

NVA Research Update E-Newsletter

September 2012

www.nva.org

This monthly e-newsletter, which contains abstracts of recently published articles relevant to the study and medical management of vulvodynia, has been supported, in part, through a grant from the **Enterprise Holdings Foundation.**

<http://enterpriseholdings.com/>
www.enterprise.com

Feature Article

Reliability and reproducibility of novel methodology for assessment of pressure pain sensitivity in pelvis.

Zolnoun D, Bair E, Essick E, Gracely E, Goyal V, Maixner W
J Pain. 2012 Sept. doi: 10.1016/j.jpain.2012.06.006.

Vestibulodynia, the most common type of chronic vulvovaginal pain, impairs the psychological, physical health of nearly 10% of women at some point in their lifetime. The aim of this investigation was to establish reliable standardized methodologies for assessment of pain sensitivity in vulvar mucosa and pelvic musculature. We enrolled 34 women with vestibulodynia and 21 pain-free controls. The participants underwent a nuanced exam that consisted of palpation of precisely located vulvar mucosal and pelvic muscle sites. These measurements remained highly stable when participants were reexamined after 2 weeks, with high within-examiner correlation. Vestibulodynia patients reported greater sensitivity than pain-free controls at the majority of examination sites, particularly at mucosal sites on the lower vestibule. The pain threshold measures at the lower mucosal sites were also associated with the participants' self-reported pain levels during intercourse. These mucosal pain threshold measurements were used to discriminate between vestibulodynia cases and controls with high sensitivity and specificity. This data supports the feasibility of contemporaneous assessment of vulvar mucosa and underlying musculature in the pelvic region, offering the hope of a more precise case definition for vestibulodynia and related disorders.

Vulvodynia /Vulvovaginal Pain

GCH1-polymorphism and pain sensitivity among women with provoked vestibulodynia.

(NVA-Funded Study)

Heddini U, Bohm-Starke N, Grönblad A, Nyberg F, Nilsson KW, Johannesson U
Mol Pain. 2012 Sep 12;8(1):68. [Epub ahead of print]

BACKGROUND: Provoked vestibulodynia (PVD) is a pain disorder localized in the vestibular mucosa. It is the most common cause of dyspareunia among young women and it is associated with general pain hypersensitivity and other chronic pain conditions. Polymorphism in the guanosine triphosphate cyclohydrolase (GCH1) gene has been found to influence general pain sensitivity and the risk of developing a longstanding pain condition. The aim of this study was to investigate GCH1-polymorphism in women with PVD and healthy controls, in correlation to pain sensitivity. **RESULTS:** We found no correlation between the previously defined pain-protective GCH1-SNP combination and the diagnosis of PVD. Nor any correlation with pain sensitivity measured as pressure pain thresholds on the arm, leg and in the vestibule,

coital pain scored on a visual analog scale and prevalence of other bodily pain conditions among women with PVD (n = 98) and healthy controls (n = 102). However, among patients with current treatment (n = 36), there was a significant interaction effect of GCH1-gene polymorphism and hormonal contraceptive (HC) therapy on coital pain (p = 0.04) as well as on pressure pain thresholds on the arm (p = 0.04). PVD patients carrying the specified SNP combination and using HCs had higher pain sensitivity compared to non-carriers. In non-HC-users, carriers had lower pain sensitivity. **CONCLUSIONS:** The results of this study gave no support to the hypothesis that polymorphism in the GCH1-gene contributes to the etiology of PVD. However, among patients currently receiving treatment an interaction effect of the defined SNP combination and use of hormonal contraceptives on pain sensitivity was found. This finding offers a possible explanation to the clinically known fact that some PVD patients improve after cessation of hormonal contraceptives, indicating that PVD patients carrying the defined SNP combination of GCH1 would benefit from this intervention.

Enoxaparin treatment for vulvodynia: a randomized controlled trial.

(NVA-Funded Study)

Farajun Y, Zarfati D, Abramov L, Livoff A, Bornstein J
Obstet Gynecol. 2012 Sep;120(3):565-72.

OBJECTIVE: To estimate the effectiveness of enoxaparin—a low-molecular-weight heparin with antiheparanase properties—in treating localized provoked vulvodynia. **METHODS:** Forty women with severe localized provoked vulvodynia were randomly and blindly assigned to self-administer either 40 mg enoxaparin or saline subcutaneously for 90 days. Dyspareunia and local sensitivity were evaluated before, at the end, and 90 days after treatment. The most painful focus was biopsied at the beginning of the study and a parallel site at the end of study for mast cells, PGP 9.5 nerve fiber staining, and heparanase quantification. **RESULTS:** The enoxaparin-treated women showed a greater reduction in vestibular sensitivity at the end of treatment and 3 months later (29.6% compared with 11.2%, P=.004). Seventy-five percent (15 of 20) of them reported more than 20% pain reduction compared with 27.8% (five of 18) in the placebo group (P=.004). Seven enoxaparin-treated women compared with three in the placebo group had almost painless intercourse at the end of the study. In women who had improvement of sensitivity at the site parallel to the original biopsy site, there was a histologically documented reduction in the number of intraepithelial-free nerve fibers in the enoxaparin group. **CONCLUSION:** Enoxaparin reduced the vestibular sensitivity and dyspareunia, concomitant with a reduction in intraepithelial free nerve fibers, in women with localized provoked vulvodynia.

Multilevel local anesthetic nerve blockade for the treatment of generalized vulvodynia: A pilot study.

(NVA-Funded Study)

McDonald JS, Rapkin AJ

J Sex Med. 2012 Aug 27. doi: 10.1111/j.1743-6109.2012.02909.x. [Epub ahead of print]

INTRODUCTION: Vulvodynia is a common pain disorder among women with a major impact on sexual functioning and quality of life. There are few published studies addressing the treatment of the pain of generalized vulvodynia or of generalized vulvodynia accompanying localized pain in the region of the vulvar vestibule. **AIM:** A prospective, noncontrolled pilot study was conducted to assess the efficacy of a novel treatment using caudal epidural, pudendal nerve block, and vulvar infiltration of local anesthetic agents. **MAIN OUTCOME MEASURES:** The main outcome measure was vulvar pain as assessed by the McGill Pain Questionnaire (MPQ). The secondary outcome measures were depressed mood evaluated with the Beck Depression Inventory (BDI) and sexual functioning assessed by the Female Sexual Functioning Inventory (FSFI). **METHODS:** Thirty-two women with vulvodynia met inclusion criteria and 26 women completed the study. The protocol included five treatment sessions with multilevel local anesthetic nerve blockade and a follow-up contact or visit 2-3 months later. **RESULTS:** There were significant improvements in vulvar pain as determined by both the sensory and affective components of the MPQ and in depression as assessed by the BDI. However, there were no changes in sexual functioning on the FSFI. **CONCLUSION:** Serial multilevel nerve block administered for the treatment of vulvodynia is a neurophysiologically based modality that may be effective and merits a placebo-controlled study.

Cream with cutaneous fibroblast lysate for the treatment of Provoked Vestibulodynia: A double-blind randomized placebo-controlled crossover study.

Donders GG, Bellen G

J Low Genit Tract Dis. 2012 Sep 10.

OBJECTIVE: Is treatment of provoked localized vulvodynia with cutaneous lysate skin cream containing human cytokines effective? **METHODS:** This is a double-blind placebo-controlled randomized crossover trial with a study and a placebo cream applied twice daily for 3 months, 1-week washout, followed by a 3-month crossover medication in 30 patients experiencing provoked localized vulvodynia with visible vulvar erythema. Tolerability of the product, sexual functioning, and clinical findings were the main outcomes. A linear model for repeated measures was used for all visits. Effect after 4 weeks of treatment, effect after 12 weeks of treatment, and, finally, carryover effects of first and second order were estimated. A Wilcoxon signed rank test was used to evaluate 4- and 12-week changes within a group, and Mann-Whitney U test was used to evaluate 4- and 12-week changes between groups. **RESULTS:** Tolerability of the cream was excellent and not different from that of placebo. During the first 12 weeks, use of the active cream resulted in a significant reduction in pain during sexual activity after 4 and 12 weeks ($p < .05$); however, use of the placebo cream did not. When analyzing the entire pain data with the statistical model for crossover clinical study design, the active cream resulted in a decrease of 1.1 points (95% confidence interval = 0.6 to 2.8, $p = .20$) and 1.3 points (95% confidence interval = 0.1 to 2.5, $p = .037$) in the visual analog scale score compared with that of placebo after 4 and 12 weeks of treatment, respectively. There was evidence for a second-order carryover effect ($p = .024$). The pain reduction was most evident for women with secondary dyspareunia. Erythema was reduced after use of the cream at 4 ($p = .03$) and 12 ($p = .01$) weeks but not after placebo. **CONCLUSIONS:** As opposed to placebo, use of cutaneous lysate cream was more effective in reducing focal redness and pain while having intercourse in patients.

A systematic review of the utility of antidepressant pharmacotherapy in the treatment of vulvodynia pain.

Leo RJ, Dewani S

J Sex Med. 2012 Sep 13. doi: 10.1111/j.1743-6109.2012.02915.x. [Epub ahead of print]

INTRODUCTION: Antidepressants have often been recommended as a potential treatment for the management of vulvodynia. However, review of the evidence supporting this recommendation has not been systematically assessed. **AIM:** To evaluate the efficacy of antidepressant pharmacotherapy in the treatment of vulvodynia. **MAIN OUTCOME MEASURES:** An assessment of the methodological quality of published reports addressing the utility of antidepressants in the treatment of vulvodynia was undertaken. Several secondary outcomes generated in the existing literature were also examined. **METHODS:** A comprehensive search of the available literature was conducted. **RESULTS:** The search yielded 13 published reports, i.e., 2 randomized controlled trials, 1 quasi-experimental trial, 7 non-experimental studies, and 3 case reports. A number of methodological shortcomings were identified in several of the reports with respect to study design including lack of clear inclusion/exclusion criteria, small sample sizes, lack of comparison groups, insufficient blinding, among others. The vast majority of studies utilized tricyclic antidepressants (TCAs). Evidence supporting the benefits of TCAs studied to date was limited, i.e., based largely upon descriptive reports but unsubstantiated by randomized controlled trials. There were no systematic investigations into the comparative efficacy of different antidepressant classes in the treatment of vulvodynia. **CONCLUSION:** There is insufficient evidence to support the recommendation of antidepressant pharmacotherapy in the treatment of vulvodynia. Although some vulvodynia-afflicted patients derive symptom relief from antidepressants, additional research is required to identify those characteristics that would predict those patients for whom antidepressants are more likely to be effective.

Vulvar pain: Anatomic and recent pathophysiologic considerations.

Ventolini G

Clin Anat. 2012 Sept 5. doi: 10.1002/ca.22160.

Vulvar pain syndrome or vulvodynia is a common multifactorial, heterogeneous, and chronic gynecological disorder with an estimated prevalence of up to 16%. This disorder seriously impacts the quality of life of women in several ways. The etiology of this condition is complex and remains elusive and requires an extensive differential diagnosis. A standard therapeutic approach for the management of vulvar pain is still under investigation and must be multidisciplinary. This review outlines the anatomic and pathophysiologic aspects of vulvar pain.

Unprovoked vestibular burning in late estrogen-deprived menopause: A case series.

Goetsch MF

J Low Genit Tract Dis. 2012 Sep 10. [Epub ahead of print]

OBJECTIVE: This study aimed to document cases of severe menopausal vulvar burning localized to the vestibule.

MATERIALS AND METHODS: Seven postmenopausal women presented to a vulvar clinic between 2007 and 2011 complaining of debilitating constant vulvar burning pain. They were treated according to the vulvar findings. Statistical tools were descriptive. **RESULTS:** The women's ages ranged from 56 to 79 years (mean age = 67 years). Pain had begun 1 to 4 years before presentation (mean = 1.8 years) and was vestibular. Five had contraindications to estrogen supplements. Only 1 patient was using estrogen; the mean number of years from menopause to onset of burning was 16 years (range = 4-27 years). Three patients developed pain during or after aromatase inhibitor therapy for breast cancer. Pelvic floor myalgia was present in 3 patients. Of the patients, 3 improved on systemic estrogen, 3 improved using topical vestibular estrogen therapy, and 1 was managed with reassurance alone. Vestibulodynia regressed in those using estrogen supplementation. One patient noted resolution after localized removal of vestibular mucosa.

CONCLUSIONS: Severe unprovoked vestibulodynia can present as unprovoked generalized pain in late menopause, and topical lidocaine can aid the diagnosis. Constant pain can arise after years of only provoked pain or in association with further lowering of estrogen from antiestrogen therapy for breast cancer. Therapy to the vestibule can provide relief. Lidocaine and local application of estrogen cream to the vestibule are effective therapies, and physical therapy can be important. With encouragement to avoid estrogen during menopause and with the increasing use of aromatase inhibitors for breast cancer, menopausal unprovoked vestibulodynia may be increasing and can be challenging to diagnose and treat.

Standard operating procedures for female genital sexual pain.

Fugl-Meyer KS, Bohm-Starke N, Damsted Petersen C, Fugl-Meyer A, Parish S, Giraldi A

J Sex Med. 2012 Sep 12. doi: 10.1111/j.1743-6109.2012.02867.x. [Epub ahead of print]

INTRODUCTION: Female genital sexual pain (GSP) is a common, distressing complaint in women of all ages that is underrecognized and undertreated. Definitions and terminology for female GSP are currently being debated. While some authors have suggested that GSP is not per se a sexual dysfunction, but rather a localized genital pain syndrome, others adhere to using clearly sexually related terms such as dyspareunia and vaginismus. **AIM:** The aims of this brief review are to present definitions of the different types of female GSP. Their etiology, incidence, prevalence, and comorbidity with somatic and psychological disorders are highlighted, and different somatic and psychological assessment and treatment modalities are discussed. **METHODS:** The Standard Operating Procedures (SOP) committee was composed of a chair and five additional experts. No corporate funding or remuneration was received. The authors agreed to survey relevant databases, journal articles and utilize their own clinical experience. Consensus was guided by systematic discussions by e-mail communications. **MAIN OUTCOME/RESULTS:** There is a clear lack of epidemiological data defining female GSP disorders and a lack of evidence supporting therapeutic interventions. However, this international expert group will recommend guidelines for management of female GSP. **CONCLUSIONS:** GSP disorders are

complex. It is recommended that their evaluation and treatment are performed through comprehensive somatopsychological multidisciplinary approach.

Standard operating procedures for taking a sexual history.

Althof SE, Rosen RC, Perelman MA, Rubio-Aurioles E

J Sex Med. 2012 Sep 12. doi: 10.1111/j.1743-6109.2012.02823.x. [Epub ahead of print]

INTRODUCTION: While there is evidence of increased professional and public awareness of sexual problems, both male and female sexual dysfunctions remain underdiagnosed and undertreated by health care professionals around the world. Health care professionals (HCPs) are typically reluctant, disinterested, or unskilled in sexual problem management and regrettably are often disinclined to inquire about sexual issues. HCPs in all countries receive variable, nonstandardized, or inadequate training in sexual history taking and its treatment. **AIM:** This article presents a standard operating procedure (SOP) for taking a sexual history from men or women with sexual problems or performance concerns. **METHODS:** Review of relevant evidence-based literature identified through a PubMed search, integrated with expert opinion. **RESULTS:** Guidelines for taking a sexual history are presented along with the relevant domains, opening and follow-up questions. **CONCLUSIONS:** The SOP presented in this article offers HCPs a brief, structured, and uniform method for obtaining a sexual history from men or women seeking health care services. Sexual history taking should be based on three basic principles, which serve as the foundation for managing sexual problems in men and women. These include the following: (i) a patient-centered approach; (ii) evidenced-based diagnostic and treatment recommendations; and (iii) use of a unified management approach for men and women. Sexual history taking should always be conducted in a culturally sensitive manner, taking account of the individual's background and lifestyle, status of the partner relationship, and the clinician's comfort and experience with the topic. Sexual inquiry should be incorporated into all new patient encounters, when possible, if only to ask one or two broad questions such as the following: "Are you sexually active? Do you have any sexual concerns or problems you would like to discuss?" Sexual history taking is a cornerstone of sexual medicine clinical practice. All patients should be provided an opportunity for frank and open discussion of sexual issues or concerns, conducted in an atmosphere of sensitivity and respect.

Reproductive and other health outcomes in Iraq and Afghanistan women veterans using VA health care: Association with mental health diagnoses.

Cohen BE, Maguen S, Bertenthal D, Shi Y, Jacoby V, Seal KH

Womens Health Issues. 2012 Sep;22(5):e461-71.

BACKGROUND: An increasing number of women serve in the military and are exposed to trauma during service that can lead to mental health problems. Understanding how these mental health problems affect reproductive and physical health outcomes will inform interventions to improve care for women veterans. **METHODS:** We analyzed national Department of Veterans Affairs (VA) data from women Iraq and Afghanistan veterans who were new users of VA healthcare from October 7, 2001, through December 31, 2010 (n = 71,504). We used ICD-9 codes to categorize veterans into five groups by mental health diagnoses (MH Dx): Those with no MH Dx, posttraumatic stress disorder (PTSD), depression, comorbid PTSD and depression, and a MH Dx other than PTSD and depression. We determined the association between mental health category and reproductive and other physical health outcomes defined by ICD-9 codes. Categories included sexually transmitted infections, other infections (e.g., urinary tract infections), pain-related conditions (e.g., dysmenorrhea and dyspareunia), and other conditions (e.g., polycystic ovarian syndrome, infertility, sexual dysfunction). Models were adjusted for sociodemographic and military service factors. **RESULTS:** There were 31,481 patients (44%) who received at least one mental health diagnosis. Women veterans with any mental health diagnosis had significantly higher prevalences of nearly all categories of reproductive and physical disease diagnoses (p < .0001 for adjusted prevalences). There was a trend of increasing prevalence of disease outcomes in women with PTSD, depression, and comorbid PTSD and depression (p for trend < .0001 for all outcomes).

CONCLUSIONS: Iraq and Afghanistan women veterans with mental health diagnoses had significantly greater prevalences of several important reproductive and physical health diagnoses. These results provide support for VA initiatives to address mental and physical health concerns and improve comprehensive care for women veterans.

When sex gives more pain than pleasure. Dyspareunia is a common problem for many postmenopausal women.

(No authors listed)

Harv Womens Health Watch. 2012 May;19(9):1-3.

No Abstract Available.

The role of human papilloma virus in development of chronic urethritis and vulvodynia in females: perspectives of immunomodulating therapy. (Article in Russian)

[No authors listed]

Urologiia. 2012 Mar-Apr;(2):35-6, 38.

The article is devoted to combined affection of the lower urinary tracts and genitalia in women with human papilloma virus (HPV) infection which manifests with persistent recurrent urethritis, pelvic pain syndrome. The colposcopic and urethroscoposcopic features, disturbed microcirculation of urethral and vaginal mucosa in virus infection promoting recurrences and persistence of HPV are discussed. Immunomodulators (inosin pranobex-groprinosin) are recommended for more effective treatment.

Women's perception of postpartum pelvic floor dysfunction and their help-seeking behaviour: a qualitative interview study.

Buurman MB, Lagro-Janssen AL

Scand J Caring Sci. 2012 Aug 27. doi: 10.1111/j.1471-6712.2012.01044.x. [Epub ahead of print]

AIMS: To explore women's perception of postpartum pelvic floor dysfunction and their help-seeking behaviour.

METHODS: We interviewed 26 patients from two family practitioners' populations in the Netherlands 1 month to 1 year after their vaginal delivery. The semi-structured interviews were independently encoded and analysed by three researchers according to a scoring list on determined topics. Three researchers independently coded themes discussed by the interviewees that matched main topics from the interview guide. In the case of encoding differences, the researchers deliberated on them until consensus was reached. **FINDINGS:** All women suffered from pelvic floor dysfunction such as urinary incontinence, pelvic floor pain, prolapse, haemorrhoids, anal fissure, constipation and dyspareunia. Midwives and gynaecologists did not prepare them for postpartum pelvic floor problems. The women did not expect the problems to be that severe. They hoped their problems would improve by themselves. The women talked to close initiates (female relatives and friends who had had deliveries themselves), who confirmed that the problems were an inevitable consequence of vaginal delivery and that there were no real treatment options. The women indicated they needed professional information about their pelvic floor problems but were ashamed to talk about them outside their inner circle. **CONCLUSIONS:** These women are uninformed about postpartum pelvic floor problems. They discuss their pelvic floor dysfunction with close initiates who feed their hope that the problems will resolve spontaneously. The women are not stimulated to seek professional help. However, the women do indicate they need professional information. They want to understand their problems and know how to deal with them. It is time for doctors and midwives to focus on the mother's health after delivery so that mothers will suffer less from pelvic floor problems, have more awareness of what they can do about them and call in medical aid.

A new device for simultaneous measurement of pelvic floor muscle activity and vaginal blood flow: A test in a nonclinical sample.

Both S, van Lunsen R, Weijnenborg P, Laan E

J Sex Med. 2012 Aug 27. doi: 10.1111/j.1743-6109.2012.02910.x. [Epub ahead of print]

INTRODUCTION: Dyspareunia in women, defined as persistent or recurrent genital pain associated with sexual intercourse, is hypothesized to be related to (fear associated) pelvic floor hyperactivity and to diminished sexual arousal. Psychophysiological research to support these hypotheses is scarce and concentrates mostly on the role of either pelvic floor activity or sexual arousal. To investigate both factors, a measurement device that enables simultaneous assessment of pelvic floor muscle activity and genital sexual arousal would be most optimal. **AIM:** The aim of this study was to test a new vaginal device—a vaginal photoplethysmograph with build-in surface electromyography (EMG)—that allows simultaneous assessment of pelvic floor muscle activity and vaginal blood flow. **MAIN OUTCOME MEASURES:** Genital arousal measured as vaginal pulse amplitude (VPA) and vaginal surface EMG. **METHODS:** Thirty-six sexually functional women participated. To investigate the sensitivity of the device for changes in genital blood flow and involuntary changes in pelvic floor activity, VPA and vaginal surface EMG were monitored during exposure to sexual and anxiety-evoking film clips. In addition, vaginal surface EMG was monitored during voluntary flick and hold contractions. **RESULTS:** VPA increased in response to the sexual film, and EMG values were significantly higher in response to the anxiety-evoking film. Higher EMG values in response to the anxiety film were associated with lower VPA. EMG during the instructed 3-second hold pelvic floor contractions showed, as expected, higher values during pelvic floor contractions with support of surrounding muscle groups, compared with pelvic floor muscles alone. **CONCLUSIONS:** The device is sensitive to changes in vaginal blood flow in response to sexual stimuli, and it is able to pick up small, involuntary changes in pelvic floor activity associated with anxiety. Also, the device is able to record changes in pelvic floor activity during voluntary pelvic floor contractions. This new device will be a valuable tool in further research on superficial dyspareunia.

Reliability and differentiation of pelvic floor muscle electromyography measurements in healthy volunteers using a new device: The multiple array probe leiden (MAPLe).

Voorham-van der Zalm PJ, Voorham JC, van den Bos TW, Ouwerkerk TJ, Putter H, Wasser MN, Webb A, Deruiter MC, Pelger RC

Neurourol Urodyn. 2012 Sep 12. doi: 10.1002/nau.22311. [Epub ahead of print]

AIMS: A new multiple electrode probe, the Multiple Array Probe Leiden (MAPLe), has been developed for biofeedback registration of the individual pelvic floor musculature (PFM). The aim was to determine the reliability and differentiation of electromyography (EMG) signals measured with the MAPLe in healthy volunteers. **METHODS:** Two hundred twenty nine healthy volunteers not seeking treatment or using medication for symptoms of prolapse, lower urinary tract, bowel, pain, and/or sexual function related to pelvic floor dysfunction were qualified to participate. Subjects were asked to perform five tasks: rest, maximum voluntary contractions, endurance, cough, and valsalva. Mean EMG values per electrode were registered. Test-retest reliability was assessed using linear mixed model with random subject effects. One-way ANOVA tests were performed to detect differences between groups. **RESULTS:** Magnetic resonance imaging (MRI) showed that each of the electrodes could be related nearest to the individual muscles. For test-retest, the intraclass correlation ranged from 0.53 to 0.91. The MAPLe showed significant differences in average EMG values between men and women, and between nulliparous and parous, pre- and postmenopausal women. Significant differences were seen between the left and right sides of the pelvic floor. In addition, the activity nearest to the individual pelvic floor muscles (external anal sphincter (EAS), puborectalis muscle, bulbospongiosus, ischiocavernosus and the pubococcygeus muscle) could be determined. **CONCLUSIONS:** The MAPLe is a reliable instrument measuring the EMG signals of the different sides and levels nearest to the pelvic floor musculature and is capable to differentiate between men and women, nulliparous, parous, pre- and postmenopausal. The findings of this study have implications for the diagnosis and treatment of pelvic floor dysfunction in the future.

Providing holistic care for women with chronic pelvic pain.

Abercrombie PD, Learman LA

J Obstet Gynecol Neonatal Nurs. 2012 Aug 3. doi: 10.1111/j.1552-6909.2012.01403.x. [Epub ahead of print]

Chronic pelvic pain (CPP) is one of the most common pain conditions affecting women and can have a significant impact on quality of life. Assessment of women with CPP is best approached in a comprehensive, systematic manner that includes exploration of physiological and psychological causes. A range of treatment options that draw from conventional medicine and complementary and alternative modalities should be offered. The women's health nurse plays a pivotal role in all aspects of care.

Recognizing myofascial pelvic pain in the female patient with chronic pelvic pain.

Pastore EA, Katzman WB

J Obstet Gynecol Neonatal Nurs. 2012 Aug 3. doi: 10.1111/j.1552-6909.2012.01404.x. [Epub ahead of print]

Myofascial pelvic pain (MFPP) is a major component of chronic pelvic pain (CPP) and often is not properly identified by health care providers. The hallmark diagnostic indicator of MFPP is myofascial trigger points in the pelvic floor musculature that refer pain to adjacent sites. Effective treatments are available to reduce MFPP, including myofascial trigger point release, biofeedback, and electrical stimulation. An interdisciplinary team is essential for identifying and successfully treating MFPP.

Sexual adjustment counseling for women with chronic pelvic pain.

Howard HS

J Obstet Gynecol Neonatal Nurs. 2012 Aug 3. doi: 10.1111/j.1552-6909.2012.01405.x. [Epub ahead of print]

Sexual concerns are common in women with chronic pelvic pain and often remain unresolved when pain improves. Therefore, to restore pelvic function, treatment should address sexuality in addition to pain. In this article, I describe sexual challenges experienced by women with chronic pelvic pain, introduce a modified sexuality counseling model, and suggest sexuality resources and training for gynecologic nurses and other health care providers who are ideally positioned to offer sexuality counseling to this population.

Centering as a model for group visits among women with chronic pelvic pain.

Chao MT, Abercrombie PD, Duncan LG

J Obstet Gynecol Neonatal Nurs. 2012 Aug 3. doi: 10.1111/j.1552-6909.2012.01406.x. [Epub ahead of print]

Providing comprehensive care for chronic pelvic pain is impeded by time and resource constraints of the standard health care visit. To provide patient education, psychosocial support, and health care assessment, we developed group visits for women with chronic pelvic pain using an evidence-based, holistic nursing approach. In this article, we describe the structure of group visits, the process of conducting Centering group visits focused on empowerment, and the content of a holistic curriculum for women with chronic pelvic pain.

Caring for women with chronic pelvic pain.

Abercrombie PD

J Obstet Gynecol Neonatal Nurs. 2012 Aug 3. doi: 10.1111/j.1552-6909.2012.01402.x. [Epub ahead of print]

No Abstract Available.

Chronic Pain

Nondermatomal somatosensory deficits in chronic pain patients: Are they really hysterical?

Egloff N, Maecker F, Stauber S, Sabbioni ME, Tunklova L, von Känel R

Pain. 2012 Sep;153(9):1847-51.

Patients with chronic pain disorders frequently show nondermatomal somatosensory deficits (NDSs) that are considered to be functional. Typically, NDSs show quadratomal or hemibody distribution ipsilateral to the areas of chronic pain. According to the Diagnostic and Statistical Manual of Mental Disorders, 4th edition and the International Classification of Diseases, 10th revision, such functional somatosensory deficits are classified in the chapter "conversion disorder." Many publications also used the term "hysterical sensory loss." However, doubts are increasing about this one-sided psychiatric view. We aimed to better characterize the biopsychosocial factors associated with NDSs. Therefore, we compared 2 groups of inpatients with chronic pain disorder, of whom 90 suffered from NDSs and 90 did not. The patients with NDSs all showed widespread somatosensory deficits with hemibody distribution. On logistic regression analysis, history of a prior physical trauma was positively predictive for patients with NDSs. Personality disorder and adverse childhood experiences were positively predictive for the control group with chronic pain disorders without NDSs. The frequencies of comorbid depression and anxiety disorder did not differ statistically between groups. In conclusion, pain patients with NDSs are, psychopathologically, by no means more noticeable personalities than patients with chronic pain disorder without NDSs. Similar to complex regional pain syndromes, we assume a multifactorial etiology of NDSs, including stress. Based on our observations, terms like "hysterical" should not be applied any longer to patients with NDSs who suffer from chronic pain.

Pain medicine fellows need explicit training in engaging patients in patient-centered pain management.

Karp JF

Pain Med. 2012 Aug;13(8):985-6. doi: 10.1111/j.1526-4637.2012.01449.x.

The majority of pain medicine physicians complete residency in anesthesiology, during which they learn to safely care for patients rendered unconscious or insensible to pain and stress during surgical, obstetric, and other medical procedures. During pain medicine fellowships, trainees learn to examine, diagnose, and treat these challenging patients. Most training is on learning the administration of regional nerve blocks, other injection interventions, and the pharmacological management of acute and chronic pain in both outpatient and inpatient settings. In addition to these somatic interventions, the ACGME requires fellows to 1) perform several complete mental status examinations (both supervised and unsupervised) and 2) "understand the principles and techniques of the psychosocial therapies, with special attention to supportive and cognitive behavioral therapies, sufficient to explain to a patient and make a referral when indicated." Given the need for a strong working alliance between patients living with chronic conditions and their physicians, more training is needed to effectively engage patients with chronic pain in a patient-centered model of chronic care.

Are men and woman towards pain equal?

(Article in French)

Jaunin-Stalder N, Mazzocato C

Rev Med Suisse. 2012 Jul 11;8(348):1470-3.

An increasing number of articles are published on the differences about pain in men and women. These differences seem to be due to the sex, the biological dimension of the person, and to the gender, which is the role given to that person in a given social and culture environment. The pain prevalence is higher in women, its threshold and tolerance are lower. The pain interpretation, its perception and the coping is also different in men and women. Finally doctors translate and treat pain differently. This article proposes some explanations on these differences which should help us

to treat this frequent and noxious symptom for the quality of life in a better way.

Chronic pain as a manifestation of potassium channel-complex autoimmunity.

Klein CJ, Lennon VA, Aston PA, McKeon A, Pittock SJ
Neurology. 2012 Aug 15. [Epub ahead of print]

OBJECTIVE: Autoantibodies targeting voltage-gated potassium channel (VGKC) complexes cause a spectrum of neuronal hyperexcitability disorders. We investigated pain as a manifestation of VGKC-complex autoimmunity. **METHODS:** We reviewed the prevalence and characteristics of pain in VGKC-complex-immunoglobulin G (IgG)-seropositive patients in 25 months of comprehensive service testing for neural autoantibodies, subtyped positive sera for LGI1-IgG and CASPR2-IgG specificities, and reviewed pain prevalence in autoimmune control patients. **RESULTS:** VGKC-complex-IgG was identified in 1,992 patients of 54,853 tested (4%). Of 316 evaluated neurologically at Mayo Clinic, 159 (50%) had pain, in isolation (28%) or with accompanying neurologic manifestations (72%), and not attributable to alternative cause. Pain was subacute in onset, chronic in course, neuropathic, nociceptive, regional, or diffuse and sometimes attributed to fibromyalgia (6%) or psychogenic cause (13%). Most patients had normal peripheral nervous system function, measured by neuropathy impairment scores and nerve conduction. Evidence of neuronal hyperexcitability (hyperhidrosis, quantitative heat-pain hyperalgesia, or electromyographic excitability) was 25-fold more common in pain patients. Pain management required multiple medications in 70% (narcotics, 30%); 13 of 16 patients reported pain relief with immunotherapy. Pain was significantly associated with CASPR2-IgG-positivity (16% positive with pain, 7% without pain; $p = 0.014$) but not with LGI1-IgG. Less than 10% of 167 patients with neural autoantibodies other than VGKC-complex-IgG reported pain. **CONCLUSIONS:** Chronic idiopathic pain is a syndromic manifestation of VGKC-complex autoimmunity. Hyperexcitability of nociceptive pathways is implicated. CASPR2-IgG significantly associates with pain, but in most patients the antigenic VGKC-complex molecule remains to be determined. VGKC-complex autoimmunity represents an important new direction for pain research and therapy.

Epidemiology of chronic pain: A population-based nationwide study on its prevalence, characteristics and associated disability in Portugal.

Azevedo LF, Costa-Pereira A, Mendonça L, Dias CC, Castro-Lopes JM
Pain. 2012 Sep;153(9):1847-51.

A cross-sectional nationwide epidemiological study was performed in a random sample of the Portuguese adult population, aiming to describe the prevalence and impact of chronic pain (CP). The 5,094 participants were selected by random digit dialing, between January 2007 and March 2008, and estimates were adequately weighted for the population. Prevalence of CP was 36.7% (95% confidence interval [CI] [35.3-38.2]), based on the definition of the International Association for the Study of Pain. Recurrent or continuous pain was present in 85% of those with CP, and moderate-to-severe intensity and disability were present in 68 and 35%, respectively. Highest CP prevalence was observed among the elderly, retired, unemployed, and less educated. Highest disability was found in relation with family/home responsibilities, recreational activities, occupation/work, and sleep/rest; 13% reported a diagnosis of depression and 49% reported interference in their job. The main factors associated with disability were sex, pain intensity, and depression or depressive symptoms. CP is highly prevalent, causes high personal and social burden, and affects particularly the most vulnerable subgroups. Portugal, depending on CP definition, could be placed in the lower prevalence group in Europe. Improvement in pain intensity management and special attention to affective components of CP are recommended. **PERSPECTIVE:** In this cross-sectional nationwide epidemiological study, we showed that chronic pain is a significant problem that is present in 37% of the Portuguese adult general population, is associated with high personal, family, and social burden, and affects in particular the most vulnerable subgroups of the population.

Opioids in chronic noncancer pain: More faces from the crowd.

Watson CP

Pain Res Manag. 2012 Jul-Aug;17(4):263-75.

BACKGROUND: The use of opioids for chronic noncancer pain (CNCP) remains very controversial. There are several randomized controlled trials, mostly in neuropathic pain, reporting efficacy and safety in the short term, but more long-term data are needed. Randomized controlled trials may be limited in providing data about the patients who benefit from often high-dose opioids over the long term. The present article provides details of these patients and adds to a previous case series. **METHODS:** The present article contains 17 case reports of 11 CNCP conditions (followed to 2011) selected to illustrate specific issues from a survey of 84 patients with intractable CNCP treated with opioids and followed every three months for a median of 11 years. The previous published survey of this group reported outcomes of pain severity, adverse effects, pain relief, satisfaction, mood, problematic opioid use, tolerance, physical dependency, functional status, health-related quality of life (HRQL), immune status and sexual function. The outcome measures for that study included a numerical rating scale for pain, the Hospital Anxiety and Depression Scale, the Brief Pain Inventory Interference Scale, the Pain Disability Index and, for HRQL, the Short-Form Health Survey 12 version 2. Most patients in the total sample reported 50% or greater relief and a moderate improvement in disability. Scores for functional status and HRQL were not severely affected. Problematic use, tolerance and serious adverse effects, including constipation, were not major issues. These selected patient reports were chosen, not to illustrate optimal results, but rather important aspects of the diagnoses, opioids and doses, the paucity of intolerable adverse effects, particular issues (concurrent addiction history, bipolar disorder and combination therapy), disease-specific and other outcomes and duration of follow-up with complex pain problems. **RESULTS:** Opioids were found to be safe and useful in the long term for these particular patients, as well as in the larger group from which they originated. **INTERPRETATION:** These 17 reports of patients with intractable CNCP treated with opioids with some success over many years puts a face on more of the participants in the larger survey of 84 subjects, suggesting that this approach is effective and safe for some patients over many years.

Medical and psychological risks and consequences of long-term opioid therapy in women.

Darnall BD, Stacey BR, Chou R

Pain Med. 2012 Aug 20. doi: 10.1111/j.1526-4637.2012.01467.x. [Epub ahead of print]

BACKGROUND: Long-term opioid use has increased substantially over the past decade for U.S. women. Women are more likely than men to have a chronic pain condition, to be treated with opioids, and may receive higher doses. Prescribing trends persist despite limited evidence to support the long-term benefit of this pain treatment approach. **PURPOSE:** To review the medical and psychological risks and consequences of long-term opioid therapy in women. **METHOD:** Scientific literature containing relevant keywords and content were reviewed. **RESULTS AND CONCLUSIONS:** Long-term opioid use exposes women to unique risks, including endocrinopathy, reduced fertility, neonatal risks, as well as greater risk for polypharmacy, cardiac risks, poisoning and unintentional overdose, among other risks. Risks for women appear to vary by age and psychosocial factors may be bidirectionally related to opioid use. Gaps in understanding and priorities for future research are highlighted.

Intrathecal opioids for chronic pain: A call for evidence.

Harden RN, Argoff CE, Williams DA

Pain Med. 2012 Aug;13(8):987-988. doi: 10.1111/j.1526-4637.2012.01456.x.

The first implanted fixed rate pumps were used in humans in the mid-1980s. In 1991, Medtronic® released the first programmable pump for human use. The majority of the research and reports concern programmable pumps, and the best and most current systematic review of the literature only identified manuscripts on these devices, and only considered chronic nonmalignant pain (AKA chronic noncancer pain [CNCP]). Older reviews are available. No review, nor our literature search, identified a randomized controlled trial (RCT) of implantable pumps using opioids in CNCP; yet

despite such lack of evidence, the devices are commonly used for patients with CNCP. In contrast, there is a Food and Drug Administration drug registry of RCTs available for implantable pumps using ziconotide in CNCP; Intrathecal baclofen has been assessed for spasticity (but no RCT; see Taricco et al.) and in the management of the dystonia of complex regional pain syndrome. There is a good RCT of implantable pumps using opioids in cancer pain showing modest efficacy, but substantial risk.

Palmitoylethanolamide in the treatment of chronic pain caused by different etiopathogenesis.

Gatti A, Lazzari M, Gianfelice V, Di Paolo A, Sabato E, Sabato AF

Pain Med. 2012 Jul 30. doi: 10.1111/j.1526-4637.2012.01432.x. [Epub ahead of print]

OBJECTIVE: To assess the efficacy and safety of palmitoylethanolamide (PEA), an endogenous fatty acid amide belonging to the N-acylethanolamines family, in reducing pain severity in patients with pain associated to different pathological conditions. **METHODS:** This was an observational study conducted on 610 patients who were unable to effectively control chronic pain with standard therapies. PEA (600 mg) was administered twice daily for 3 weeks followed by single daily dosing for 4 weeks, in addition to standard analgesic therapies or as single therapy. The primary outcome measure was the mean score pain severity evaluated by the numeric rating scale. Safety was also evaluated. **RESULTS:** PEA treatment significantly decreased the mean score pain intensity evaluated in all patients who completed the study. The PEA effect was independent of the pain associated pathological condition. PEA-induced decrease of pain intensity was present also in patients without concomitant analgesic therapy. Importantly, PEA showed no adverse effects. **CONCLUSIONS:** In this study, PEA was effective and safe in the management of chronic pain in different pathological conditions.

Emotional disclosure interventions for chronic pain: from the laboratory to the clinic.

Lumley MA, Sklar ER, Carty JN

Transl Behav Med. 2012 Mar 1;2(1):73-81.

Life stress and the avoidance of negative emotions may contribute to chronic pain. The technique of written or spoken emotional disclosure can reverse emotional avoidance and improve health, and 18 randomized studies have tested it among people with chronic pain. We review these studies to provide guidance for the clinical use of this technique. The benefits of emotional disclosure for chronic pain are quite modest overall. Studies in rheumatoid arthritis show very limited effects, but two studies in fibromyalgia suggest that disclosure may be beneficial. Effects in other populations (headaches, cancer pain, pelvic pain, abdominal pain) are mixed. Moderator findings suggest that some patients are more likely to benefit than others. Emotional disclosure has been tested in well-controlled efficacy trials, leaving many unanswered questions related to translating this technique to practice. Issues needing further study include determining disclosure's effects outside of randomized controlled trials, identifying the optimal pain populations and specific individuals to target for disclosure, presenting a valid rationale for disclosure, selecting the location and method of disclosure, and choosing between cognitive-behavioral or emotional disclosure techniques.

Decision-making using fMRI in clinical drug development: revisiting NK-1 receptor antagonists for pain.

Borsook D, Upadhyay J, Klimas M, Schwarz AJ, Coimbra A, Baumgartner R, George E, Potter WZ, Large T, Bleakman D, Evelhoch J, Iyengar S, Becerra L, Hargreaves RJ

Drug Discov Today. 2012 Sep;17(17-18):964-73. Epub 2012 May 10.

Substance P (SP) and neurokinin-1 receptors (NK-1R) are localized within central and peripheral sensory pain pathways. The roles of SP and NK-1R in pain processing, the anatomical distribution of NK-1R and efficacy observed in preclinical pain studies involving pain and sensory sensitization models, suggested that NK-1R antagonists (NK-1RAs) would relieve pain in patient populations. Despite positive data available in preclinical tests for a role of NK-1RAs in pain, clinical studies across several pain conditions have been negative. In this review, we discuss how functional imaging-derived

information on activity in pain-processing brain regions could have predicted that NK-1RAs would have a low probability of success in this therapeutic domain.

Vulvovaginal Disorders

The burden of health associated with benign gynecological disorders in low-resource settings.

Black KI, Fraser IS

Int J Gynaecol Obstet. 2012 Aug 9. [Epub ahead of print]

Benign gynecological conditions impact on women's lives in a myriad of ways. Many of these conditions exert their burden on women's health because they remain undiagnosed, unacknowledged, or unreported for many years. Some of these conditions cause debilitating primary symptoms, especially of heavy menstrual bleeding, the lethargy of iron deficiency, and of persistent pelvic pain, with substantial impact on quality of life and ability to function on a day-to-day basis. The distressing quality of life impact of pelvic floor prolapse or of local vulval lesions should not be overlooked. Many also have secondary health consequences with adverse effects on fertility and reproductive outcome.

Vaginal use of Ibuprofen isobutanolammonium (ginenorm): efficacy, tolerability, and pharmacokinetic data: a review of available data.

Milani M, Iacobelli P

ISRN Obstet Gynecol. 2012;2012:673131. Epub 2012 Jul 9.

Vaginal infection and inflammation with or without vulvar involvement are very common gynecologically clinical conditions associated with morbidity and reduced quality of life. Vaginal infections are commonly treated with causal antimicrobial treatments. In addition to specific antimicrobial treatment, anti-inflammatory therapy, both systemic or topical (vaginal douche), could be useful in the integrated treatment approach of these conditions reducing symptoms and speeding up the recovery in vulvovaginitis. Ibuprofen is a well-known effective and well-tolerated anti-COX (anti-COX1 and COX2) compound. In addition, several in vitro studies suggest that Ibuprofen shares antimicrobial and antifungal activities. Ibuprofen isobutanolammonium (Ib-isb) (Ginenorm) is a soluble salt from formulation suitable for external and intravaginal use. This salt completely dissociates in aqueous solution. Ib-isob is available in sachet and vaginal douche pharmaceutical formulations. Clinical efficacy of Ib-isob has been documented in 10 clinical studies (6 controlled and 4 open trials) which have enrolled in total 399 women with vulvovaginitis. The six controlled clinical trials were performed both versus placebo (2 studies) or versus active comparators such as benzydamine. In these studies, Ib-isb has been used in general for 7 consecutive days with a twice application daily regimen at the dose of 1 g per application. Topical application of Ib-isob induced a marked and rapid reduction in signs (erythema, oedema) and symptoms (itching and burning sensation) of vulvovaginitis. In head-to-head studies carried out in comparison with other topical products, Ib-isob induced a more rapid reduction in both subjective and objective symptoms. In particular a remarkable significant improvement of all the symptoms has been observed in the group of patients treated with Ib-isob in comparison with women receiving benzydamine. The clinical data available for Ib-isob confirm that this salt, specifically developed for gynecological use, is effective and well tolerated in vulvovaginal inflammation conditions. Efficacy of Ib-isob was greater in comparison with commonly used products. Ibuprofen-isob may be considered a useful and effective tool for the topical treatment of nonspecific vaginal diseases.

Treatment of genital lichen sclerosus in women--review.

Sadowska-Przytocka A, Dańczak-Pazdrowska A, Szewczyk A, Czarnecka-Operacz M, Jenerowicz D, Osmola-Mańkowska A, Olek-Hrab K

Ginekol Pol. 2012 Jun;83(6):458-61.

Lichen sclerosus is a chronic inflammatory skin disorder that belongs to a group of autoimmune connective tissue diseases, localized within the skin and mucous membrane of the anogenital area. In the latter location, the focal atrophy of the mucosa is the most visible sign. Lesions may be accompanied by symptoms such as itching, pain, burning. The disease occurs more often in females. The etiology is not fully understood. Genetic, infectious, hormonal factors and autoimmune mechanisms are taken into consideration. Early diagnosis and appropriate treatment is important to avoid further complications. This review aims to analyze available literature on the treatment of this disease entity

Topical treatment of vulvar lichen sclerosus with calcineurin inhibitors.

(Article in Dutch)

Maassen MS, van Doorn HC

Ned Tijdschr Geneesk. 2012;156(36):A3908.

OBJECTIVE: To provide an overview of the literature concerning the topical treatment of vulvar lichen sclerosus, a chronic inflammatory skin disease, with calcineurin inhibitors, such as pimecrolimus and tacrolimus. **DESIGN:** A literature review into the use of topical calcineurin inhibitors (TCIs) in the treatment of vulvar lichen sclerosus. **METHOD:** A literature search was performed using PubMed and EMBASE and the search terms 'tacrolimus', 'pimecrolimus' or 'calcineurin inhibitors' and 'lichen sclerosus et atrophicus', 'vulvar lichen sclerosus', 'vulvar dermatoses' or 'vulvar diseases'. **RESULTS:** The search produced 6 case reports, 5 patient series, 3 pilot studies, 2 open-label studies and 1 RCT concerning the use of TCIs for the treatment of vulvar lichen sclerosus. The literature shows that both medications are effective and well tolerated. However, glucocorticoids seem to be effective in more patients than TCIs. Tacrolimus has a stronger immunosuppressant effect than pimecrolimus and therefore seems to be more effective without having more observed side-effects. **CONCLUSIONS:** TCIs may represent a useful second-line therapeutic option for patients for whom treatment with glucocorticoids is not effective or who do not tolerate them well. Randomized clinical studies are required to determine the role of TCIs in the treatment of lichen sclerosus. **Conflict of interest:** none declared. **Financial support:** none declared.

Surgical division of labial adhesions in vulvar lichen sclerosus and lichen planus.

Bradford J, Fischer G

J Low Genit Tract Dis. 2012 Aug 9. [Epub ahead of print]

OBJECTIVE: Vulvar lichen sclerosus (LS) and lichen planus (LP) may cause persistent symptomatic labial adhesions. In the scant literature on this topic, there is no agreement about which operation is suitable, or the role of suppressive medical therapy. We report on simple perineotomy in the context of careful preoperative and postoperative medical suppressions. **MATERIALS AND METHODS:** Thirty-five patients were identified within a referral vulvar practice, with symptomatic labial adhesions due to LS or LP. After sharp dissection of adhesions and injection of anesthesia, patients doubled the frequency of their preoperative therapy and underwent close surveillance until complete healing had occurred. Suppression of the inflammatory process was continued indefinitely with regular review. **RESULTS:** Mean age was 57 years. Of the patients, 27 had LS and 8 had LP. Of the 35 patients, 28 (80%) had dyspareunia or apareunia. Mean symptom duration was 9 years. Of the 35 patients, 21 had posterior fusion, 11 had anterior fusion, and 3 had both anterior and posterior fusions. Of the 35 patients, 17 had mild fusion, 11 had moderate fusion, and 7 had severe introital stenosis. At the 3-month review, 31 of the 35 patients had no refusion. Mean duration of follow-up was 2 years (range = 3 months to 7.5 years). Of the 35 patients, 29 had no late refusion during this time. Of the 18 patients with dyspareunia, 8 had no pain, and 9 had less pain. Of the 10 patients with apareunia, 1 could have sex without pain, and 6 could have sex but with pain. **CONCLUSION:** Simple perineotomy is adequate to treat persistent labial adhesions,

provided that the inflammatory process is carefully suppressed.

Lichen sclerosus and immunobullous disease.

Walsh ML, Leonard N, Shawki H, Bell HK
J Low Genit Tract Dis. 2012 Sep 10. [Epub ahead of print]

ABSTRACT: We report 3 patients with long-standing lichen sclerosus who subsequently developed new onset erosive disease in affected sites. Repeated biopsies were performed which, although not diagnostic, showed some features of bullous pemphigoid for 1 patient and nonspecific findings for the 2 others. Direct immunofluorescence showed the characteristic findings of bullous pemphigoid in the first and pemphigus vulgaris in the others. All 3 patients were treated with immunosuppressive agents, and their condition improved dramatically.

Urethral reconstruction in lichen sclerosus.

Palminteri E, Brandes SB, Djordjevic M
Curr Opin Urol. 2012 Sep 6. [Epub ahead of print]

PURPOSE OF REVIEW: Lichen sclerosus is a chronic skin disease that shows a predilection for the anogenital area and may involve anterior urethra causing stenosis. Surgical options in the management of urethral strictures caused by lichen sclerosus still represent a challenging issue. **RECENT FINDINGS:** Depending on the length and severity of urethral involvement, surgical management of lichen sclerosus urethral strictures can range from a simple meatotomy to a single or complex staged long repair using oral mucosa. Skin grafts or flaps are not recommended because skin could be involved by the disease. Perineal urethrostomy may represent the salvage solution in severe panurethral strictures. **SUMMARY:** One-stage or staged repairs using oral mucosa grafts are the most recommended procedures for the treatment of lichen sclerosus urethral strictures, but derivative perineal urethrostomy may play an important role in severe situations. Patients require long-term follow-up and extensive counseling that enables them to fully grasp the chronic and progressive nature of the disease and to deal with it.

Peristomal lichen sclerosus: The role of occlusion and urine exposure?

Al-Niaimi F, Lyon C
Br J Dermatol. 2012 Aug 22. doi: 10.1111/bjd.12014. [Epub ahead of print]

Lichen sclerosus (LS) is a chronic inflammatory skin disorder first described in 1887 by Hallopeau. It typically affects the anogenital area and presents clinically with ivory-white atrophic patches or plaques with associated telangiectasia and purpura. Only 4 cases of peristomal LS have been reported in the literature, and it has been considered to be a variant of extragenital LS.

Brief report: Premenstrual vaginal colonization of Candida and symptoms of vaginitis.

Watson CJ, Grando D, Garland SM, Myers S, Fairley CK, Pirotta M
J Med Microbiol. 2012 Jul 26. [Epub ahead of print]

Although premenstrual exacerbation of vulvovaginal symptoms attributed to *Candida* spp. is well documented, the causation of these symptoms is not well understood. This case series describes daily vaginal colonization with candida in three women. A single study pilot study was designed to test the methodology of proposed randomized controlled trial, Garlic and Candida. This study reports on the three women colonized with *Candida* spp. Ten women aged 18-50 who reported vulvovaginal candidiasis in previous 12 months were recruited through University of Melbourne. Each participant took daily vaginal swabs for two weeks in the luteal phase of their menstrual cycle, which were analyzed for quantitative colony counts of *Candida* spp. Of these, three women were colonized with *Candida* spp. For the first time,

daily colonization of candida in the luteal phase of the menstrual cycle is described in three women, demonstrating an increase in colony count preceding symptom development. This small study demonstrates colonization of *Candida* spp. during the luteal phase of the menstrual cycle in three women. *Candida* colonization is poorly understood, yet investigating the relevance of the link between symptom exacerbation and the menstrual cycle in who experience recurrent episodes of vulvovaginal candidiasis may influence management.

New approaches in the development of a vaccine for mucosal candidiasis: Progress and challenges.

Vecchiarelli A, Pericolini E, Gabrielli E, Pietrella D
Front Microbiol. 2012;3:294. Epub 2012 Aug 13.

The commensal fungus *Candida albicans* causes mucosal candidiasis in the rapidly expanding number of immunocompromised patients. Mucosal candidiasis includes oropharyngeal, esophageal, gastrointestinal, and vaginal infections. Vulvovaginal candidiasis (VVC) and antimycotic-refractory recurrent VVC is a frequent problem in healthy childbearing women. Both these mucosal infections can affect the quality of life and finding new therapeutical and preventive approaches is a challenge. A vaccine against candidal infections would be a new important tool to prevent and/or cure mucosal candidiasis and would be of benefit to many patients. Several *Candida* antigens have been proposed as vaccine candidates including cell wall components and virulence factors. Here we discuss the recent progress and problems associated with vaccination against mucosal candidiasis

***Candida glabrata* : Pathogenicity and therapy update.**

(Article in German)
Tietz HJ
Hautarzt. 2012 Aug 30. [Epub ahead of print]

Chronic recurrent vulvovaginal candidiasis caused by *Candida glabrata* is still rare in comparison to *C. albicans* infection, but therapy remains more difficult. Standard agents as fluconazole or itraconazole often fail, as well as the newer systemic triazoles like voriconazole or posaconazole. Micafungin is a new echinocandin drug with a wide antifungal spectrum including rare *Candida* species. No clinical trials with micafungin in chronic recurrent vulvovaginal candidiasis have been undertaken. We present the initial results employing a new therapy regimen consisting of micafungin in combination with topical ciclopirox olamine. All 14 patients with chronic recurrent vulvovaginal candidiasis caused by *C. glabrata* were treated successfully.

Vulvovaginitis and other common vulvar disorders in children.

Rome ES
Endocr Dev. 2012;22:72-83. Epub 2012 Jul 25.

Vulvovaginitis, labial adhesions, and other vulvar disorders occur commonly in children and can provoke high anxiety in both the parent and child. Performed correctly, the pediatric gynecologic examination can diagnose and treat, educate and reassure both parent and child. This examination requires patience, sensitivity, direct communication with the child as well as with the parent, and an open manner that inspires trust in both parties to manage a potentially anxiety-provoking situation. This chapter will review common vulvar disorders, including vulvovaginitis, lichen sclerosis et atrophicus, bubble bath vaginitis, labial adhesions, urethral prolapse, and other common problems. A discussion of childhood sexual abuse is beyond the scope of this chapter, with appropriate references available elsewhere. Practical pearls will be offered to make this exam easy for the primary care clinician and/or subspecialist.

Quantification of normal vaginal constituents using a new wet preparation technique.

Fowler RS

J Low Genit Tract Dis. 2012 Sep 10. [Epub ahead of print]

OBJECTIVE: This study aimed to evaluate a new method for preparing vaginal wet preparations to enable quantification of cells and lactobacilli. The current nonstandardized technique allows for a variable amount of vaginal fluid collected, diluted by a variable amount of saline/KOH, and no quantification of constituents. **MATERIALS:** The vaginal fluids from 100 randomly selected women without vulvovaginitis symptoms presenting to the author's practice at Mayo Clinic underwent analysis by the quantification technique. Women were excluded if they were younger than 18 years, had antibiotics within the past 2 months, currently on their period, had placed anything in the vagina for the past 24 hours, used Depo-Provera, or were lactating. **METHODS:** All the wet preparations were made by mixing the natural vaginal fluids with 3 mL of sterile normal saline. Spinal diluting fluid was added to the saline preparation. The saline and KOH mixtures were injected into separate wells of KOVA Glasstic Grid Slide and analyzed with a phase-contrast microscope at 40× and 60×. The concentration of leukocytes, lactobacilli, and squamous cells and the degree of maturation of the majority (>50%) of squamous cells were assessed, and it was determined whether there was excessive non-lactobacilli bacteria (EB) as evident by clumps of bacteria in the background fluid and speckling on the squamous cells. **RESULTS:** The 3 most common patterns to occur were as follows: First, 51% (95% confidence interval [CI] = 41%-60%) of the total specimens had abundant lactobacilli, no leukocytes, more than 50% fully matured squamous cells, and no EB. Second, 22% (95% CI = 14%-32%) of the total specimens had low lactobacilli counts, no leukocytes, more than 50% undermatured squamous cells, and no EB. Third, 12% (95% CI = 6%-20%) of the total specimens had abundant lactobacilli, leukocytes, more than 50% fully matured squamous cells, and no EB. **CONCLUSIONS:** It is imperative to be able to objectively quantify normal vaginal secretion constituents so that (1) the abnormal patterns can be demarcated and (2) treatment targets of what constitutes healthy vaginal conditions can be provided.

Sexual and reproductive health needs of young people: Matching needs with systems.

Braeken D, Rondinelli I

Int J Gynaecol Obstet. 2012 Aug 9. [Epub ahead of print]

Access to services is a central concern surrounding the promotion of sexual and reproductive health and rights (SRHR) of young people. A more holistic (so-called "positive") approach toward SRHR is needed, as is provision of services that tackle sexual and gender-based violence, sexual diversity, discrimination, relationship issues, and fears and concerns about sex and sexuality. Despite efforts to provide youth-friendly services, the uptake of services by young people is very low. What must be taken into account are young people's pathways to seeking services; and the specific barriers they face before getting to the services, while receiving services, and after leaving the service delivery sites. Attention to the perceptions and needs of young people is essential, along with development of policies, services, and programs that address those needs, particularly the youth-friendly approach to service delivery.

Clinical and laboratory evidence of Trichomonas vaginalis infection among women of reproductive age in rural area.

Fule SR, Fule RP, Tankhiwale NS

Indian J Med Microbiol. 2012 Jul;30(3):314-6.

BACKGROUND: Vaginitis is a commonly encountered complaint and one of the most frequent reasons for patient visit to obstetrician-gynaecologists. Three vaginal infections are frequent causes of a vaginal discharge: (1) bacterial vaginosis, (2) vulvovaginal candidiasis and (3) trichomonas vaginitis. Differences in the clinical presentation are helpful in diagnosis. Characteristic signs and symptoms for these three vaginal infections are distinct, but on many occasions, they are overlapping. The aim of the present study was to find the prevalence and correlation between the clinical spectrum and laboratory evidence of Trichomonas vaginalis infection by simple, reliable, confirmatory and specific method, i.e. microscopic examination of wet mount preparation and acridine stain of vaginal fluid. **MATERIALS AND METHODS:** Irrespective of HIV status, a total of 156 women with vaginal discharge were studied for establishing diagnosis of genital

tract infection. The cases of bacterial vaginosis and vulvovaginal candidiasis were excluded from the study. Vaginal speculum assisted high vaginal swabs were collected from women with discharge, during collection vagina was inspected for obvious signs. RESULTS: Of the 156 women with vaginal discharge, 19 (12.06 %) showed T. vaginalis infection. All the women belonged to active reproductive age group, i.e. 20-40 years. Itching dysuria, and offensive, malodorous, thin, yellowish vaginal discharge were the main and consistent complaints. Only in 2 (1.52%) cases, vaginal speculum examination revealed erythema and punctuate haemorrhage, the so-called "strawberry" vagina. The pH was recorded to be >4.5. CONCLUSION: Clinical differentiation of various forms of infectious vaginitis is unreliable. The prevalence of T. vaginalis infection at 12.06% was found among rural young women of reproductive age using simple and reliable screening wet mount microscopy.

Papules on genitals: Always an infectious disease?

Rodrigo-Nicolás B, Armengot-Carbó M, Gimeno Carpio E

J Sex Med. 2012 Aug 15. doi: 10.1111/j.1743-6109.2012.02873.x. [Epub ahead of print]

No Abstract Available.

Acquired labial sinechiae and hydrocolpos secondary to Stevens-Johnson syndrome.

Jesus LE, Dekermacher S, Manhães CR, Faria LM, Barros ML

Urology. 2012 Aug 22. [Epub ahead of print]

Stevens-Johnson syndrome frequently affects the genitalia. Vaginal problems have been recognized in female patients; however, reports about the problem and its treatment are rare. Labial sinechiae have not yet been reported as sequelae of Stevens-Johnson syndrome. Amenorrhea, cyclical abdominal pain, and a hypogastric mass in girls affected by Stevens-Johnson syndrome could indicate acquired vaginal obstruction. Extensive labial sinechiae in such patients can cause dysuria, urinary tract infection, and sexual dysfunction. After a diagnosis of Stevens-Johnson syndrome in girls, it is prudent to schedule a prepubertal genital examination to diagnose genital disease preemptively and avoid obstructed menstruation and future sexual problems.