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This newsletter is quarterly and contains abstracts from medical journals published between March and June 2003 (abstracts presented at scientific meetings may also be included). Please direct any comments regarding this newsletter to [chris@nva.org](mailto:chris@nva.org).

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A population-based assessment of chronic unexplained vulvar pain: have we underestimated the prevalence of vulvodynia?

Harlow BL, Stewart EG

J Am Med Womens Assoc. 2003 Spring;58(2):82-8

OBJECTIVES: To estimate the prevalence of unexplained chronic vulvar pain (burning or sharp knifelike pain or pain on contact) in an ethnically diverse population-based sample of women. METHODS: We used town census directories to identify 4915 women age 18 to 64 from 5 ethnically diverse Boston communities and asked them to complete a self-administered questionnaire pertaining to current and past chronic lower genital tract discomfort (response rate 68%). We calculated the cumulative incidence and 95% confidence intervals by demographic and reproductive characteristics. Approximately 16% of respondents reported histories of chronic burning, knifelike pain, or pain on contact that lasted for at least 3 months or longer, and nearly 7% were experiencing the problem at the time of the survey. Chronic vulvar pain on contact decreased with increasing age, but the cumulative incidence of chronic burning and knifelike pain was similar across all ages. Contrary to earlier clinical assessments, white and African American women reported similar lifetime prevalences. However, Hispanic women were 80% more likely to experience chronic vulvar pain than were white and African American women. Women with histories of chronic vulvar pain were 7 to 8 times more likely to report difficulty and great pain with their first tampon use than were women without such histories. Nearly 40% of women chose not to seek treatment, and of those who did, 60% saw 3 or more doctors, many of whom could not provide a diagnosis. CONCLUSION: Chronic unexplained vulvar pain is a highly prevalent disorder that is often misdiagnosed.

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Prevalence and incidence of prolonged and severe dyspareunia in women: results from a population study.

Danielsson I, Sjoberg I, Stenlund H, Wikman M

Scand J Public Health. 2003;31(2):113-8

**Aims:** The principle aim of this study was to investigate the prevalence and incidence of prolonged ( $\geq 6$  months) and severe dyspareunia in a non-patient population of women, and to explore the rate of recovery as well as the inclination to seek medical care. Another aim was to compare the use of oral contraceptives among women who had ever had dyspareunia and those who had not. **Methods:** A total of 3,017 women aged 20-60 participating in a screening program for cervical cancer answered a questionnaire about possible painful coitus. **Results:** The prevalence was 9.3% for the whole group and 13% for women aged 20-29 and 6.5% for the women aged 50-60, with a risk ratio of 2.0 (95% CI 1.4-2.8) for the youngest age group compared with the oldest. The incidence risk ratio was 9.3 (95% CI 2.8-30.9) for the youngest age group compared with the oldest. Using age-specific incidence rates, a rising incidence of dyspareunia in young women was demonstrated. Of the women who had ever had prolonged and severe dyspareunia 28% had consulted a physician for their symptoms; 20% recovered after treatment, while 31% recovered spontaneously. No differences were found in the use of oral contraceptives between the women who had had dyspareunia and those who had not. **Conclusions:** Prolonged and severe dyspareunia is a great health problem among all women and especially young women, for whom a rising incidence of dyspareunia is suggested and discussed. Surprisingly few women have consulted a physician, raising the question of why this is the case and what can be done about it.

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Case-control study of vulvar vestibulitis risk associated with genital infections.

Smith EM, Ritchie JM, Galask R, Pugh EE, Jia J, Ricks-McGillan J

Infect Dis Obstet Gynecol 2002;10(4):193-202

**OBJECTIVE:** To evaluate the risk of vulvar vestibulitis syndrome (VVS) associated with genital infections in a case-control study. **METHODS:** Diagnosed cases with VVS (n = 69) and age-frequency-matched healthy controls (n = 65) were enrolled from gynecology clinics in a university medical hospital during 1999. They were compared for potential risk factors and symptoms of disease. **RESULTS:** VVS cases had a significantly higher risk of physician-reported bacterial vaginosis (BV) (odds ratio, OR = 9.4), *Candida albicans* (OR = 5.7), pelvic inflammatory disease (PID) (OR = 11.2), trichomoniasis (OR = 20.6), and vulvar dysplasia (OR = 15.7) but no risk associated with human papillomavirus (HPV), ASCUS, cervical dysplasia, genital warts, chlamydia, genital herpes or gonorrhea. Genital symptoms reported significantly more often with VVS included vulvar burning (91 vs. 12%), dyspareunia (81 vs. 15%), vulvar itching (68 vs. 23%) and dysuria (54 vs. 19%) (p < 0.0001). **CONCLUSION:** A history of genital infections is associated with an increased risk of

VVS. Long-term follow-up case-control studies are needed to elucidate etiologic mechanisms, methods for prevention and effective treatment.

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Increased innervation of the vulval vestibule in patients with vulvodynia.

Tympanidis P, Terenghi G, Dowd P

Br J Dermatol. 2003 May;148(5):1021-7

Background Vulval vestibulitis is a condition characterized by the sudden onset of a painful burning sensation, hyperalgesia, mechanical allodynia, and occasionally pruritus, localized to the region of the vulval vestibulus. It is considered the commonest subset of vulvodynia. Pain precipitated in the absence of nociceptor stimuli might be triggered by previous peripheral nerve injury, or by the release of neuronal mediators, which set off inappropriate impulses in nonmyelinated pain fibres sensitizing the dorsal horn neurones. The pathophysiology of vulval vestibulitis is still unclear. Objectives The objective of this study was to evaluate the nerve fibre density and pattern, in specimens of vulval vestibulus, in normal subjects and in patients with vestibulitis, and provide objective diagnostic criteria for this condition. Methods Twelve patients with a history of the vestibulitis type of vulvodynia, and eight normal subjects underwent biopsy of the posterior wall of the vulval vestibule. Quantitative immunohistochemistry was performed, using antisera to the general neuronal marker protein gene product (PGP) 9.5, and to the neuropeptide calcitonin gene-related peptide (CGRP), on 15- micro m sections. Results There was a statistically significant increase of density and number of PGP 9.5 immunoreactive in the papillary dermis of patients with vulvodynia of the vestibulitis type, compared with those of controls. However, the distribution pattern of the innervation showed no significant change. There were no significant differences in CGRP staining between patients and controls. Conclusions It is concluded that the increase of PGP 9.5 immunoreactive nerve fibres, in patients with vulvodynia, may be either secondary to nerve sprouting, or may represent neural hyperplasia. Increased innervation may be applied as an objective diagnostic finding in vulval vestibulitis syndrome.

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Dysesthetic vulvodynia. Management strategies to improve quality of life.

Holland SM

Adv Nurse Pract. 2003 May;11(5):42-6

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The role of gabapentin in treating diseases with cutaneous manifestations and pain.

Scheinfeld N

**BACKGROUND:** Gabapentin was first approved by the FDA in 1993 as an add-on treatment for partial epileptic seizures. In May of 2002, it was approved as treatment for post-herpetic neuralgia by the Food and Drug Administration. It appears to be a promising agent in the treatment of pain, alterations of sensation and pruritus associated with dermatological disease, but no review of these uses exists. **METHODS:** Medline and Google searches were performed for the words "Gabapentin" and "Neurontin." The articles found were reviewed. Article identified that contained references to the treatment of skin disease and neuropathic pain were examined and their contents surveyed. **RESULTS:** Approximately 1200 articles were located in Medline that referred to Gabapentin or Neurontin. Over 150 articles reviewed its use for neuropathic pain, neuritis or neuralgia of various sorts. Approximately 20 articles reviewed its use for a variety of dermatological conditions or diseases with dermatological manifestations that included: pain control associated with wound dressing changes, erythromelalgia, piloleiomyoma related pain, brachioradial pruritus, Glossodynia, vulvodinia, and reflex sympathetic dystrophy. Over 100 articles that related to Gabapentin side effects were reviewed. **CONCLUSIONS:** Gabapentin is a very promising medication in the treatment of post-herpetic neuralgia and pain. Because dermatological patients suffer pain from painful tumors, after surgery, in conjunction with neuropathic ulcers, during dressing changes involving serious medical conditions, its applications seem manifold. Future studies must assess its role in the treatment of pruritus and other dermatological conditions involving pain or alteration of sensation.

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Electrical stimulation (ES) in the management of sexual pain disorders.

Nappi RE, Ferdeghini F, Abbiati I, Vercesi C, Farina C, Polatti F

J Sex Marital Ther. 2003;29 Suppl 1:103-10

We performed an open study to investigate the use of electrical stimulation (ES) on the vestibular area and vaginal introitus in women with sexual pain disorders. We recruited 29 women (age range 20-45 years) from among the patients at our Reproductive Psychobiology Unit to participate in the present study. They each experienced vestibular pain, inducing dyspareunia and vaginism. We performed ES with an ECL43400 apparatus (Elite, EssediEsse srl, Milan, Italy) once a week for 10 weeks. To evaluate the muscular activity of the perineal floor and sexual function, we employed the same apparatus with a vaginal probe for recording myoelectrical activity ( $\mu\text{V}$ ), we employed a VAS scale for evaluating pain, and we administered the Female Sexual Function Index (FSFI; Rosen et al., 2000) before and after the study protocol. We analyzed data by parametric and nonparametric comparisons and correlations, as appropriate. Our major findings were as follows: (a) the contractile ability of pelvic floor muscles ( $p < 0.001$ ), as well as the resting ability ( $p < 0.001$ ), significantly improved following ES; (b) the current intensity tolerated significantly increased ( $p < 0.001$ ) throughout the study, from 41.3  $\pm$  7.4 mA at the start of the study to 50  $\pm$  7.4 mA at the end of the stimulation protocol; (c) the Visual Analogic Scale (VAS) for pain significantly

declined ( $p < 0.001$ ), whereas FSFI pain scores ( $p < 0.001$ ) and full scale scores ( $p < 0.001$ ) significantly improved following ES, and 4 out of 9 women with vaginism went back to coital activity; (d) FSFI pain score and the current intensity tolerated, both before ( $R = .59$ ;  $p < 0.006$ ) and at the end ( $R = .53$ ;  $p < 0.02$ ) of the stimulation protocol, positively correlated. ES may be effective in the management of sexual pain disorders. Further controlled studies are necessary to standardize stimulation protocols according to the severity of pain and to better clarify the long-term clinical effects of ES.

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Management of common vulval conditions.

Welsh BM, Berzins KN, Cook KA, Fairley CK

Med J Aust 2003 Apr 21;178(8):391-5

Community-based surveys indicate that about a fifth of women have significant vulval symptoms lasting over three months at some time in their lives. Common causes of itch or pain are dermatitis, recurrent candidiasis and the recently recognised pain syndromes - vulvar vestibular syndrome and dysaesthetic vulvodynia. Diagnosis is usually apparent after a thorough history and examination, although conditions commonly coexist and are complicated by prior treatment. Skin lesions not responding to treatment require biopsy. Treatment aims to control symptoms rather than to cure; avoiding soaps and other irritants is central to management. An early, accurate diagnosis should enhance management of vulval conditions, particularly pain syndromes.

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#### OTHER VULVAR DISORDERS

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Management of patients with recurrent vulvovaginal candidiasis.

Sobel J

Drugs. 2003;63(11):1059-66

Recurrent vulvovaginal candidiasis (RVVC) is by no means uncommon and is a source of considerable physical discomfort in addition to serving as a major therapeutic challenge. The syndrome is multifactorial in aetiology and hence management strategies must recognise the complex aetiological pathways. Many women receiving the misplaced diagnosis of RVVC have a variety of other infectious and non-infectious entities presenting with identical symptoms. Hence the first step in management is confirming the diagnosis of RVVC including microbial confirmation and species identification. Efforts should be made to identify and correct a causal mechanism. Maintenance suppressive azole antifungal regimens are highly effective in controlling symptoms, although cure is less common. Further advances in achieving higher cure rates await the availability of non-azole fungicidal agents.

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Erosive lichen planus of the vulva and vagina.

Lotery HE, Galask RP

Obstet Gynecol. 2003 May;101(5 Pt 2):1121-5

**BACKGROUND:** Erosive lichen planus causes erosion of the vulva and vagina and characteristic oral lesions. Dyspareunia is usual, and vaginal stenosis may occur. This report highlights the clinical features and the response to medical therapy. **CASES:** We report the case histories of three women who presented to the Vulvovaginal Disorders Clinic of the University of Iowa with long histories of dyspareunia and advanced vaginal scarring. In each case, the clinical diagnosis of erosive lichen planus was obvious but had not been made previously. All three women have responded well to topical treatment with tacrolimus 0.1% ointment. **CONCLUSION:** Erosive lichen planus should be suspected in a case of vaginal erosion or narrowing. Surgical management is inappropriate when the mucosa is eroded. Inspection of the mouth may confirm the diagnosis.

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Tacrolimus ointment for the treatment of vulvar lichen sclerosus.

Assmann T, Becker-Wegerich P, Grewe M, Megahed M, Ruzicka T

J Am Acad Dermatol. 2003 Jun;48(6):935-7

The treatment of vulvar lichen sclerosus is generally considered difficult. Ultrapotent corticosteroids represent the most effective topical treatment, but carry the risk of side effects such as skin atrophy. We describe a 71-year-old woman with long-standing vulvar lichen sclerosus refractory to conventional treatment. After 6 consecutive weeks of treatment with tacrolimus ointment 0.1% (Protopic) twice daily, signs and symptoms of lichen sclerosus resolved. To our knowledge, this is the first report of the use of topical tacrolimus, which does not induce skin atrophy, in the treatment of vulvar lichen sclerosus.

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Vulvar syringoma, report of a case and review of the literature.

Miranda JJ, Shahabi S, Salih S, Bahtiyar OM

Yale J Biol Med. 2002 Jul-Aug;75(4):207-10

Syringomas are common intraepidermal sweat gland tumors most often found in women around the time of adolescence. Frequent sites of involvement include the lower eyelids and malar areas, however vulvar involvement is relatively rare. These lesions often present as small, multiple, skin-colored-to-yellowish papules and are often associated with increased vulvar discomfort and itching. We present a case of a 29-year old female who presented to her gynecologist complaining of vulvar itching and burning. A small condylomatous-type wart observed on her vulva was biopsied and found to be a syringoma. Because of their clinical presentation and associated symptoms, vulvar syringomas should

be considered in the differential diagnosis of any multicentric papular lesion of the vulva, vulvar pain syndrome, and pruritis vulvae.