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

Vulvodynia / Pain

Vulvodynia: a state-of-the-art consensus on definitions, diagnosis and management.
Bachmann GA, Rosen R, Pinn VW, Utian WH, Ayers C, Basson R, Binik YM, Brown C, Foster DC, Gibbons JM Jr, Goldstein I, Graziottin A, Haefner HK, Harlow BL, Spadt SK, Leiblum SR, Masheb RM, Reed BD, Sobel JD, Veasley C, Wesselmann U, Witkin SS
J Reproductive Med. 2006 Jun;51(6):447-56

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

Hyperoxaluria in women with vulvar vestibulitis syndrome.
Greenstein A, Militscher I, Chen J, Matzkin H, Lessing JB, Abramov L
J Reprod Med. 2006 Jun;51(6):500-2

OBJECTIVE: To determine whether evaluation and treatment of hyperoxaluria in vulvar vestibulitis syndrome (VVS) is justified. STUDY DESIGN: Forty women (mean age, 24.5 years; range, 18-35) diagnosed with VVS at a sex therapy clinic participated. Diagnosis of VVS relied upon Friedrich's criteria: (1) severe vulvar vestibular pain upon touch or attempted vaginal entry, (2) tenderness to pressure localized within the vulvar vestibule, and (3) physical findings confined to vulvar erythema of various degrees. Oxalate was measured in 24-hour urine samples. Women with hyperoxaluria (urine oxalate >50 mg/24 h) were placed on a low-oxalate diet and oral calcium citrate as single therapy and reevaluated 3 months later. RESULTS: Hyperoxaluria was diagnosed in 7 women (17.5%), of whom 1 demonstrated an objective improvement and could have pain-free vaginal intercourse following treatment, yielding a 2.5% benefit from the evaluation and treatment of hyperoxaluria. CONCLUSION: There is no justification for evaluation and treatment of hyperoxaluria in women with VVS due to its low yield and economic burden.

Tender point examination in women with vulvar vestibulitis syndrome.
Pukall CF, Baron M, Amsel R, Khalife S, Binik YM
Clin J Pain. 2006 Sep;22(7):601-609

OBJECTIVES: To examine whether generalized pain sensitivity in women with vulvar vestibulitis syndrome (VVS) is increased, suggestive of altered pain processing at the level of the central nervous

system, and to investigate pain history and other pain measures in women with VVS. METHODS: Sixteen women with VVS and 16 age-matched (+/-3 years) and oral contraceptive status-matched (yes or no) control women participated in this cross-sectional study. The TP examination, typically used in the diagnosis of FMS, consists of the palpation of 9 bilateral nonvulvar areas by a blinded rheumatologist and was the main measure of generalized sensitivity. Pain intensity and unpleasantness rating (0 to 10) were recorded after each palpation. In addition, nonvulvar pain history, pain interference, catastrophizing, and anxiety were assessed via questionnaires. RESULTS: Women with VVS had significantly more painful TPs than nonaffected women; they reported significantly higher pain intensity and unpleasantness ratings and displayed more pain behaviors than controls ($P<0.05$). Furthermore, VVS patients reported having experienced more pain problems and associated interference, they catastrophized more in response to vulvar and nonvulvar pain, and they had higher levels of trait anxiety than controls ($P<0.05$). DISCUSSION: These results are consistent with recent findings of generalized sensitivity and heightened responses to pain in women with VVS. These results suggest that the mechanisms involved in VVS may include those that are genital specific in addition to those that are more generalized, and possibly centrally mediated.

Prevalence of neuropathic pain and the need for treatment.
Morley-Foster P
Pain Res Manag. 2006 Summer;11 Suppl A:5A-10A

Recent publications have suggested that more than two million adults in the United States suffer from neuropathic pain, but this number seems to be a significant underestimate. The prevalence of neuropathic pain from diabetes and postherpetic neuralgia alone, using the most conservative estimates of incidence, would equal two million Americans. Lesions of the nervous system responsible for pain genesis can occur either in the central or the peripheral nervous system. The most common causes of peripheral neuropathic pain syndromes worldwide are diabetes, HIV infection, cancer-related neuropathy (due to tumour invasion, surgical nerve damage, radiation or chemotherapy-induced nerve damage) and lumbar degenerative disc disease. Other less common, but significant, sources of suffering are postherpetic neuralgia, complex regional pain syndrome, phantom limb pain and postsurgical nerve trauma. Central neuropathic pain can be caused by stroke (infarct or hemorrhage), multiple sclerosis, spinal cord injury and syringomyelia. Certain pain syndromes such as trigeminal neuralgia and vulvodynia, although clearly neuropathic and a source of tremendous suffering, are not discussed in the present article due to space constraints. There is an unmet need for the treatment of neuropathic pain as evidenced by reports of pain despite the use of opioids and anticonvulsants, continuing psychological difficulties, lack of access to treatments and patients seeking access to complementary therapy.

A retrospective study of the referral patterns to a vulval clinic: highlighting educational needs in this subspecialty.
Cheung ST, Gach JE, Lewis FM
J Obstet Gynaecol. 2006 Jul;26(5):435-7

A retrospective study of the referral patterns to a specialist vulval clinic was performed. A total of 200 clinical records were reviewed of new patients seen between January 2004 and June 2005. A provisional diagnosis was stated in 45.5% of referrals, of which 27.5% had the diagnosis changed at the clinic. The majority of referrals were from general practitioners (GPs) (77%) and smaller proportions from gynaecologists (11%), dermatologists (9%) and others (3%). The most common conditions seen were lichen sclerosus (39%), eczema/lichen simplex (30.5%), lichen planus (11.5%), pain syndromes (10.5%) and others (8.5%). Lichen sclerosus was accurately diagnosed in 54.5% of referrals but for eczema/lichen simplex it was only recognised in 11.5% of referrals. Nine cases of lichen sclerosus had been referred by gynaecologists after histological confirmation, for advice on management. Education of vulval diseases to non-specialists should focus on conditions that they are most likely to encounter and find difficult to manage. This study illustrates an effective method to define what the local teaching requirements are.

A cognitive-behavioral group program for women with vulvar vestibulitis syndrome (VVS): factors associated with treatment success.
ter Kuile MM, Weijenborg PT
J Sex Marital Ther. 2006 May-Jun;32(3):199-213

The results of this prospective open clinical trial (N = 76) indicate that a cognitive-behavioral group program for women with vulvar vestibulitis syndrome (VVS) affects sexuality, pain control, vaginal muscle control, and vestibular pain and that these changes may mediate changes in pain during intercourse. Improvements in sexual functioning and vestibular pain during treatment seem to be particularly important factors in determining short and longer term treatment outcome. These findings are consistent with a cognitive-behavioral conceptualization of VVS.

Vulvar Dermatoses

Topical tacrolimus in the management of lichen sclerosus.
Luesley DM, Downey GP
BJOG. 2006 Jul;113(7):832-4

The effective management of vulval lichen sclerosus (LS) currently depends upon the use of topical steroids and emollients. There are concerns with regard to the long-term toxicity of potent steroids and therefore is a need to consider effective alternatives. Immunomodulatory macrolactams offer an alternative to steroids in the management of some other inflammatory skin disorders and it would seem reasonable therefore to assess their activity in LS. This pilot study of 16 histologically confirmed cases of LS suggests that macrolactams have a positive pharmacological effect.

Vulval skin disease: clinical features, assessment and management.
Lawton S, Littlewood S
Nurs Stand. 2006 Jun 28-Jul 4;20(42):57-63; quiz 64

This article outlines the issues involved in assessing and managing patients who present with a vulval skin condition. It describes the anatomy of the vulval area, many of the skin conditions that nurses may encounter in their practice and potential treatment options for these conditions. The importance of accurate history-taking is emphasised and described, and appropriate referral to a specialist is also discussed.

Infectious Disease

Probiotics for prevention of recurrent vulvovaginal candidiasis: a review.
Falagas ME, Betsi GI, Athanasiou S
J Antimicrob Chemother. 2006 Aug;58(2):266-72. Epub 2006 Jun 21

Vulvovaginal candidiasis (VVC) is a common infection affecting the quality of life of many women. Probiotics have been investigated as possible agents for the prevention of recurrences of VVC. We reviewed the available literature. In some studies the development of VVC was associated with either a low number of lactobacilli in the vagina or with the presence of H2O2-non-producing vaginal lactobacilli, although there are a few studies not supporting these statements. In addition, in vitro studies have shown that lactobacilli can inhibit the growth of Candida albicans and/or its adherence on the vaginal epithelium. The results of some clinical trials support the effectiveness of lactobacilli, especially Lactobacillus acidophilus, Lactobacillus rhamnosus GR-1 and Lactobacillus fermentum RC-14, administered either orally or intravaginally in colonizing the vagina and/or preventing the colonization and infection of the

vagina by C. albicans, while the results of a small number of clinical trials do not corroborate these findings. Nevertheless, most of the relevant clinical trials had methodological problems such as small sample size, no control group (placebo) and included women without confirmed recurrent VVC, and thus they are not reliable for drawing definitive conclusions. Thus, the available evidence for the use of probiotics for prevention of recurrent VVC is limited. However, the empirical use of probiotics may be considered in women with frequent recurrence of VVC (more than three episodes per year), especially for those who have adverse effects from or contraindications for the use of antifungal agents, since adverse effects of probiotics are very rare. In any case women should be clearly informed about the unproven usefulness of probiotics for this purpose. In conclusion, despite the promising results of some studies, further research is needed to prove the effectiveness of probiotics in preventing the recurrences of VVC and to allow their wide use for this indication.

Single-dose sertaconazole vaginal tablet treatment of vulvovaginal candidiasis.
Wang PH, Chao HT, Chen CL, Yuan CC
J Chin Med Assoc. 2006 Jun;69(6):259-63

BACKGROUND: Vulvovaginal candidiasis (WC) is a bothersome disease in women. Poor compliance with the continuous use of antifungal vaginal drugs often results in treatment failure. The aim of the present study was to evaluate the efficacy, acceptability, and safety of single-dose sertaconazole vaginal tablet (500 mg) treatment compared with conventional 3-dose econazole vaginal tablet (150 mg) treatment for VVC. METHODS: In this open, randomized, and comparative study, 40 symptomatic patients with VVC confirmed by the smear method were enrolled. Patients in group A were treated with single-dose sertaconazole vaginal tablet and those in group B were treated continuously with econazole vaginal tablet for 3 days. RESULTS: The characteristics of the patients in both groups were comparable and without statistical difference. Group A showed a significantly better clearance rate for candidiasis than group B (100% vs. 72.2% on day 7, p = 0.013; 100% vs. 77.8% on day 14, p = 0.030), based on smear method results. Group A showed a more rapid response for symptom relief than group B on day 7, but there was no difference in overall symptom relief between group A and group B on day 14. CONCLUSION: Single-dose sertaconazole proved to be a more convenient and symptom-relieving treatment for VVC. The advantages of such management are worthy of further study in women with relapse VVC.

Terbinafine versus itraconazole and fluconazole in the treatment of vulvovaginal candidiasis.
Ferahbas A, Koc AN, Uksal U, Aygen E, Mistik S, Yildiz S
Am J Ther. 2006 Jul-Aug;13(4):332-6

Vulvovaginal candidiasis is one of the most frequent infections of the female genital tract with a high incidence. Although numerous antimycotical agents are available for treatment of yeast vaginitis, there are few comparative data on the in vivo and in vitro activity of these drugs. The aim of this open, randomized, and comparative study was to determine in vivo and in vitro effectiveness of the 3 systemic antifungal agents: terbinafine and 2 azoles (itraconazole and fluconazole) in the treatment of patients with Vulvovaginal candidiasis. A total of 44 patients who had signs and symptoms of Vulvovaginal candidiasis were recruited for the study. Patients were randomly assigned to 3 groups: terbinafine 500 mg/d orally was used for 7 days, itraconazole 200 mg/d orally was used for 7 days, and fluconazole 150 mg orally was used as a single dose. Both clinical and mycologic examinations were performed for posttreatment assessment at week 4. This study revealed a clinical cure rate 33.3% for terbinafine, 60% for itraconazole, and 66.6% for fluconazole ($P>0.05$). Mycologic cure rates were 33.3%, 10%, and 66.6% respectively ($P<0.05$). Overall cure rates were 33.3%, 10%, and 53.3% ($P>0.05$). Terbinafine could be an alternative treatment option in Vulvovaginal candidiasis because there were no significant differences in the clinical and overall cure rates among 3 antifungal agents. However, terbinafine could not be suggested as a first-line treatment in Vulvovaginal candidiasis. Systemic use of terbinafine in larger numbers of cases may give more information about the effectiveness of this drug in the treatment of patients with vulvovaginal candidiasis.

Fluconazole versus 3-day clotrimazole in the treatment of sporadic and recurrent vulvovaginal candidiasis.
Coric M, Barisic D, Lovric H
Int J Gynaecol Obstet. 2006 Aug 14; [Epub ahead of print]
No abstract available.

Basic Science

Relationship of the uterosacral ligament to the sacral plexus and to the pudendal nerve.
Siddique SA, Gutman RE, Schon Ybarra MA, Rojas F, Handa VL
Int Urogynecol J Pelvic Floor Dysfunct. 2006 May 30

We describe the anatomy of the uterosacral ligament with respect to the sacral plexus. In six adult female embalmed cadavers, we identified the uterosacral ligament and its lateral nerve relations. Using the ischial spine as the starting point and measuring along the axis of the uterosacral ligament, we noted that the S1 trunk of the sacral plexus passes under the ligament 3.9 cm [95% confidence interval (CI), 2.1-5.8 cm] superior to the ischial spine. The S2 trunk passes under the ligament at 2.6 cm (95% CI; 1.5, 3.6 cm), the S3 trunk passes under the ligament at 1.5 cm (95% CI; 0.7, 2.4 cm), and the S4 trunk passes under the ligament at 0.9 cm (95% CI; 0.3, 1.5 cm) superior to the ischial spine. The pudendal nerve forms lateral to the uterosacral ligament. Our data demonstrate that the S1-S4 trunks of the sacral plexus, not the pudendal nerve, are vulnerable to injury during uterosacral ligament suspension.