months after surgery. The control group had three manometric evaluations 6 months apart. RESULTS: Baseline pressure measurement in the fissure group was significantly higher than in the hemorrhoid group, which was significantly higher than in the control group (138 +/- 28.4 mmHg vs. 108.4 +/- 23 mmHg vs. 73 +/- 5.9 mmHg, P < 0.0001). Twelve months after surgery, anal resting pressure remained significantly lower than the baseline measurements in both the fissure (110 +/- 18.2 vs. 138 +/- 28.4, P < 0.0001) and hemorrhoid groups (103.6 +/- 21.5 vs. 108 +/- 23, P < 0.0001), but both remained higher than the control group (103.6 +/- 21.5 mmHg vs. 73 +/- 5.9 mmHg, P < 0.0001). CONCLUSIONS: Resting pressure is elevated in hemorrhoid and anal fissure patients. After surgery the anal resting pressure is reduced but is still higher than in the control group. Further studies are required to investigate the protective effect of postsurgical reduction of anal resting pressure against recurrence.

2 – FUNCTIONAL ANATOMY 2005 10

Intra-anal and rectal application of L-erythro methoxamine gel increases anal resting pressure in healthy volunteers.
Nisar PJ, Gruss HJ, Bush D, Barras N, Acheson AG, Scholefield JH
Br J Surg 2005 Oct 17;.
BACKGROUND:: This study examined the effect of a single local application of L-erythro methoxamine, an alpha(1)-adrenoceptor agonist, on mean anal resting pressure (MARP) and cardiovascular variables in healthy volunteers. METHODS:: L-Erythro methoxamine gel was administered in a single-blind manner; 0.3-3 per cent gels were applied perianally (n = 12), 1-3 per cent gels intra-anally (n = 16) and 1 per cent gel rectally (n = 8). MARP, systolic blood pressure, diastolic blood pressure and pulse rate were measured before application and for up to 6 h afterwards. Blood samples were taken to estimate plasma drug levels. RESULTS:: Perianal gel produced no increase in MARP. Intra-anal 1 per cent and 3 per cent gel produced a significant rapid rise in MARP for 4 and 5 h respectively after application (P = 0.012 and P = 0.017 respectively). Rectal 1 per cent gel increased MARP for 2 h after application (P = 0.036). Intra-anal gel resulted in an increase in systolic blood pressure (1 per cent gel at 2 h, P = 0.042; 3 per cent gel at 4 h, P = 0.017). One per cent intra-anal and rectal gels caused a decrease in the pulse rate for 2 h after application (P = 0.012 and P = 0.018 respectively). Six subjects complained of nausea and three of headache after gel application. CONCLUSION:: Intra-anal and rectal gel produced a sustained rise in MARP with rapid onset in volunteers. This raises the possibility of a therapeutic application for L-erythro methoxamine in patients with passive incontinence and internal anal sphincter dysfunction.

3 – DIAGNOSTICS 2005 10

Multidetector Row CT of the Small Bowel.
Patak MA, Mortele KJ, Ros PR
Radiol Clin North Am 2005 Nov;43(6):1063-77.
Multidetector row CT (MDCT) has become an imaging technique of choice to study routinely the small bowel. Thin collimation and fast scanning allow coverage of the entire abdomen within a single suspended respiration phase allowing the use of multiple enhancement phases after intravenous contrast administration. MDCT of the small bowel can identify and stage most of the common diseases of the small bowel. MDCT is changing the paradigm for diagnosing small bowel disease by becoming the first diagnostic line for almost all small bowel diseases. MDCT has the needed sensitivity and specificity, the availability, and the safety for a front-line diagnostic method.

Single-Fiber Electromyography Correlates More Closely With Incontinence Scores Than Pudendal Nerve Terminal Motor Latency.
Fowler AL, Mills A, Durdey P, Thomas MG
Dis Colon Rectum 2005 Oct 7;.
BACKGROUND: The investigation of fecal incontinence is important in deciding the most appropriate treatment. The presence of neuropathy has been shown to affect surgical outcomes adversely. Latency studies are of dubious value in assessing neuropathy; needle electromyography is the gold standard test. The relationship between these two tests and the symptoms of fecal incontinence has not been studied. METHOD: A cohort of 57 patients underwent neurologic and symptom assessment using latency studies, concentric and single-fiber electromyography, and symptom assessment using the Cleveland Clinic Scoring System. RESULTS: There was a significant correlation between left mean fiber density and Cleveland Clinic Scoring (correlation: 0.32, P = 0.02) but not between right or left latency studies. CONCLUSION: Single-fiber electromyography gave relevant results that could be obtained easily on modern equipment. Latency values were not reliable.

4 – PROLAPSES 2005 10

Rectocele Repair Using Biomaterial Augmentation: Current Documentation and Clinical Experience.
Altman D, Mellgren A, Zetterstrom J
Obstet Gynecol Surv 2005 Nov;60(11):753-760.
Although the etiology of rectocele remains debated, surgical innovations are currently promoted to improve anatomic outcome while avoiding dyspareunia and alleviating rectal emptying difficulties following rectocele surgery. Use of biomaterials in rectocele repair has become widespread in a short time, but the clinical documentation of their effectiveness and complications is limited. Medline and the Cochrane database were searched electronically from 1964 to May 2005 using the Pubmed and Ovid search engines. All English language publications including any of the search terms "rectocele," "implant," "mesh," "biomaterial," "prolapse," "synthetical," "pelvic floor," "biological," and "compatibility" were reviewed. This review outlines the basic principles for use of biomaterials in pelvic reconstructive surgery and provides a condensation of peer-reviewed articles describing clinical use of biomaterials in rectocele surgery. Historical and new concepts in rectocele surgery are discussed. Factors of importance for human in vivo biomaterial compatibility are presented together with current knowledge from clinical studies. Potential risks and problems associated with the use of biomaterials in rectocele and pelvic reconstructive surgery in general are described. Although use of biomaterials in rectocele and other pelvic organ prolapse surgery offers exciting possibilities, it raises treatment costs and may be associated with unknown and potentially severe complications at short and long term. Clinical benefits are currently unknown and need to be proven in clinical studies. Target Audience: Obstetricians & Gynecologists, Family Physicians Target Audience: After completion of this article, the reader should be able to explain that the objective of surgical treatment is to improve anatomic outcome and alleviate rectal emptying difficulties, describe the efficacy of biomaterials in rectocele repair, and summarize the potential risks and problems associated with use of biomaterials in rectocele and pelvic reconstructive surgery.

Transvaginal mesh technique for pelvic organ prolapse repair: mesh exposure management and risk factors.
Collinet P, Belot F, Debodinance P, Ha Duc E, Lucot JP, Cosson M
Int Urogynecol J Pelvic Floor Dysfunct 2005 Oct 15;:1-6.
Prosthetic reinforcement in the surgical repair of pelvic prolapse by the vaginal approach is not devoid of tolerability-related problems such as vaginal erosion. The purposes of our study are to define the risk factors

for exposure of the mesh material, to describe advances and to recommend a therapeutic strategy. Two hundred and seventy-seven patients undergoing surgery due to pelvic prolapse with transvaginal mesh technique were included in a continuous, retrospective study between January 2002 and December 2003. Thirty-four cases of mesh exposure were observed within the 2 months following surgery, which represents an incidence of 12.27%. All the patients were medically treated, nine of whom were found to have completely healed during the check-up performed at 2 months. In contrast, 25 patients required partial mesh exeresis. Risk factors of erosion were concomitant hysterectomy [OR=5.17 (p=10(-3))] and inverted T colpotomy [OR=6.06 (p=10(-2))]. Two technical guidelines can be defined from this study as regards the surgical procedure required in order to limit mesh exposure via the vaginal route. The uterus must be preserved, and the number and extent of colpotomies needed to insert the mesh must be limited.

Vaginal vault prolapse: Choice of operation.
Arbel R, Lavy Y
Best Pract Res Clin Obstet Gynaecol 2005 Oct 9;.
The surgeon who faces a patient with vaginal vault prolapse is dealing with a complex and intriguing challenge. Part of the complexity is due to the lack of standardization and routine application of tools to assess pre- and postoperative anatomical and functional outcomes. Patient satisfaction is a major endpoint for surgical success; thus all aspects of the prolapse pathology and the patient's lifestyle should be considered. The surgeon needs to be well versed and flexible in order to choose the most appropriate operative approach to achieve optimal results for an individual patient. In this chapter we present the vaginal and abdominal approaches for the correction of vaginal vault prolapse, with discussion of the surgical outcomes and complications for each technique. A comprehensive comparison of the various techniques is offered on the basis of current published literature. In addition, we focus on various controversies, including the prevention of vault prolapse at the time of hysterectomy, issues regarding uterine preservation, the management of overt or occult concomitant stress incontinence, and the place-if any-for combined anti-incontinence procedures at the time of prolapse surgery. New minimally invasive techniques for vault prolapse are also reviewed. We emphasize areas that call for further research and for standardized outcome criteria.

The development of pelvic organ prolapse after colposuspension: a prospective, long-term follow-up study on the prevalence and predisposing factors.
Auwad W, Bombieri L, Adekanmi O, Waterfield M, Freeman R
Int Urogynecol J Pelvic Floor Dysfunct 2005 Oct 26;:1-6.
The objectives of this prospective study were to determine the prevalence of pelvic organ prolapse (POP) after colposuspension and to investigate possible preoperative and operative risk factors. Seventy-seven women who underwent colposuspension between 1996 and 1997 were investigated. POP was assessed before colposuspension using the pelvic organ prolapse quantification system (POPQ). Women were reassessed at one and seven to eight years (or when referred with symptomatic POP). By seven to eight years, of the 77 women, 29 (38%) had developed symptomatic prolapse, 29 (38%) had asymptomatic prolapse, 7 (9%) had no symptoms and no prolapse, and 12 (15%) could not be assessed. POP at one year was significantly associated with the presence of posterior vaginal descent before colposuspension (odds ratio 3.07, 95% CI 1.10-8.60, p=0.03). No variable reached statistical significance by eight years postcolposuspension. In conclusion, this is the first study to assess POP prospectively using a validated method before and after colposuspension. The results add support to the view that there is an association between colposuspension and the development of symptomatic POP (requiring surgery).

Remodeling of vaginal connective tissue in patients with prolapse.
Moalli PA, Shand SH, Zyczynski HM, Gordy SC, Meyn LA Obstet Gynecol 2005 Nov;106(5):953-63.
As pelvic organ prolapse progresses, the morphology of the vagina dramatically changes. The objective of this study was to determine whether these changes observed clinically correlate with histologic and biochemical evidence of tissue remodelling. The increase in collagen III and active MMP-9 expression in the vaginal tissues of patients with prolapse suggests that this tissue is actively remodeling under the biomechanical stresses associated with prolapse. Level of Evidence: II-2.

Systematic review of randomized trials comparing rubber band ligation with excisional haemorrhoidectomy.
Shanmugam V, Thaha MA, Rabindranath KS, Campbell KL, Steele RJ, Loudon MA
Br J Surg 2005 Oct 27;.

Stapled Hemorrhoidectomy Under Local Anesthesia: Tips and Tricks.

Delikoukos S, Zacharoulis D, Hatzitheofilou C
Dis Colon Rectum 2005 Oct 3;.

Doppler-Guided Hemorrhoidal Artery Ligation: An Alternative to Hemorrhoidectomy.
Felice G, Privitera A, Ellul E, Klaumann M
Dis Colon Rectum 2005 Sep 30;.
Doppler-guided ligation of the hemorrhoidal artery is a safe and effective alternative to hemorrhoidectomy and is associated with minimal discomfort and low risk of complications.

5 – RETENTIONS 2005 10

Slow transit colon constipation is not related to the number of interstitial cells of Cajal.
Toman J, Turina M, Ray M, Petras RE, Stromberg AJ, Galandiuk S
Int J Colorectal Dis 2005 Oct 18;:1-6.

Tapered terminal ileum conduit for antegrade continence enemas.
Surfield GA, Andrews DA
Pediatr Surg Int 2005 Nov 3;:1-2.

6 – INCONTINENCES 2005 10

Short-term and long-term effects of obstetric anal sphincter injury and their management.
Fitzpatrick M, O'herlihy C
Curr Opin Obstet Gynecol 2005 Dec;17(6):605-610.

Bladder Perforation During Tension-Free Vaginal Tape Procedures: Analysis of Learning Curve and Risk Factors.
McLennan MT, Melick CF
Obstet Gynecol 2005 Nov;106(5):1000-1004.
A learning curve exists for tension-free vaginal tape procedures. Many injuries are missed on initial resident cystoscopic inspection, highlighting the need for comprehensive cystoscopic training during residency. LEVEL OF EVIDENCE: II-3.

The Effect of Ultralow-Dose Transdermal Estradiol on Urinary Incontinence in Postmenopausal Women.
Waetjen LE, Brown JS, Vittinghoff E, Ensrud KE, Pinkerton J, Wallace R, Macer JL, Grady D
Obstet Gynecol 2005 Nov;106(5):946-952.
Two years of treatment with unopposed ultralow-dose transdermal E2 did not substantially change the frequency of incontinence symptoms or alter the risk of developing at least weekly incontinence. LEVEL OF EVIDENCE: I.

Postmenopausal hormone therapy: does it cause incontinence?
Steinauer JE, Waetjen LE, Vittinghoff E, Subak LL, Hulley SB, Grady D, Lin F, Brown JS
Obstet Gynecol 2005 Nov;106(5):940-5.
Estrogen plus progestin therapy increases risk of urge and stress incontinence within 4 months of beginning treatment. LEVEL OF EVIDENCE: I.

Treatment of stress incontinence with the SPARC sling: intraoperative and early complications of 445 patients.
Hodroff MA, Sutherland SE, Kesha JB, Siegel SW
Urology 2005 Oct;66(4):760-2.

Sacral neuromodulation for intractable urge incontinence: are there factors associated with cure?
Amundsen CL, Romero AA, Jamison MG, Webster GD
Urology 2005 Oct;66(4):746-50.

Learning outcomes of a group behavioral modification program to prevent urinary incontinence.
Sampselle CM, Messer KL, Seng JS, Raghunathan TE, Hines SH, Diokno AC
Int Urogynecol J Pelvic Floor Dysfunct 2005 Nov-Dec;16(6):441-6. Epub 2005 Mar 15.
This study describes acquisition of knowledge and motor skill in bladder training (BT) and pelvic floor muscle

training (PFMT) and adherence following a behavioral modification program (BMP). Essentially continent (0-5 episodes in past year) community-dwelling older women (n=359) were randomized to treatment (n=164), a 2-h group education session supplemented by one brief individualized session of approximately 10 min, or control (n=195), no instruction, and followed for 12 months. Knowledge, motor skill, and adherence to the BMP were documented. Changes in pelvic muscle function and voiding interval were used to validate self-reported adherence. Following group instruction, mean BT and PFMT knowledge was 90 and 86%, respectively; 68% demonstrated correct PFMT technique without additional instruction, 29% required brief instruction, and 3% were unable to learn PFMT technique. Adherence ranged from 63 to 82% for PFMT and 58 to 67% for BT. Group instruction supplemented with brief individual instruction as needed is an effective teaching method for BT and PFMT.

Factors influencing the long-term success of periurethral collagen therapy in the office.
Koduri S, Goldberg RP, Kwon C, Dobrez DG, Sand PK
Int Urogynecol J Pelvic Floor Dysfunct 2005 Oct 14;:1-6.

Efficacy of Sacral Nerve Stimulation for Fecal Incontinence: Results of a Multicenter Double-Blind Crossover Study.
Leroi AM, Parc Y, Lehur PA, Mion F, Barth X, Rullier E, Bresler L, Portier G, Michot F
Ann Surg 2005 Nov;242(5):662-669.

Functional changes after physiotherapy in fecal incontinence.
Dobben AC, Terra MP, Berghmans B, Deutekom M, Boeckxstaens GE, Janssen LW, Bossuyt PM, Stoker J
Int J Colorectal Dis 2005 Oct 22;:1-7.
BACKGROUND: Physiotherapy is a common treatment option in patients with fecal incontinence. Although physiotherapy may result in relief of symptoms, to what extent improvement is associated with changes in anorectal function is still unclear. AIM: The aim of the present study was to investigate prospectively how anorectal function changes with physiotherapy and whether these changes are related to changes in fecal incontinence score. METHODS: Consenting consecutive patients (n=266) with fecal incontinence (91% women; mean age, 59 years) underwent anorectal manometry, anal and rectal mucosal sensitivity measurements, and rectal capacity measurement at baseline and after nine sessions of standardized pelvic floor physiotherapy. These findings were compared with changes in Vaizey incontinence score. RESULTS: On follow-up 3 months after physiotherapy, squeeze pressure (p=0.028), as well as urge sensation threshold (p=0.046) and maximum tolerable volume (p=0.018), had increased significantly. The extent of improvement was not related to age, duration of fecal incontinence, menopause, and endosonography findings. All other anorectal functions did not change. An improvement in the Vaizey score was moderately correlated with an increase in incremental squeeze pressure (r=0.14, p=0.04) and a decrease in anal mucosal sensitivity threshold (r=0.20, p=0.01). CONCLUSIONS: Physiotherapy improves squeeze pressure, urge sensation, and maximum tolerable volume. However, improved anorectal function does not always result in a decrease in fecal incontinence complaints.

Incontinence in Women With Surgically Managed Rectal Prolapse: A Population-Based Case-Control Study.
Altman D, Zetterstrom J, Schultz I, Nordenstam J, Hjern F, Lopez A, Mellgren A
Dis Colon Rectum 2005 Nov 8;.
A strong association between rectal and genital prolapse surgery suggests that diagnosis of rectal prolapse necessitating surgical intervention should prompt a multidisciplinary pelvic floor assessment.

Telephone vs. Face-to-Face Biofeedback for Fecal Incontinence: Comparison of Two Techniques in 239 Patients.
Byrne CM, Solomon MJ, Rex J, Young JM, Heggie D, Merlino C
Dis Colon Rectum 2005 Oct 25;.
PURPOSE: Biofeedback is an effective treatment for patients with fecal incontinence, yet little is known about how it works or the minimum regime necessary to provide clinical benefit. This study compares the effectiveness of a novel protocol of telephone-assisted biofeedback treatment for patients living in rural and remote areas with the standard face-to-face protocol for patients with fecal incontinence. METHODS: A new treatment program comprising an initial face-to-face assessment and treatment with transanal manometry and ultrasound biofeedback, followed by three treatments conducted via telephone and a final face-to-face assessment, was developed. Standard treatment involved five face-to-face treatment sessions with manometry and ultrasound. Patients from rural areas were offered the telephone-assisted treatment protocol. Data gathered prospectively included incontinence scores, a quality of life index, anal manometry,

and external sphincter isometric and isotonic fatigue times. RESULTS: A total of 239 consecutive patients treated between July 2001 and July 2004 were enrolled. There were no significant differences in demographic details, past history, or pretreatment measures of the two groups. Forty-six of 55 patients (84 percent) treated with the telephone protocol and 129 of 184 (70 percent) treated by the standard technique completed treatment. There were substantial, significant improvements after treatment, including 54 percent mean improvement in patient's own rating of their incontinence in both groups; a mean decrease of 3.1 and 3.2 on the St. Mark's incontinence score (from 7.9 to 4.7 and 7.4 to 4.2 of 13) and relative improvements of 128 and 130 percent in the quality of life index (from 0.29 to 0.65 and 0.3 to 0.69 of 1) for the telephone-assisted and standard groups respectively. Importantly, there were no significant differences between the telephone-assisted or standard groups in any outcome. Of patients who completed treatment, 78 percent were better or much better. CONCLUSIONS: A less intensive regime of biofeedback seems to be equally effective as the standard intensive protocol. This finding adds weight to the evolving concept that the physical aspects of biofeedback treatment, such as manometry or ultrasound, may not be necessary in the treatment of most patients with fecal incontinence. This needs to be further tested in a randomized, controlled trial.

7 – PAIN 2005 10

Multidetector CT of the Female Pelvis.
Siddall KA, Rubens DJ
Radiol Clin North Am 2005 Nov;43(6):1097-118.
In the emergency room setting, multidetector detector CT (MDCT) offers rapid, noninvasive, multiplanar evaluation of female patients who have acute pelvic pain. MDCT has been integrated into several of the major trauma centers, and its use may surpass the use of ultrasound in the trauma evaluation of the pregnant patient. In the nonemergent setting, MDCT can be used to stage gynecologic malignancy and to evaluate tumor recurrence. Multiplanar MDCT has received some acceptance for evaluation of small primary tumor volume and small metastatic implants. MDCT also has a role in the evaluation of pelvic varices and suspected pelvic congestion syndrome.

Quality of life and psychological factors in chronic prostatitis/chronic pelvic pain syndrome.
Ku JH, Kim SW, Paick JS
Urology 2005 Oct;66(4):693-701.

Long-term results of amitriptyline treatment for interstitial cystitis.
van Ophoven A, Hertle L
J Urol 2005 Nov;174(5):1837-40.

Menstrual cycle affects bladder pain sensation in subjects with interstitial cystitis.
Powell-Boone T, Ness TJ, Cannon R, Lloyd LK, Weigent DA, Fillingim RB
J Urol 2005 Nov;174(5):1832-6.

Uterine innervation after hysterectomy for chronic pelvic pain with, and without, endometriosis.
Atwal G, du Plessis D, Armstrong G, Slade R, Quinn M
Am J Obstet Gynecol 2005 Nov;193(5):1650-5.
Nerve fiber proliferation and other features of reinnervation have been observed in the isthmic regions of uteri that were removed at hysterectomy for chronic pelvic pain with and without endometriosis. There were no quantitative differences between the groups with chronic pelvic pain and endometriosis. These observations provide an alternative explanation for the source of pain and other clinical symptoms in these clinical settings.

Excisional surgery versus ablative surgery for ovarian endometriomata: a Cochrane Review.
Hart R, Hickey M, Maouris P, Buckett W, Garry R
Hum Reprod 2005 Nov;20(11):3000-3007.
BACKGROUND: The objective of this review was to determine which is the most effective technique for treating an ovarian endometrioma; excision or ablation. METHODS: A systematic review employing the principles of the Cochrane Menstrual Disorders and Subfertility Group was undertaken. No randomized studies of the management of endometriomata by laparotomy were found. Two randomized studies of the laparoscopic management of ovarian endometriomata of >3 cm in size were included. RESULTS: Laparoscopic excision of the cyst wall of the endometrioma was associated with a reduced rate of recurrence of the endometrioma [odds ratio (OR) 0.41, confidence interval (CI) 0.18-0.93], reduced requirement for further surgery (OR 0.21, CI 0.05-0.79), reduced recurrence rate of the symptoms of

dysmenorrhoea (OR 0.15, CI 0.06-0.38), dyspareunia (OR 0.08, CI 0.01-0.51) and non-menstrual pelvic pain (OR 0.10, CI 0.02-0.56). It was also associated with a subsequently increased rate of spontaneous pregnancy in women who had documented prior subfertility (OR 5.21, CI 2.04-13.29). CONCLUSIONS: There is some evidence that excisional surgery for endometriomata provides for a more favourable outcome than drainage and ablation, with regard to the recurrence of the endometrioma, recurrence of symptoms and subsequent spontaneous pregnancy in women who were previously subfertile. Consequently this should be the favoured surgical approach. However, we found no data to indicate the best surgical approach in women planning to undergo assisted reproductive techniques.

8 – FISTULAE 2005 10

Successful closure of a bladder neck fistula complicated by urethral and vaginal stenosis, using oxidized cellulose (Surgicel) for reinforcement.

Mittal S, Sharma JB, Gupta N

Int Urogynecol J Pelvic Floor Dysfunct 2005 Nov 5;:1-3.

We describe a case of a bladder neck fistula in a 25-year-old lady presenting with true urinary incontinence, vaginal constriction and induration, with vaginal length reduced to only 1.5 cm. There was an 8-mm fistula involving upper urethra and bladder neck, with fibrosis all around. Using Schuchardt incision, the fistula was reached and mobilization tried. As there was less available tissue, a 3x2-cm layer of oxidized cellulose was stitched between the bladder and the vaginal mucosa for reinforcement and to achieve a watertight closure of fistula.

What Is The Role of Mechanical Bowel Preparation in Patients with Pilonidal Sinus Undergoing Surgery? Prospective, Randomized, Surgeon-blinded Trial.

Terzi C, Canda AE, Unek T, Dalgic E, Fuzun M

World J Surg 2005 Oct 30;.

The aim of this study was to determine the effect of a mechanical bowel preparation on postoperative surgical wound infections in patients treated with identical antimicrobial prophylaxis undergoing wide excision and primary closure for chronic pilonidal sinus disease. Patients more than 18 years old were included in the study. All patients had intravenous antimicrobial prophylaxis at the time of anesthesia induction. In a prospective, randomized setting, patients were allocated to either the bowel preparation group or the no-bowel-preparation group. Mechanical bowel preparation was performed using an oral sodium phosphate solution. On the morning of the procedure a rectal enema was performed with the phosphate solution. The primary outcome measure was the rate of wound infection, but all postoperative complications and recurrences were recorded. All patients were actively observed for 1 year after discharge. The overall infection rate for the entire study population was 12.8% (13/101) including 14.3% (7/49) of those who had had the bowel preparation and 11.5% (6/52) of those with no bowel preparation. There was no statistically significant difference between groups (P = 0.680). The mean rate of recurrence for all 101 patients was 4.9% (5/101) at 19.2 months (range 12-32 months) of follow-up. The recurrence rate was 6.1% (3/49) in the bowel preparation group and 3.8% (2/52) in the no-bowel-preparation group (P = 1.000). Although the number of patients is small in this study, our results showed that the mechanical bowel preparation does not cause a decrease in the rate of surgical wound infections after excision and primary closure in patients with chronic pilonidal sinus disease.

Prospective, Multicenter Evaluation of Highly Concentrated Fibrin Glue in the Treatment of Complex Cryptogenic Perianal Fistulas.

Zmora O, Neufeld D, Ziv Y, Tulchinsky H, Scott D, Khaikin M, Stepansky A, Rabau M, Koller M

Dis Colon Rectum 2005 Oct 25;.

PURPOSE: The surgical management of complex perianal fistulas is challenging and may be associated with the risk of sphincter injury. Instillation of fibrin glue to the fistula tract is a simple procedure that does not involve any muscle division, and potentially results in healing of the fistula. This study was designed to assess the use of highly concentrated fibrin glue with intra-adhesive antibiotics in the treatment of complex cryptogenic perianal fistulas. METHODS: Patients with complex perianal fistulas of cryptogenic origin were prospectively included in this multicenter study. Injection of the fibrin glue mixed with antibiotics was performed in a uniform fashion. After the procedure, patients were actively examined at fixed time intervals; in cases of recurrent fistula, reinjection of fibrin glue was offered. RESULTS: Sixty patients were enrolled; complete healing of the fistula was achieved in 32 patients (53 percent). Eight of 28 patients (29 percent) who were not completely healed had significant symptomatic improvement. All patients resumed normal daily activity the day after surgery and none had any deterioration in continence related to the procedure. The majority of the 26 (43 percent) adverse events were considered mild and spontaneously resolved; 2 patients

(3 percent) with perianal septic complications were successfully treated by drainage. CONCLUSIONS: Injection of fibrin glue for the treatment of perianal fistulas is safe, simple, and associated with early return to normal activity. Although moderately successful, it may preclude extensive surgery in more than one-half of these patients.

Prospective clinical and manometric study of fistulotomy with primary sphincter reconstruction in the management of recurrent complex fistula-in-ano.
Perez F, Arroyo A, Serrano P, Candela F, Perez MT, Calpena R
Int J Colorectal Dis 2005 Oct 20;:1-5.
BACKGROUND AND AIMS: The aim of this study was to assess the results of fistulotomy with sphincter reconstruction in the management of recurrent complex fistula-in-ano in terms of recurrence and continence. PATIENTS AND METHODS: Prospective study of 16 patients undergoing fistulotomy with sphincter reconstruction for recurrent complex fistula-in-ano was done. Preoperative and postoperative evaluation included physical examination, anal ultrasonography and anal manometry, with a 40-month follow-up. The Wexner Continence Grading Scale (0-20) was used to assess faecal continence. RESULTS: Fistulas were classified as high transsphincteric in 13 patients (81.3%), suprasphincteric in 2 (12.5%) and extrasphincteric in 1 patient (6.2%). Four patients (25%) had recurred twice or more. Eight patients (50%) complained of varying degrees of prior faecal incontinence. Their mean score decreased from 8.5 to 1.875 after surgery, and all the patients improved except for one whose score remained the same. On anal manometry, the differences between continent and incontinent patients before surgery [maximum resting pressure (MRP) 86.3 vs 57.6 mmHg, maximum squeeze pressure (MSP) 196.5 vs 138.6 mmHg] decreased after surgery (MRP 81.9 vs 63.7 mmHg, MSP 179.8 vs 159.3 mmHg). In fully continent patients, both the clinical score and manometric values were quite similar after surgery. Two fully continent patients (25%) developed occasional flatus incontinence and soiling, scoring two and three points, respectively. One patient recurred (6.25%) 6 months after surgery. CONCLUSION: Fistulotomy with sphincter reconstruction seems to be an effective resource in the management of recurrent complex fistula-in-ano. It improves both anal continence and manometric values in incontinent patients without compromising them in fully continent ones.

Fistula in ano surgery has no impact on pudendal nerve terminal motor latency.
Daniel F, Thomas C, Etienney I, Atienza P
Int J Colorectal Dis 2005 Oct 18;:1-4.
BACKGROUND: Anal fistula surgery is recognized as a major risk factor for anal incontinence. This incontinence is mainly due to surgical sphincter lesions, although a neurogenic mechanism through damage to the pudendal nerve is not excluded. The objective of our study was to evaluate the influence of anal surgery on the anal terminal motor latency of the pudendal nerve (PNTML). The nervous conduction of the pudendal nerves does not seem to be altered by the presence of an infectious process in the ischiorectal fossa nor by the surgical procedure. However, a more refined electrophysiological study would seem to be necessary to assess the repercussions on the perineal innervation.

9 – BEHAVIOUR, PSYCHOLOGY, SEXOLOGY 2005 10

Brief communication: physical abuse of boys and possible associations with poor adult outcomes.
Holmes WC, Sammel MD
Ann Intern Med 2005 Oct 18;143(8):581-6.
BACKGROUND: Men's childhood physical abuse experiences are understudied. OBJECTIVE: To obtain descriptions about men's personal childhood physical abuse histories and estimate their association with adult outcomes. DESIGN: Population-based telephone survey. SETTING: Urban areas with high frequency of domestic violence against girls and women. PARTICIPANTS: 298 men recruited through random-digit dialing. MEASUREMENTS: 6 Conflict Tactics Scale items and psychiatric, sexual, and legal history questions. RESULTS: One hundred of 197 (51%) participants had a history of childhood physical abuse. Most (73%) participants were abused by a parent. Childhood physical abuse history was associated with depression symptoms ($P = 0.003$), post-traumatic stress disorder symptoms ($P < 0.001$), number of lifetime sexual partners ($P = 0.035$), legal troubles ($P = 0.002$), and incarceration ($P = 0.007$) in unadjusted analyses and with depression symptoms ($P = 0.015$) and post-traumatic stress disorder symptoms ($P = 0.003$) in adjusted analyses. LIMITATIONS: There may have been inaccurate recall of past events. Lack of exposure time data disallowed direct comparison of abuse perpetration by mothers versus fathers. Other unmeasured variables related to childhood physical abuse might better explain poor adult outcomes. CONCLUSIONS: The high frequency of childhood physical abuse histories in this population-based male sample, coupled with the high proportion of parent perpetrators and the association between childhood physical abuse and adult outcomes that are often associated with perpetration of violence, argues for more study of and clinical

attentiveness to potential adult outcomes of men's own childhood physical abuse histories.

Wellbeing: an idea whose time has come.
Lancet 2005 Oct 22-28;366(9495):1412.

Postoperative delirium in elderly patients after major abdominal surgery.
Olin K, Eriksdotter-Jonhagen M, Jansson A, Herrington MK, Kristiansson M, Permert J
Br J Surg 2005 Oct 17;.
BACKGROUND:: The aim of this study was to investigate the occurrence of postoperative delirium (POD) in elderly patients undergoing major abdominal surgery and to identify factors associated with delirium in this population. METHODS:: Data were collected prospectively from 51 patients aged 65 years or more. Delirium was diagnosed by the Confusion Assessment Method and from the medical records. T**he Mini Mental State Examination (MMSE) was used to identify cognitive impairment.** RESULTS:: POD occurred in 26 of 51 patients. Delirium lasted for 1-2 days in 14 patients (short POD group) and 3 days or more in 12 patients (long POD group). The latter patients had significantly greater intraoperative blood loss and intravenous fluid infusion, a higher rate of postoperative complications, a **lower MMSE score** on postoperative day 4 and a longer hospital stay than patients without POD. Patients in the short POD group were significantly older than those in the long POD group and those who did not develop delirium. CONCLUSION:: Approximately half of the elderly patients in this study developed POD. Bleeding was found to be an important risk factor for delirium.

10 – MISCELLANEOUS 2005 10

Cellular telephone interference with medical equipment.
Tri JL, Severson RP, Firl AR, Hayes DL, Abenstein JP
Mayo Clin Proc 2005 Oct;80(10):1286-90.
Cellular telephones can interfere with medical equipment. Technology changes in both cellular telephones and medical equipment may continue to mitigate or may worsen clinically relevant interference. Compared with cellular telephones tested in previous studies, those currently in use must be closer to medical devices before any interference is noticed. However, periodic testing of cellular telephones to determine their effects on medical equipment will be required.

[The physics of vacuum therapy]
Maier D, Beck A, Kinzl L, Bischoff M
Zentralbl Chir 2005 Oct;130(5):463-8.
BACKGROUND: Vacuum therapy is a routine and successful method for wound treatment and for the temporary covering of soft-tissue defects. It is an occlusive method that can be used for treating acute, chronic and infected wounds. To date, no data are available regarding secretion transit times and pressure conditions in lesions treated with vacuum therapy. The present study had as its objectives to examine the mechanisms of vacuum therapy and determine the effects of physical forces on the wound surface with the purpose of formulating recommendations for pressure settings using the various available vacuum pumps. MATERIAL AND METHODS: Using an appropriate model, we measured secretion transit times and pressures using two different vacuum therapy pads. We then conducted pressure measurements during dressing change in eight patients with wound surfaces greater than 20 cm(2). RESULTS: The secretion transit times remained unchanged with the polyvinyl alcohol (PVA) pad and a negative pressure of 40 kPa, but decreased by about 50 % when the black polyurethane (PU) pad was used. Pressure measurements showed that, at this negative pressure, there was only a slight positive external pressure of 31 mmHg on the wound surface. CONCLUSION: When the PVA pad is used, negative pressures greater than 40 kPa should be applied in order to effect a maximum transit of wound secretion and prolongation of the use of the vacuum dressing. When the PU pad is used, the applied negative pressure can be lower due to the pad's larger pores, as recommended by Argenta and Morykwas. An excessive external pressure on the wound surface does not occur.

Pelvic, abdominal, and chest wall reconstruction with AlloDerm in patients at increased risk for mesh-related complications.
Butler CE, Langstein HN, Kronowitz SJ
Plast Reconstr Surg 2005 Oct;116(5):1263-75; discussion 1276-7.
BACKGROUND: The use of polypropylene mesh in the reconstruction of trunk defects increases complication rates when the mesh is placed directly over viscera or the operative site has been irradiated or contaminated with bacteria. An alternative is AlloDerm (decellularized human cadaveric dermis), which

becomes vascularized and remodeled into autologous tissue after implantation. When used for fascial reconstruction, AlloDerm forms a strong repair, causes minimal abdominal adhesions, and resists infection. METHODS: We did a retrospective study of cancer patients at increased risk for mesh-related complications who underwent trunk reconstruction with AlloDerm over a 1-year period. Risk factors included unavoidable placement of mesh directly over the bowel or lung, perioperative irradiation, and/or bacterial contamination of the defect. The indications, defect characteristics, reconstructive techniques, complications, and surgical outcomes were evaluated. RESULTS: Thirteen patients were included in the study. Indications for reconstruction were oncologic resection, resection of enterocutaneous fistula, and/or ventral hernia repair. Seven patients had bacterial contamination at the operative site and seven patients received perioperative radiation. The mean musculofascial defect size was 435 cm. AlloDerm was placed directly over the bowel or lung in all patients. Nine patients required flap reconstruction, including 14 pedicled and two free flaps. The mean follow-up was 6.4 months. Complications occurred in six patients, however, there were no clinically evident mesh infections, hernias, or bulges. CONCLUSIONS: AlloDerm successfully can be used in reconstructions for large, complex pelvic, chest, and abdominal wall defects even when placed directly over viscera and when the operative field is irradiated and/or contaminated with bacteria.