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This newsletter is quarterly and contains abstracts from medical journals published between March and June 2006 (abstracts presented at scientific meetings may also be included). Please direct any comments regarding this newsletter to chris@nva.org.

Vulvodynia / Pain

A conceptual model for the pathophysiology of vulvar vestibulitis syndrome.

Zolnoun D, Hartmann K, Lamvu G, As-Sanie S, Maixner W, Steege J
Obstet Gynecol Surv. 2006 Jun;61(6):395-401; quiz 423

Vulvar vestibulitis syndrome (vestibulitis), the most common type of chronic vulvovaginal pain, impairs the psychologic, physical, and reproductive health of approximately 10% of women at some point in their lives. Research on the pathophysiology of vestibulitis suggests abnormalities in 3 interdependent systems: vestibular mucosa, pelvic floor muscles, and central nervous system pain regulatory pathways. To date, causes and relative contributions of these abnormalities to the development and maintenance of vestibulitis remain poorly understood. Research consistently supports the conceptualization of vestibulitis as a chronic pain disorder-akin to fibromyalgia, irritable bowel disorder, and temporomandibular disorder (TMD)-that is far more complex than vestibular hypersensitivity alone. Nevertheless, the clinical diagnosis of vestibulitis continues to rely on subjective report of pain during intercourse and vestibular sensitivity on clinical examination after exclusion of other gynecologic disorders. We propose that current diagnostic criteria, which are based on highly subjective patient and clinician measures, are not sufficient to describe and properly classify the heterogeneous clinical presentations of this disorder. To inform clinical care or research, we must be able to objectively characterize women with vestibulitis. This narrative review critically appraises current conceptualization of vestibulitis and presents a context for studying vestibulitis as a chronic pain disorder, emphasizing the need for objective assessment of clinical features. **TARGET AUDIENCE:** Obstetricians & Gynecologists, Family Physicians. **LEARNING OBJECTIVES:** After completion of this article, the reader should be able to state that vulvar vestibulitis is common; recall that the disorder has three major pathophysiological pathways and that understanding of these pathways is important in selecting treatment options, and explain that the clinician must attempt to properly classify the clinical presentations of the disorder.

Vulvodynia: diagnosis and management.

Reed B

Am Fam Physician. 2006 Apr 1;73(7):1231-8 (summary for patients:1239)

<http://www.aafp.org/afp/20060401/1231.html>

The diagnosis of vulvodynia is made after taking a careful history, ruling out infectious or dermatologic abnormalities, and eliciting pain in response to light pressure on the labia, introitus, or hymenal remnants. Several treatment options have been used, although the evidence for many of these treatments is incomplete. Treatments include oral medications that decrease nerve hypersensitivity (e.g., tricyclic antidepressants, selective serotonin reuptake inhibitors, anticonvulsants), pelvic floor biofeedback,

cognitive behavioral therapy, local treatments, and (rarely) surgery. Most women experience substantial improvement when one or more treatments are used.

Botulinum toxin A for the management of vulvodynia.

Yoon H, Chung, WS, Shim BS

Int J Impot Res. 2006 May 18; [Epub ahead of print]

Clinically, botulinum toxin A blocks the cholinergic innervation of the target tissue. Recently, it has been proved effective not only at a neuromuscular junction but also within parasympathetic or sympathetic neural synapses. Seven women with pain on genitalia that could not be controlled with conventional pain managements were enrolled in this study. Twenty to 40 U of botulinum toxin A were used in each injection. Injection sites were the vestibule, levator ani muscle or the perineal body. Repeat injections were administered every 2 weeks if the patient's symptoms had not fully subsided. In all patients, pain had disappeared with botulinum toxin A injections. Five patients needed to be injected twice; the other two patients needed only one injection. We did not observe complications related to botulinum toxin A injections, such as pain, hemorrhage, infection, muscle paralysis or other complications. The subjective pain score improved from 8.3 to 1.4, and no one has experienced a recurrence (the follow-up period was four to 24 months, with a mean follow-up of 11.6 months). Botulinum toxin A is effective in blocking nociception. Even though further investigation and well-controlled study will be necessary, we suggest that the botulinum toxin therapy would be useful and safe in managing vulvodynia of muscular or neuroinflammatory origins.

Surgical techniques: surgery for vulvar vestibulitis syndrome.

Goldstein A

J Sex Med. 2006 May;3(3):559-62

No abstract available.

Persistent constipation and posterior vulval pain.

Quinn M

J Obstet Gynaecol. 2006 May;26(4):388-9

No abstract available.

Nerve-stimulator-guided repeated pudendal nerve block for treatment of pudendal neuralgia.

Naja MZ, Al-Tannir MA, Maaliki H, El-Rajab M, Ziade MF, Zeidan A

Eur J Anaesthesiol. 2006 May;23(5):442-4

No abstract available.

C-arm-guided pudendal nerve block: a new technique.

Choi SS, Lee PB, Kim YC, Kim HJ, Lee SC

Int J Clin Pract. 2006 May;60(5):553-6

Pudendal nerve block (PNB) is an effective diagnostic and/or treatment method for perineal pain. Various approach techniques, such as transperineal, transvaginal, computerised tomography (CT)- or sono-guided approach, have been suggested for this block. However, they have some limitations, such as high cost, difficulty to perform in practice, inaccurate and unreliable results and inconvenience. To overcome these limitations, we first tried C-arm-guided approach for accomplishing PNB in the prone position. Under the optimal ischial spine view of C-arm fluoroscopy, the block needle was placed on the tip of the ischial spine. Then a mixed solution for the block was administered. All of the 25 patients enrolled in this study were blocked successfully using this method. No side-effects or complications were observed in relation to the block. We concluded that the C-arm-guided approach for PNB is an effective alternative to the existing techniques, which can overcome their limitations.

A retrospective claims database analysis to assess patterns of interstitial cystitis diagnosis.

Wu EQ, Birnbaum H, Kang YJ, Parece A, Mallett D, Taitel H, Evans RJ
Curr Med Res Opin. 2006 Mar;22(3):495-500

OBJECTIVE: Interstitial cystitis (IC) is often misdiagnosed as one of several other conditions manifesting similar symptoms. This analysis assesses the potential extent of IC misdiagnosis while considering concomitant conditions in a managed care population and identifies predictors of IC diagnosis.

RESEARCH DESIGN AND METHODS: Administrative insurance claims data covering 1.7 million lives (1999-2003) were analyzed. Insurance enrollees with ≥ 1 IC diagnosis (ICD-9-CM of 595.1x) were identified as IC patients. A random sample of non-IC controls was selected using a 10:1 matching ratio. Six-month incidence rates of 'commonly misdiagnosed conditions', (overactive bladder, urinary tract infection, chronic pelvic pain, endometriosis, prostatitis) were compared before and after patients' initial IC diagnosis and the reduction in incidence rate of commonly misdiagnosed conditions was used as a suggestive measure of the extent of IC misdiagnosis. The Kaplan-Meier method was used to assess the extent that commonly misdiagnosed conditions were predictors of subsequent IC. A Cox Proportional Hazards regression model (that adjusts for patient demographics, concomitant and misdiagnosed conditions) was used to estimate the hazard ratio (HR) of these conditions. Similar analyses were performed for the 'commonly concomitant conditions' (fibromyalgia, irritable bowel syndrome, vulvodynia).

RESULTS: There were 992 IC patients and 9920 controls identified. The reduced incidence of commonly misdiagnosed conditions after initial IC diagnosis suggests that the misdiagnosis rate could be as high as 38% within the 6-month period before initial IC diagnosis. **CONCLUSIONS:** Diagnoses of commonly misdiagnosed conditions are significant predictors of future IC diagnosis. When overlooked, potential misdiagnosis of IC can lead to underestimation of the true prevalence of IC. Similarly, diagnoses of commonly concomitant conditions are significant predictors of future IC diagnosis. These initial findings based on claims data suggest hypotheses for further investigation with clinical data. These results suggest more consideration of IC as a diagnosis is warranted, especially when certain diagnoses are repeatedly made and the resulting treatments do not alleviate the patient's symptoms.

Vulvar Dermatoses

Vulvar disease pearls.

Margesson LJ
Dermatol Clin. 2006 Apr;24(2):145-55

The vulva is a neglected area of the skin, hidden away by ignorance, embarrassment, and taboo with the result that women with vulvar diseases, desperate for help, suffer needlessly and waste millions of dollars on inadequate or inappropriate treatment. As the skin experts, dermatologists are vital for vulvar care. This article covers a range of subjects from normal anatomy to atypical presentations of common infections, such as candidiasis and herpes simplex virus. Tips are presented on the management of common vulvar dermatoses and there is a brief overview of pearls in diagnosis and therapy. Dermatologists are uniquely qualified to care for this area.

Infectious Disease

ACOG Practice Bulletin. Clinical management guidelines for obstetrician-gynecologists, Number 72, May 2006: Vaginitis.

ACOG Committee on Practice Bulletins – Gynecology
Obstet Gynecol. 2006 May;107(5):1195-1206

Vaginal symptoms are common in the general population and are one of the most frequent reasons for patient visits to obstetrician-gynecologists. Vaginitis may have important consequences in terms of discomfort and pain, days lost from school or work, and sexual functioning and self image. Vaginitis is associated with sexually transmitted diseases and other infections of the female genital tract, including human immunodeficiency virus (HIV), as well as adverse reproductive outcomes in pregnant and nonpregnant women. Treatment usually is directed to the specific cause of vaginal symptoms, which most commonly include bacterial vaginosis, vulvovaginal candidiasis, and trichomoniasis. The purpose of this document is to provide information about the diagnosis and treatment of vaginitis.

Basic Science

Anatomical and surgical considerations of the sacrotuberous ligament and its relevance in pudendal nerve entrapment syndrome.

Loukas M, Louis RG Jr, Hallner B, Gupta AA, White D
Surg Radiol Anat. 2006 May;28(2):163-9

In view of the paucity of literature, this study was undertaken to reappraise the gross anatomy of the sacrotuberous ligament (STL), with the objective of providing an accurate anatomical basis for clinical conditions involving the STL. We studied the gross anatomy of the STL in 50 formalin fixed cadavers (100 sides) during the period of 2004-2005. All specimens exhibited an STL with a ligamentous part and (87%) of specimens exhibited a membranous (falciform) segment, which extended towards the ischioanal fossa. The variations of the falciform extensions were classified into three types. In Type I (69%), the falciform process extended towards and along the ischial ramus to terminate at the obturator fascia. In Type II (108%), the falciform process extended along the ischial ramus, fused with the obturator fascia and continued towards the ischioanal fossa. In addition, the medial border of the falciform process descended to fuse with the anococcygeal ligament, forming a continuous membrane. Lastly, in Type III (13%), the falciform process of the STL was absent. The above mentioned data could have an important implication to the understanding of the relationship between the pudendal nerve and the sacrotuberous ligament and their relevance to pudendal nerve entrapment syndrome.