

NVA Research Update E- Newsletter

September – October – November 2016

www.nva.org

Vulvodynia

The Vulvar Pain Assessment Questionnaire inventory.

Dargie E, Holden RR, Pukall CF.

Pain. 2016 Aug 1.

<https://www.ncbi.nlm.nih.gov/pubmed/27780177>

Millions suffer from chronic vulvar pain (ie, vulvodynia). Vulvodynia represents the intersection of 2 difficult subjects for health care professionals to tackle: sexuality and chronic pain. Those with chronic vulvar pain are often uncomfortable seeking help, and many who do so fail to receive proper diagnoses. The current research developed a multidimensional assessment questionnaire, the Vulvar Pain Assessment Questionnaire (VPAQ) inventory, to assist in the assessment and diagnosis of those with vulvar pain. A large pool of items was created to capture pain characteristics, emotional/cognitive functioning, physical functioning, coping skills, and partner factors. The item pool was subsequently administered online to 288 participants with chronic vulvar pain. Of those, 248 participants also completed previously established questionnaires that were used to evaluate the convergent and discriminant validity of the VPAQ. Exploratory factor analyses of the item pool established 6 primary scales: Pain Severity, Emotional Response, Cognitive Response, and Interference with Life, Sexual Function, and Self-Stimulation/Penetration. A brief screening version accompanies a more detailed version. In addition, 3 supplementary scales address pain quality characteristics, coping skills, and the impact on one's romantic relationship. When relationships among VPAQ scales and previously researched scales were examined, evidence of convergent and discriminant validity was observed. These patterns of findings are consistent with the literature on the multidimensional nature of vulvodynia. The VPAQ can be used for assessment, diagnosis, treatment formulation, and treatment monitoring. In addition, the VPAQ could potentially be used to promote communication between patients and providers, and point toward helpful treatment options and/or referrals.

Does degree of vulvar sensitivity predict vulvodynia characteristics and prognosis?

Reed BD, Plegue MA, Harlow SD, Haefner HK, Sen A.

J Pain. 2016 Oct 24. pii: S1526-5900(16)30265-6. doi: 10.1016/j.jpain.2016.10.006.

<https://www.ncbi.nlm.nih.gov/pubmed/27789257>

Although women with vulvodynia typically have increased vulvar sensitivity, data on characteristics associated with the degree of vulvar sensitivity are lacking. We measured vulvar sensitivity by cotton swab test and vulvodolorimeter among a subset of 335 women, ages <70 years, in the longitudinal Woman to Woman Health Study. Comparing the vulvodynia screening results from their online/paper survey to that at the time of the examination, 42 cases had ongoing vulvodynia, 66 cases had a recent remission, 22 controls now had a recent onset of vulvodynia, and 205 controls remained asymptomatic.

Vulvar sensitivity was greater in each vulvodynia group compared to controls ($P < 0.001$), and was associated with younger age at first onset of pain ($p = 0.025$), pain after intercourse ($p = 0.008$), describing the pain as a "pressure," "burning," or "irritating" ($p = 0.015$, $p = 0.005$, and $p = 0.006$, respectively), with increased severity of pain ever ($p = 0.012$), and with subsequent persistent or relapsing vulvodynia ($p < 0.001$ for each). A score of > 1 for the cotton swab summary score best differentiated cases from controls (sensitivity 71.9%; specificity 72.0%). Although 13.8% of women with vulvodynia had no increased sensitivity on cotton swab testing, they did not differ in most clinical characteristics or clinical course from those with increased vulvar sensitivity. **PERSPECTIVE:** This study demonstrated that women with vulvodynia have more vulvar sensitivity than controls, but the spectrum of sensitivity is broad. Furthermore, those with and without vulvar sensitivity did not differ in most vulvar pain characteristics or in prognosis, suggesting a positive swab test is not required to substantiate the diagnosis.

New topical treatment of vulvodynia based on the pathogenetic role of cross talk between nociceptors, immunocompetent cells, and epithelial cells.

Keppel Hesselink JM, Kopsky DJ, Sajben N.

J Pain Res. 2016 Oct 3;9:757-762. eCollection 2016

<https://www.ncbi.nlm.nih.gov/pubmed/27757050>

Topical treatments of localized neuropathic pain syndromes in general are mostly neglected, mainly due to the fact that most pain physicians expect that a topical formulation needs to result in a transdermal delivery of the active compounds. On the basis of the practical experience, this study brings forth a new, somewhat neglected element of the vulvodynia pathogenesis: the cross talk between the nerve endings of nociceptors, the adjacent immunocompetent cells, and vaginal epithelial cells. Insight into this cross talk during a pathogenic condition supports the treatment of vulvodynia with topical (compounded) creams. Vulvodynia was successfully treated with an analgesic cream consisting of baclofen 5% together with the autacoid palmitoylethanolamide 1%, an endogenous anti-inflammatory compound. In this review, data is presented to substantiate the rationale behind developing and prescribing topical products for localized pain states such as vulvodynia. Most chronic inflammatory disorders are based on a network pathogenesis, and monotherapeutic inroads into the treatment of such disorders are obsolete.

Clinicians' Perspectives and Experiences Regarding Maternity Care in Women With Vulvodynia.

Smith KB, Sadownik LA, Basson R, Isaacson J, Brotto LA.

J Obstet Gynaecol Can. 2016 Sep;38(9):811-819. doi: 10.1016/j.jogc.2016.04.008. Epub 2016 Jun 11.

<https://www.ncbi.nlm.nih.gov/pubmed/27670706>

OBJECTIVE: To assess clinicians' frequency of and comfort with provision of maternity care for women with vulvodynia, their beliefs and practices regarding delivery mode, and frequency of maternal requests for Caesarean section (CS). **METHODS:** We invited physicians and midwives to complete a questionnaire assessing their frequency of contact with pregnant women with vulvodynia; their level of comfort providing antenatal, intrapartum, and postpartum care for these women; whether they believed that vulvodynia is an indication for elective CS and the frequency of making this recommendation; and the number of patients with vulvodynia who strongly requested CS. **RESULTS:** Of the 140 participating clinicians, 91 were physicians and 49 were midwives. Most physicians ($n = 64$; 70.4%) saw patients with vulvodynia at least once per month. Clinicians who saw women with vulvodynia were most likely to see pregnant women with vulvodynia rarely ($n = 54$; 40.3%) or every six

to 12 months (n = 29; 21.6%). Almost one third (n = 44; 31.4%) were not comfortable providing maternity care for these women, and 16.4% (n = 23) agreed that vulvodynia was an indication for elective CS. Of respondents who provided maternity care for women with vulvodynia, 15.4% (n = 18) had recommended CS; the most common reason for doing so was potential worsening of vulvar symptoms. The majority of clinicians who provided maternity care for women with vulvodynia (n = 73; 62.4%) indicated that maternal requests for CS were rare. **CONCLUSION:** Almost one third of participating clinicians (31.4%) were not comfortable providing maternity care for women with vulvodynia. Despite infrequent maternal requests, a minority of clinicians believed that vulvodynia is an indication for CS and/or made that recommendation. Additional research and education are needed to provide optimal obstetric care for women with vulvodynia.

Committee Opinion No 673 Summary: Persistent Vulvar Pain.

[No authors listed]

Obstet Gynecol. 2016 Sep;128(3):676-7. doi: 10.1097/AOG.0000000000001639.

<https://www.ncbi.nlm.nih.gov/pubmed/27548552>

Persistent vulvar pain is a complex disorder that frequently is frustrating to the patient and the clinician. It can be difficult to treat and rapid resolution is unusual, even with appropriate therapy. Vulvar pain can be caused by a specific disorder or it can be idiopathic. Idiopathic vulvar pain is classified as vulvodynia. Although optimal treatment remains unclear, consider an individualized, multidisciplinary approach to address all physical and emotional aspects possibly attributable to vulvodynia. Specialists who may need to be involved include sexual counselors, clinical psychologists, physical therapists, and pain specialists. Patients may perceive this approach to mean the practitioner does not believe their pain is "real"; thus, it is important to begin any treatment approach with a detailed discussion, including an explanation of the diagnosis and determination of realistic treatment goals. Future research should aim at evaluating a multimodal approach in the treatment of vulvodynia, along with more research on the etiologies of vulvodynia.

Multimodal Vulvar and Peripheral Sensitivity Among Women With Vulvodynia: A Case-Control Study.

Reed BD, Sen A, Harlow SD, Haefner HK, Gracely RH.

J Low Genit Tract Dis. 2016 Oct 7.

<https://www.ncbi.nlm.nih.gov/pubmed/27753704>

OBJECTIVE: To assess differences in vulvar and peripheral sensitivity between women with and without vulvodynia. **METHODS:** Women with vulvodynia (n = 41) and age-matched controls (n = 43) seen in the outpatient setting were evaluated via surveys, clinical examination, and multimodal sensory testing (pressure, heat, cold, vibration, and electrical stimulation). The relationships between sensitivity to various sensory modalities and case/control status, as well as by vulvodynia subgroups, were assessed using logistic regression. **RESULTS:** Women with vulvodynia were more sensitive to pressure and to electrical stimuli than were control women at the vulva (median, 22 vs 230 g and 0.495 vs 0.769 mA, respectively; $P < 0.001$ for each) and at the thumb (median, 2500 vs 4250 g and 0.578 vs 0.764 mA, respectively; $P = 0.006$ for pressure, $P < 0.001$ for electrical stimulation). Heat, cold, and vibration detection thresholds did not differ significantly between these groups ($P > 0.025$). Those reporting spontaneous pain versus provoked pain had greater pressure sensitivity to the thumb (median, 1850 vs 2690 g; $P = 0.020$) and greater electrical sensitivity at the introitus (0.450 vs 0.608 mA; $P = 0.011$), and those with primary versus secondary vulvodynia had substantially greater pressure sensitivity to the

thumb (median, 2438 vs 3125 g, $P = 0.004$). However, having localized versus generalized vulvodynia was not associated with differences in pressure or electrical sensitivity. **CONCLUSIONS:** Sensitivities to pressure and electrical stimuli are greater among vulvodynia cases than among controls and support 2 previously defined subgroups—those reporting spontaneous pain versus those whose pain only occurred when provoked, and those with primary versus secondary vulvodynia.

Catechol-O-Methyltransferase Gene Polymorphism and Vulvar Pain in Women with Vulvodynia.

Patanwala IY, Lamvu G, Ledger WJ, Witzeman K, Marvel R, Rapkin A, Bongiovanni AM, Feranec J, Witkin SS.

Am J Obstet Gynecol. 2016 Oct 22. pii: S0002-9378(16)30915-2. doi: 10.1016/j.ajog.2016.10.020.

<https://www.ncbi.nlm.nih.gov/pubmed/27780702>

BACKGROUND:

The underlying causes of vulvar pain in women with vulvodynia remain poorly understood. Catechol-O-methyltransferase (COMT), an enzyme that metabolizes catecholamines, is a neuromodulator involved with perception and sensitivity to pain. The COMT gene is polymorphic and a single nucleotide polymorphism (SNP) is associated with low activity and heightened pain sensitivity. The variant allele encoding this polymorphism is commonly called the L allele, for low enzyme activity as opposed to the normal H (high activity) allele. **OBJECTIVE:** The methionine containing COMT protein coded by the L allele results in elevated catecholamine levels, reduced inactivation of the dopaminergic and adrenergic systems and increased sensitivity to pain. This polymorphism may not only decrease the pain threshold in response to acute pain, but may also facilitate the development of chronic pain. Therefore the objective of our study is to assess whether a variation in the COMT genotype is involved in increased pain sensitivity in women with vulvodynia. **STUDY DESIGN:** Prospective cohort study **METHODS:** Buccal swabs were collected from 167 Caucasian women with vulvodynia and 107 control women and their DNA was tested for a SNP at position 158 (rs4680) in the COMT gene. **RESULTS:** Women with vulvodynia had a marginally increased, yet not significant, prevalence of the COMT genotype associated with high activity of the coded protein; 32.9% in women with vulvodynia as opposed to 21.5% in the controls (OR 1.80, 95% CI 1.02, 3.15). Subgrouping the cases based on pain frequency revealed that the elevated occurrence of this COMT genotype was present in 40.6% of the subset of women who experienced pain only with sexual intercourse versus only 21.5% of controls (OR 2.50, 95% CI 1.27, 4.93). Also, women with primary vulvodynia had a significantly higher prevalence of the H allele than did the controls (62.9% vs 48.1%, OR 1.82, 95% CI 1.05, 3.17). **CONCLUSION:** Increased pain sensitivity in women with vulvodynia is not due to a genetically determined low COMT enzyme activity. Other mechanisms may account for alterations in COMT activity in women with pain limited to intercourse or primary vulvodynia that contribute to pain sensitivity.

A Role for Bradykinin Signaling in Chronic Vulvar Pain.

Falsetta ML, Foster DC, Woeller CF, Pollock SJ, Bonham AD, Haidaris CG, Phipps RP. *J Pain*. 2016 Aug 18. pii: S1526-5900(16)30181-X. doi: 10.1016/j.jpain.2016.07.007. <https://www.ncbi.nlm.nih.gov/pubmed/27544818>

Chronic vulvar pain is alarmingly common in women of reproductive age and is often accompanied by psychological distress, sexual dysfunction, and a significant reduction in quality of life. Localized provoked vulvodynia (LPV) is associated with intense vulvar pain concentrated in the vulvar vestibule (area surrounding vaginal opening). To date, the origins of vulvodynia are poorly understood, and treatment for LPV manages pain symptoms, but does not resolve the root causes of disease. Until recently, no definitive disease mechanisms had been identified; our work indicates LPV has inflammatory origins, although additional studies are needed to understand LPV pain. Bradykinin signaling is one of the most potent inducers of inflammatory pain and is a candidate contributor to LPV. We report that bradykinin receptors are expressed at elevated levels in LPV patient versus healthy control vestibular fibroblasts, and patient vestibular fibroblasts produce elevated levels of proinflammatory mediators with bradykinin stimulation. Inhibiting expression of one or both bradykinin receptors significantly reduces proinflammatory mediator production. Finally, we determined that bradykinin activates nuclear factor (NF) κ B signaling (a major inflammatory pathway), whereas inhibition of NF κ B successfully ablates this response. These data suggest that therapeutic agents targeting bradykinin sensing and/or NF κ B may represent new, more specific options for LPV therapy.

PERSPECTIVE: There is an unmet need for the development of more effective vulvodynia therapies. As we explore the mechanisms by which human vulvar fibroblasts respond to proinflammatory/propain stimuli, we move closer to understanding the origins of chronic vulvar pain and identifying new therapeutic targets, knowledge that could significantly improve patient care.

Effect of Vestibulectomy for Intractable Vulvodynia.

Kliethermes CJ, Shah M, Hoffstetter S, Gavard JA, Steele A. *J Minim Invasive Gynecol*. 2016 Nov - Dec;23(7):1152-1157. doi: 10.1016/j.jmig.2016.08.822. Epub 2016 Aug 25. <https://www.ncbi.nlm.nih.gov/pubmed/27568225>

STUDY OBJECTIVE: To assess the effectiveness of vestibulectomy in treating vulvodynia for patients with inadequate response to vulvar care guidelines and medical management. **DESIGN:** Retrospective case series (Canadian Task Force classification II-2). **PATIENTS:** All patients who underwent a vestibulectomy from 2004 to 2013 for vulvodynia. **INTERVENTIONS:** All patients in this study underwent a vestibulectomy. **MEASUREMENTS AND MAIN RESULTS:** In this study we analyzed 31 patients' overall reported pain scores and Q-tip test scores before and after vestibulectomy. The efficacy of vestibulectomy on reduction of pain was then analyzed after surgical management. There was no significant difference in pain scores from initial visit compared with the last visit before vestibulectomy after vulvar care guidelines and medical management were initiated ($p = .48-.94$). However, mean subjective pain scores before and after vestibulectomy decreased by 67% ($p < .001$). Q-tip testing showed reductions of pain by 63% ($p < .001$) and 73% ($p < .001$) at the right and left Bartholin gland areas, respectively. There was approximately a 60% decrease of pain scored around the bilateral periurethral areas ($p < .05$). **CONCLUSIONS:** Vestibulectomy is an effective treatment for vulvodynia. For

those with intractable pain, vestibulectomy is an appropriate next step after unsuccessful medical treatment. The surgery leads to a significant decrease in patients' pain scores, nearly eliminating it in most cases.

Maintaining Affection Despite Pain: Daily Associations Between Physical Affection and Sexual and Relationship Well-Being in Women with Genito-Pelvic Pain.

Vannier SA, Rosen NO, Mackinnon SP, Bergeron S.

Arch Sex Behav. 2016 Sep 12.

<https://www.ncbi.nlm.nih.gov/pubmed/27620322>

Provoked vestibulodynia (PVD) is a recurrent, genito-pelvic pain condition that affects 8-12 % of women and has negative implications for sexual and relationship functioning. Many women with PVD report avoiding physical affection because they are concerned that affectionate behavior will lead to painful sexual activity. In community samples, physical affection is associated with improved sexual and relational well-being; however, no research has assessed the influence of physical affection on well-being in women with PVD. The current study examined day-to-day, within-person associations between affectionate behavior (hugging/kissing, cuddling) and sexual satisfaction, relationship satisfaction, sexual functioning, and pain intensity in women with PVD. Seventy women diagnosed with PVD completed an 8-week daily survey. Data were analyzed using multilevel modeling. All outcomes were assessed on days involving sexual activity (n = 401 days). Physical affection was assessed on days with and without sexual activity. Hugging/kissing was positively associated with sexual satisfaction, relationship satisfaction, and sexual functioning within any given day and when predicting the next day. Hugging/kissing was unrelated to pain intensity. Cuddling was not associated with any outcomes. Results persisted for affection that occurred on days with and without sexual activity. Findings suggest physical affection is beneficial for the sexual and relationship well-being of women with PVD. These results may inform interventions that encourage women coping with PVD to engage in more daily physical affection with their partners.

Sexual Assertiveness Mediates the Associations Between Partner Facilitative Responses and Sexual Outcomes in Women With Provoked Vestibulodynia.

McNicoll G, Corsini-Munt S, O Rosen N, McDuff P, Bergeron S.

J Sex Marital Ther. 2016 Sep 1:1-15.

<https://www.ncbi.nlm.nih.gov/pubmed/27586889>

Provoked vestibulodynia (PVD) is a recurrent idiopathic vulvo-vaginal pain associated with negative sexual and psychological consequences. Facilitative partner responses to pain are currently receiving empirical attention because they are positively associated with women's sexual outcomes. However, the mechanisms through which facilitative responses to pain are associated with these outcomes have not been examined. One potential mechanism is sexual assertiveness, which has been found to be associated with better sexual function and satisfaction in women with PVD. The present study examined whether women's sexual assertiveness mediated the association between women's perception of facilitative partner responses and women's sexual function and satisfaction. Women (N = 140) with PVD symptomatology completed self-reported questionnaires evaluating their perception of their partners' facilitative responses, and their own sexual assertiveness, sexual function, and sexual satisfaction. Dependent measures were sexual function measured by the Female Sexual Function Index and sexual satisfaction assessed by the Global Measure of Sexual Satisfaction Scale. Results indicated that women's

higher sexual assertiveness mediated the association between their greater perceived facilitative partner responses and their improved sexual function and satisfaction. Findings suggest a potential mechanism through which partner responses may be associated with women's sexual outcomes.

Co-morbid Disorders

Vulvodynia and Irritable Bowel Syndrome Treated With an Elimination Diet: A Case Report.

Drummond J, Ford D, Daniel S, Meyerink T.

Integr Med (Encinitas). 2016 Aug;15(4):42-7.

<https://www.ncbi.nlm.nih.gov/pubmed/27574494>

BACKGROUND: A 28-y-old athletic woman was diagnosed with vulvodynia and long-term irritable bowel syndrome (IBS) and was treated successfully with an elimination diet. **CASE/INTERVENTION:** In the course of 6 mo of nutrition therapy utilizing an elimination diet, specific foods triggering abdominal bloating and pain, and vulvovaginal pain were identified. In the course of treatment, the nutrition and supplement program instituted for this patient allowed her to return to her prior functional level without pain (including sexual activity) and resolution of her IBS. She has remained symptom free for at least 6 mo posttreatment. **CONCLUSION:** This case demonstrates the potential usefulness of incorporating a customized nutritional approach to determine proinflammatory foods in patients with chronic vulvodynia and overlapping IBS. Long-term pain resolution and healthy sexual functioning in this case was supported by food elimination and nutritional supplementation.

Pudendal Neuralgia

Adding corticosteroids to the pudendal nerve block for pudendal neuralgia: a randomised, double-blind, controlled trial.

Labat JJ, Riant T, Lassaux A, Rioult B, Rabischong B, Khalfallah M, Volteau C, Leroi AM, Ploteau S.

BJOG. 2016 Jul 27. doi: 10.1111/1471-0528.14222.

<https://www.ncbi.nlm.nih.gov/pubmed/27465823>

OBJECTIVE: To compare the effect of corticosteroids combined with local anaesthetic versus local anaesthetic alone during infiltrations of the pudendal nerve for pudendal nerve entrapment. **DESIGN:** Randomised, double-blind, controlled trial. **SETTING:** Multicentre study. **POPULATION:** 201 patients were included in the study, with a subgroup of 122 women. **METHODS:** CT-guided pudendal nerve infiltrations were performed in the sacrospinous ligament and Alcock's canal. There were three study arms: patients in Arm A (n = 68) had local anaesthetic alone, those in Arm B (n = 66) had local anaesthetic plus corticosteroid and those in Arm C (n = 67) local anaesthetic plus corticosteroid with a large volume of normal saline. **MAIN OUTCOME MEASURES:** The primary end-point was the pain intensity score at 3 months. Patients were regarded as responders (at least a 30-point improvement on a 100-point visual analogue scale of mean maximum pain over a 2-week period) or nonresponders. **RESULTS:** Three months' postinfiltration, 11.8% of patients in the local anaesthetic only arm (Arm A) were responders versus 14.3% in the local anaesthetic plus corticosteroid arms (Arms B and C). This difference was not statistically significant (P = 0.62). No statistically significant difference was observed

in the female subgroup between Arm A and Arms B and C (P = 0.09). No significant difference was detected for the various pain assessment procedures, functional criteria or quality-of-life criteria.

CONCLUSIONS: Corticosteroids provide no additional therapeutic benefits compared with local anaesthetic and should therefore no longer be used.

Transischiorectal fossa approach for resection of pudendal nerve schwannoma: case report.

Chen S, Gaynor B, Levi AD.

J Neurosurg Spine. 2016 Nov;25(5):636-639. Epub 2016 Jun 17.

<https://www.ncbi.nlm.nih.gov/pubmed/27314552>

Pudendal nerve schwannomas are very rare, with only two cases reported in the English-language literature. The surgical approaches described in these two case reports are the transgluteal approach and the laparoscopic approach. The authors present the case of a patient with progressive pelvic pain radiating ipsilaterally into her groin, vagina, and rectum, who was subsequently found to have a pudendal schwannoma. The authors used a transischiorectal fossa approach and intraoperative electrophysiological monitoring and successfully excised the tumor. This approach has the advantage of direct access to Alcock's canal with minimal disruption of the pelvic muscles and ligaments. The patient experienced complete relief of her pelvic pain after the procedure.

Lichen Sclerosus

Raman spectroscopy and multivariate analysis for the non invasive diagnosis of clinically inconclusive vulval lichen sclerosis.

Frost J, Ludeman L, Hillaby K, Gornall R, Lloyd G, Kendall C, Shore AC, Stone N.

Analyst. 2016 Nov 9.

<https://www.ncbi.nlm.nih.gov/pubmed/27827479>

Vulval lichen sclerosis (LS) is a common inflammatory condition associated with an increased risk of developing vulval carcinoma. Diagnosis is usually clinical although biopsy is necessary if the diagnosis is uncertain or if there is a failure to respond to adequate initial treatment. Raman spectroscopy has the potential to be applied in vivo for near real time objective non-invasive optical diagnosis, avoiding the need for invasive tissue biopsies. The aim of this study was to evaluate the diagnostic performance of Raman spectroscopy for differentiating LS from other vulval conditions in fresh vulval biopsies. Biopsies were analysed from 27 women with suspected LS in whom the attending gynaecologist could not establish the diagnosis on clinical presentation alone. Spectral variance was explored using principal component analysis and in conjunction with the histological diagnoses was used to develop and test a multivariate linear discriminant classification model. This model was validated with leave one sample out cross validation and the diagnostic performance of the technique assessed in comparison with the pathology gold standard. After cross validation the technique was able to correctly differentiate LS from other inflammatory vulval conditions with a sensitivity of 91% and specificity of 80%. This study demonstrates Raman spectroscopy has potential as a technique for in vivo non-invasive diagnosis of vulval skin conditions. Applied in the clinical setting this technique may reduce the need for invasive tissue biopsy. Further in vivo study is needed to assess the ability of Raman spectroscopy to diagnose other vulval conditions before clinical application.

Phototherapy for sclerosing skin conditions.

Teske NM, Jacobe HT.

Clin Dermatol. 2016 Sep-Oct;34(5):614-22. doi: 10.1016/j.clindermatol.2016.05.012. Epub 2016 May 20.
<https://www.ncbi.nlm.nih.gov/pubmed/27638441>

Phototherapy is an effective treatment strategy for a variety of sclerosing skin conditions. There are a number of phototherapeutic modalities used for the treatment of sclerosing skin conditions, including ultraviolet (UV)A1, broadband UVA, psoralen plus UVA, and narrowband UVB phototherapy. As controlled trials with validated outcome measures are lacking for these therapies, existing evidence is largely level II for morphea and is even more minimal for scleroderma and other sclerosing disorders (scleroderma, lichen sclerosus, and chronic graft-versus-host disease, among others). Studies do suggest that phototherapy may be effective for many of these disorders, including those that have been unresponsive to other therapies. Phototherapy remains an attractive therapeutic option for patients due to its efficacy and favorable risk-versus-benefit profile. Phototherapy also offers a therapeutic alternative to systemic immunosuppressives for patients who cannot tolerate these medications

Treatment of long anterior urethral stricture associated to lichen sclerosus.

Angulo JC, Arance I, Esquinas C, Nikolavsky D, Martins N, Martins F.

Actas Urol Esp. 2016 Nov 2. pii: S0210-4806(16)30131-0. doi: 10.1016/j.acuro.2016.09.002.
<https://www.ncbi.nlm.nih.gov/pubmed/27816211>

INTRODUCTION: Panurethral stricture associated with lichen sclerosus is a therapeutic challenge. We present the analysis of our results using two urethroplasty techniques based on oral mucosa graft.

MATERIAL AND METHOD: Retrospective study in patients with long anterior urethral stricture (>8cm) associated with lichen sclerosus. Patients received urethroplasty with oral mucosa graft technique according Kulkarni (n=25) or two-step Johanson-Bracka urethroplasty (n=15). Demographics, operative time, complications (Clavien-Dindo), hospital stay, days with catheter, EAV postoperative pain, failure rate, need for retreatment and functional data including IPSS, QoL, Qmax, post void residual (PVR) are evaluated. **RESULTS:** In all cases there was involvement of glandular and penile urethra, and in 75% of bulbar urethra. A single graft was used in 22.5%, two in 72.5% and three in 5%. Patients treated at a single step were younger (P=.007). Although the length of the stenosis was equivalent in both techniques (P=.96), relapse and complication rates were higher in two-step surgery (P=.05 and P=.03; respectively) and so was operative time (P<.0001) and overall stay (P=.0002). There were no differences in preoperative IPSS, QoL, Qmax or PVR, neither in postoperative values of IPSS or Qmax; but there was a difference in QoL (P=.006) and PVR (P=.03) favouring single-step urethroplasty. VAS pain on postoperative day 1 was also lower in Kulkarni urethroplasty than in the first step of Johanson-Bracka technique (P<.0001). **CONCLUSIONS:** In patients with lichen sclerosus and long anterior urethral stricture Kulkarni urethroplasty provides more efficient and better patient reported outcomes than Johanson-Bracka urethroplasty. It also prevents cosmetic, sexual and voiding temporary deterioration inherent to 2-step surgery.

The Prevalence of Lichen Sclerosus in Patients With Vulvar Squamous Cell Carcinoma.

Davick JJ, Samuelson M, Krone JT, Stockdale CK.

Int J Gynecol Pathol. 2016 Oct 31.

<https://www.ncbi.nlm.nih.gov/pubmed/27801760>

Women with vulvar lichen sclerosus (LS) have an increased risk of developing differentiated vulvar intraepithelial neoplasia and vulvar squamous cell carcinoma (SCC). Our primary aim was to determine the prevalence of LS among women with vulvar SCC. All patients who underwent excision for invasive SCC of the vulva from January 1, 2009 to December 31, 2013 were identified by searching our institution's electronic laboratory information system (n=111). The vulvar excision specimens from these patients were reviewed for the presence of adjacent LS. The grade of the SCC and clinical data were also documented for each case. The proportion of vulvar SCCs with adjacent LS identified on the excision specimen was 0.29 (95% confidence interval, 0.21-0.38). The proportion of patients in our study population who have ever had a histopathologic diagnosis of LS was 0.36 (95% confidence interval, 0.28-0.45). The presence of LS was not associated with the grade of the adjacent SCC. Patients with synchronous LS on excision were older on average than patients without LS. Tobacco users in our population were more likely to have a history of lower genital tract dysplasia, more likely to be younger, and less likely to have LS identified on the vulvar SCC excision specimen. Given the strong association between LS, differentiated vulvar intraepithelial neoplasia, and vulvar SCC, we recommend careful evaluation of these patients from a clinical and pathologic standpoint.

Patients with lichen sclerosus experience moderate satisfaction with treatment and impairment of quality of life: results of a cross-sectional study.

van Cranenburgh OD, Nijland SB, Lindeboom R, de Korte J, de Rie MA, Ter Stege JA, Prinsen CA.

Br J Dermatol. 2016 Oct 8. doi: 10.1111/bjd.15125.

<https://www.ncbi.nlm.nih.gov/pubmed/27718500>

BACKGROUND: Although considered relevant, little is known about satisfaction with treatment and health-related quality of life (HRQoL) among lichen sclerosus (LS) patients. **OBJECTIVES:** In a cross-sectional study, we aimed to examine 1) satisfaction with treatment, 2) patient characteristics associated with satisfaction, and 3) HRQoL in Dutch LS patients. **METHODS:** Members of the Dutch LS Patient Association (N=750) were invited to complete a web-based survey. We measured satisfaction with treatment with a study-specific questionnaire, and HRQoL with the Skindex-29. We calculated domain scores for Symptoms, Emotions, and Functioning, and categorized scores into little, mildly, moderately, or severely impaired HRQoL. We used a multiple linear regression analysis to examine whether patient characteristics were associated with treatment satisfaction. **RESULTS:** 303 patients (40.4%) were included. Patients under current treatment (N=265, 87.4%) were moderately satisfied with their treatment. Patients rated 'treatment effectiveness' as most important, although 58 (22%) were dissatisfied with the effectiveness of their current treatment. More impairment on the HRQoL Emotions domain and a higher degree of disease severity were both associated with lower satisfaction with treatment and explained in total 13.5% of the variance in treatment satisfaction. On all HRQoL domains, a third of the patients (34.7% - 38.9%) reported severe impairment. **CONCLUSIONS:** LS patients are moderately satisfied with their treatment, and one third of patients experience severe impairment of HRQoL. To improve dermatological care, we recommend enhancement of doctor-patient communication, information provision and organization, which may be more likely to change than treatment effectiveness or safety. This article is protected by copyright. All rights reserved.