

The Comprehensive Treatment of Provoked, Localised Vulvodynia with Acupuncture and Associated Modalities

By: Lee Hullender
Rubin

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Abstract

A prevalent female sexual pain disorder, vulvodynia causes significant distress due to vulvar pain, decreased intimacy and diminished quality of life. Provoked, localised vulvodynia (PLV) is the most common form of vulvodynia and severely impacts the lives of up to 16 per cent of women. Conventional medical treatment is often multi-modal, but has modest results. Vestibulectomy - surgical excision of the affected tissue - is currently the most effective therapy to address PLV pain. However, surgery may not be an option due to the associated risks or patient preference, therefore non-pharmacological treatments like acupuncture and its associated modalities may be pursued by patients. Acupuncturists should be educated on the features of PLV, its clinical manifestation and how they might support women suffering with PLV. The objective of this paper is to describe PLV in both conventional and Chinese medicine terms and provide an overview of acupuncture and adjuvant treatments. A short case study is included to illustrate how the theory works in clinical practice.

Introduction

A prevalent female sexual pain disorder, vulvodynia causes significant distress due to pain, decreased intimacy and diminished quality of life (Arnold et al., 2006). Vulvodynia presents clinically as pain and discomfort in the vulva with no identifiable cause and ongoing for at least three months duration (Bornstein et al., 2016; Stockdale & Lawson, 2014). Pain may be limited to a specific area (localised vulvodynia) such as the vulvar vestibule or clitoris, the whole vulva (generalised vulvodynia) including the pubis, perineum and/or inner thighs, or both areas (mixed vulvodynia) (Bornstein et al., 2016). Vulvodynia pain may be constant (unprovoked) or may occur only with specific touch or pressure (provoked). The disorder can be further classified based its onset: primary (pain has always been there since the first introital penetration) or secondary (was able to comfortably have introital penetration at one time) (Bornstein et al., 2016). The most common type of vulvodynia is provoked, localised vulvodynia, which accounts for 80 per cent of cases (Harlow & Stewart, 2003).

The objective of this paper is to describe the most common form of vulvodynia (provoked, localised vulvodynia) in both biomedical and Chinese medicine terms and provide an overview of acupuncture and adjuvant support treatments.

Biomedicine perspective

Provoked, localised vulvodynia (PLV) is estimated to

affect 8 to 16 per cent of women (Arnold et al., 2016). The pain is typically described as burning, searing, raw or abrading, and occurs with specific touch or pressure to the vestibular skin. The condition was previously known as vulvar vestibulitis, provoked vestibulodynia or vulvar dyesthesia. Provoked, localised vulvodynia significantly impacts intimacy, decreases sexual confidence, and adversely influences affect, triggering and reinforcing a broad cascade of effects on a woman's quality of life. Penetrative intercourse may not be possible and is often avoided entirely.

While the cause is unclear, several factors are associated with PLV, including genetic, hormonal, inflammatory, musculoskeletal, neurologic, psychosocial and structural defects (Arnold et al., 2007; Reed et al., 2016). Vestibular skin differs in women with PLV: nerves are thicker and more densely distributed in their vestibular tissue, with an increased concentration of inflammatory mast cells observed on biopsy (Leclair et al., 2013). Women with PLV may also have increased pelvic muscle tone as the pelvic floor muscles clench as a response to or an attempt to reduce pain, as well as in anticipation of pain. The pain of PLV can also alter central sensitisation, an adaptation of the brain's perception of pain (Zhang et al., 2011). Touch that would generally be soft and feathery feels searing or raw when central sensitisation is altered. However, this should in no way be interpreted that the 'pain is all in her head.' Care must be taken to

ensure health providers do not reinforce this incorrect opinion. It is important to believe patients with PLV and engender agency and engage in a therapeutic partnership. Clinically, several complex regional pain syndromes are frequent co-morbidities of PLV, including fibromyalgia (FM), temporomandibular disorder (TMD), headaches, back pain, as well as chronic fatigue, irritable bowel syndrome, interstitial cystitis, yeast infections, other vulvar dermatoses, and affective mood disorders like anxiety and/or depression (Goldstein et al., 2016). With this broad spectrum of disorders, supporting patients is important to ensure they become an active participant and avoid becoming passive in their healing journey.

For women suffering with PLV, diagnosis may take time, be difficult to confirm, and is often a process of exclusion. Women should be evaluated by an experienced vulvar specialist. There is no specific lab or blood test that confirms PLV, but the specialist will complete a thorough history and perform a physical exam that evaluates neurological and dermatological components and assesses muscular tone (Stockdale & Lawson, 2014). It is important to differentiate whether pain is localised to the vulvar vestibule or generalised to other areas like the perineum, inner thighs or mons pubis, which would instead indicate a different vulvodynia classification. An important component of the physical exam is the cotton swab test (CST), which may be performed to assess allodynia on the vulvar vestibule. A moistened cotton swab is lightly rolled over multiple locations on the vestibular skin to determine severity of pain. When the swab is rolled on the skin, the provider will simultaneously notice pelvic floor clenching or a whole-body retraction in severe pain. A two per cent lidocaine liquid is then applied to the vestibule, and the test is repeated. If the allodynia is reversed, then the diagnosis of PLV is likely (Stenson, 2017).

Conventional treatment is often multimodal and must be able to address the constellation of symptoms, as PLV is a complex disorder that affects multiple systems including the dermatological (eg vestibular skin), musculoskeletal (eg pelvic floor), psychosexual and, for some, gastrointestinal (eg abdominal pain) systems. Treatments should include education on vulvar care, and may include a combination of medications, manual therapy and counselling (Stenson, 2017). Medications can include topical, oral or injected agents. Topicals are used to treat the skin directly such as anaesthetics (eg lidocaine) or neuromodulators (eg gabapentin or amitriptyline/baclofen combination creams). Oral medications include neuromodulators and tricyclic antidepressants. Injectable medications include Botox and steroids. Anaesthetics are also prescribed to be used as needed prior to any anticipated sexual contact. However, it should be noted that no medication was superior to placebo to reduce PLV pain (Stenson, 2017). Manual treatments involve focused pelvic floor physical therapy (PFPT) by a trained

specialist, which includes home exercises and exercises with dilators. Counselling is also indicated due to PLV's broad impact on sexual confidence, such as cognitive behavioural therapy (CBT) or psychosexual counselling. More research is needed to confirm the effectiveness of both of these treatments on PLV. If all other interventions are unsuccessful, then surgical removal of the affected vestibular skin is the last available treatment. In observational studies, an estimated 80 per cent cure rate was found with surgical vestibulectomy. Risks are associated with surgery, however, and it is generally reserved for after other treatments have failed. Recovery from surgery generally includes topical lidocaine therapy and PFPT.

Penetrative intercourse may not be possible and is often avoided entirely.

A supportive and collaborative healthcare team is vital for the effective management of PLV and should engage the patient to be an active participant. While the treatment for PLV is not quick or simple, a multidisciplinary approach is recommended for the best results.

Chinese medicine perspective

Vulvodynia is not described as a disease in the classical literature, and therefore not much has been formally published on the subject. We can consider a few passages to guide us in understanding the aetiology and pathogenesis of this modern disorder. In *Fu Ke Xin Fa Yao Jue* (A Heart approach to Gynaecology: Essentials in Verse) it states: 'Pain within the yin is called "small door marriage [pain]." When the pain is extreme the hands and feet are unable to stretch.' (Anonymous, 2005). This passage clearly describes the lower body muscle contraction that may occur with penetrative introital pain. The annotation included with this passage states that such 'small door marriage pain' is caused by depressive heat (due to depression or other emotional conditions) that damages the Liver and Spleen, engendering damp-heat that drains down to the genitals to brew and cause contracting pain. This could also be interpreted as a rationale for guarding the lower yin orifice.

Fu Qing Zhu discusses yin tong (genital pain) in *Fu Qing Zhu Nu Ke* (Fu Qing Zhu's Gynaecology) as follows: 'If, after delivery, one begins to get around too soon, the birth gate may be invaded by wind thus causing such pain that the body dare not touch clothes or quilt.' (Fu, 1995). The emptying of blood and qi via birth leaves the vulva vulnerable to pathogenic invasion. Blood is required to fill the channels and tissues to protect them from pathogenic invasion. The description of the severity of pain here,

while not explicitly related to vulvodynia, provides insight on how severe pain may develop from depletion.

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Aetiology and pathogenesis

Although the aetiology of vulvodynia is unknown in conventional medicine, Chinese medicine provides some insight. Invasion of external pathogens, improper diet, emotional disturbance and weak constitution combined with overstrain and incompatible lifestyle should be considered. Descriptions below are modifications of Sun Peilin's work in *The Treatment of Pain with Chinese Herbs and Acupuncture* (Sun, 2011).

External factors

External cold pathogens can invade the vulva when a woman is exposed to a cold environment or sits on a cold surface for extended periods, or when she is post-partum, post-surgery or following heavy physical work or exercise when the pores are open due to sweating. Cold then causes pain because it contracts muscles and tendons due to blood stasis and stagnates qi by blocking its free flow through the channels and collaterals. If left unchecked the stagnation transforms into heat. The blockage of both blood and qi leads to severe pain that can feel burning.

External fire toxin can invade the vulvar tissue as either viral or certain types of bacterial infections. The fire damages the blood, tissues, channels and collaterals, and leads to burning, searing pain.

Dampness can invade the body if a woman remains in water or a damp environment for extended periods of time. The damp or damp-heat pathogens obstruct the local channels and collaterals and lead to pain. Damp-heat pathogenic factors may correspond with yeast or certain types of bacteria.

Diet

Habitually consuming excessive pungent, hot, sweet or fatty foods, or excessive alcohol intake all damage the middle jiao leading damp or damp-heat to accumulate. As the damp pathogens develop, they drain downward to the lower jiao, collect and brew. The channels and collaterals are disturbed around the vulva leading to stagnation of qi and stasis of blood, symptoms of burning and itching, and ultimately pain.

Emotions

Emotional constraint or disturbance disrupts the circulation of qi and affects the Heart and Liver. Since the vulvar tissue is surrounded by the Liver channel,

unresolved emotional constraint can directly stagnate the qi and blood flow in this area, leading to or exacerbating vulvar pain.

Other factors

General constitutional weakness, ageing, long-term chronic disease, poor nutrition, excessive physical work, menorrhagia, delivering several children or multiple surgeries with significant blood loss can all consume qi and blood. The vulvar tissue fails to be nourished due to qi and blood vacuity, leading to dryness and ultimately pain that feels scraped and raw.

The pathogenesis of vulvodynia from a Chinese medicine perspective is complex and can be assessed according to zang fu theory and channel theory. To understand how the disease develops, consider vital substance storage. The Kidney stores jing (essence) and the Liver stores the blood. Additionally, the Liver and Kidney originate from the same source, so a depletion of Kidney yin may in turn produce Liver yin vacuity. Physiological functioning of the genitals depends on proper nourishment of Kidney and Liver yin. When yin is insufficient in the Liver channel, the tendons and muscles are not properly nourished, and the vulvar skin can develop pain with pressure or touch.

Acupuncture channels and collaterals

When pain is localised in the genitals, we must consider the potential channel pathologies in addition to zang fu. The channels mostly involved with genital pain like PLV are the Liver and Kidney, and the Yin Qiao (Motility), Du (Governing), Chong (Penetrating) and Ren (Conception) Mai (Vessels). Descriptions of the channels below are sourced from *A Manual of Acupuncture* (Deadman et al., 1998).

The path of the Liver primary channel ascends the medial thigh and enters the genitals. It then ascends the lateral quadrants of the abdomen up to the inferior rib cage. In addition, the Liver's *luo* (connecting), divergent and sinew channels, as well as its cutaneous regions all cross or encompass the genitals.

- The Kidney primary channel ascends the medial leg to the postero-medial aspect of the thigh to the tip of the coccyx, while its sinew channel joins the Spleen sinew channel to bind at the genitals.
- The Yin Qiao Mai also ascends the medial leg and thigh to the external genitalia.
- The Ren Mai emerges from Huiyin REN-1 and travels anteriorly across the genitals to the abdomen, ascending to the head.

- The first and second branches of the Du Mai descend to or wind around the genitals, perineum and anus.

The pelvic floor muscles will likely also be impacted in PLV. Consider the channels that address the musculature of this region. On the posterior, the Bladder and Gall Bladder, and anteriorly, the Spleen and Stomach channels may be indicated. The Spleen is of additional importance as its sinew channel ascends the medial thigh to converge at the genitals, from where it ascends and binds at the umbilicus.

Chinese medicine diagnosis

Diagnosis from the Chinese medicine perspective is dependent upon several factors. Specific considerations for diagnosis are:

- 1) Location, quality and severity of pain: When considering the location of the pain, one must confirm if the pain is only localised to one specific area of the vulva or more generalised to the whole pelvic floor and medial thighs. Assess whether the pelvic musculature is hypertonic by palpating the medial and anterior thighs, lower central and lateral abdomen, posterior pelvic muscles and hip. Generally speaking, acupuncturists are not assessing intra-vaginally, but with the permission of the patient, should palpate all other associated muscle groups that do not require a patient disrobe.
- 2) Temperature of pain;
- 3) State of shen.

In addition, I often request the medical records from my patient's primary care provider or vulvar specialist. Within those notes, a full visual exam will be reported, as well as comment regarding vaginal muscle tone.

Zilberman has wonderfully described the zang fu diagnoses associated with vulvodynia (Zilberman, 2015). To complement her work, the channel diagnoses are described below. Diagnosis descriptions in this paper were originally influenced by the work of Flaws & Sionneau (2005). The primary channel diagnoses associated with PLV are qi stagnation and blood stasis of the channel; fire in the channel; and cold in the channel engendering heat. The associated signs and symptoms are as follows:

- Qi stagnation and blood stasis of the channel: Enduring vulvar pain; marked pain that may radiate to the perineum, low abdomen or low back; depression, irritability, insomnia or restlessness; no other significant symptoms of hot or cold. Purple or purple-spotted tongue; wiry and/or choppy pulse.

- Fire in the channel: Burning, lancinating vulvar pain that is ameliorated with cold; pain worse in hot climate/weather and may radiate; local redness; feels hot to the touch; mental agitation; possible burning or painful urination; fever and/or overall red complexion. Dry, red tongue, yellow tongue coating; forceful, rapid, surging pulse.
- Cold in the channel engendering heat: Localised and lancinating vulvar pain that may also be burning but that is relieved by warmth; pain worse in cold climate/weather; aversion to cold and pronounced lack of warmth in the extremities; thirst, sensations of heat and mental agitation. Tight, wiry, possibly slow pulse; pale tongue with moist, white coating.

Treatment

In clinical research, acupuncture is a promising therapy to reduce PLV pain. Two controlled and four small, uncontrolled studies investigated acupuncture as a treatment for vulvodynia. In all of the studies, acupuncture reduced pain, improved quality of life and was well tolerated by participants. However, these studies varied significantly in methodological quality, which was typically low: 1) four were uncontrolled, single-armed observational trials with fewer than 15 subjects in each study; and 2) acupuncture point protocols and methods of vulvodynia classification were inconsistent between studies. While all studies reported a reduction in pain with acupuncture, only four reported pain scores. There were different outcome measures between studies, leading to significant issues with heterogeneity. In the controlled studies, Hullender Rubin et al. (2017) observed a 50 per cent reduction of PLV pain as measured by tampon test, that was maintained at follow up three months later. Schlaeger et al. (2015) reported approximately 50 per cent vulvodynia pain reduction as measured on the McGill Pain Questionnaire after a five-week treatment course compared to wait list control. In the uncontrolled studies, Curran et al. (2010) reported modest improvements in PLV pain measures in eight women on the Female Sexual Function Index. However, Guevin et al. (2005) reported a significant mean difference of 6.38 in VAS scores after acupuncture in 13 women ($p < 0.001$). Powell & Wojnarowska (1999, N=12) and Danielsson et al. (2001, N=14) did not report pain scores.

The treatment approach described here acknowledges the countless ways to treat chronic pain syndromes informed by myriad systems, clinical expertise and research experience. Vulvodynia pain is rarely resolved quickly and requires perseverance by both patient and practitioner. Practitioners are advised to partner with pelvic floor physical therapists, sexual counsellors and vulvar specialists to support these patients. Farong Zhang, a master herbalist from Chengdu University of

Traditional Chinese Medicine, said in my doctoral training to consider treatment plans as a pathway to a park. There are many pathways to the park. Some paths will be short, others may be longer, meandering, have distractions or pauses. Eventually, he said, all paths will lead to the park. Wise words to remind clinicians to never lose sight of the treatment goals, even if there are diversions or regression in the patient's improvement.

Clinically, working with vulvar specialists, pelvic floor physical therapists, and sexual counsellors to co-manage PLV patient care can be successful. Similar to the biomedical approach, the acupuncture can be multimodal. Multiple anatomical structures and physiologies are at play – channels, skin, sinews, zang fu and shen. A dynamic, responsive and multimodal approach is therefore strongly indicated. Acupuncturists can adjust the basic point prescriptions based on what they see clinically. Consider the treatment suggestions outlined below as a framework to build upon. Always treat the individual. Some patients will not tolerate or may decline certain modalities. This requires critical thinking and nimble adjustments to ensure effectiveness. In clinical practice, modalities used to treat PLV pain include acupuncture, electro-acupuncture, moxibustion or infrared (IR) heating lamps, tui na, cupping, topical ointments,

lifestyle and diet modifications, and appropriate referrals. Essentially, the whole acupuncture tool box.

Acupuncture

Due to the relatively defined location of the pain in PLV, a core set of points can be used with additions based on channel diagnosis. To address both the yin and yang aspects of the disorder, as well as prevent accommodation to needling effects, it is advisable to alternate patient position between supine and prone position each session. In the experience of the author, patients tend to decline treatment of both sides during a single session after the third consecutive session.

In general, supine treatments address the Ren and Chong Mai, and the Jueyin and Yangming channels. Yangming is chosen due to its influence on the Chong Mai. Prone treatments use the foot Taiyang and Taiyin channels. See Table 1 for a description of primary points, selection rationale and needling techniques to achieve de qi and engage the channels. Repeat needle manipulation after 10 to 15 minutes and avoid burning sensations at the needle site. If prone treatments are declined, an alternative electrical stimulation point combination is Guilai ST-29 and Sanyinjiao SP-6 using the same methods described in Table 1.

Patient position	Acupuncture point	Rationale	Needling method
Supine	Zhongji REN-3	Addresses genital pain and urinary disorders.	Angled inferiorly toward pubic symphysis, with gentle, rapid rotation back and forth to propagate sensation into the vulva.
	Guilai ST-29	Courses qi and blood in the lower jiao, pain in the genitals.	Angled inferiorly and medially toward pubic symphysis, with rapid rotation back and forth to propagate sensation into the vulva.
	Hegu LI-4	Courses qi and reduces pain.	Even stimulation to engender dull ache or awareness of needle at site.
	Ligou LIV-5	Genital pain, clears heat.	Angled superiorly with channel toward the pelvis, with rapid rotation back and forth to propagate sensation into the vulva.
	Daling P-7	Clears heat, calms shen, cools blood.	Oblique insertion with even stimulation to engender dull ache or awareness of needle at site.
Prone	Gaohuangshu BL-43	Outer back-shu point of the Pericardium (Jueyin), nourishes yin, clears heat, calms shen, and treats pain.	Angled inferiorly with channel; mild lifting and thrusting to engender dull ache or awareness of needle at site.
	Ciliao BL-32, Xiaoliao BL-34	Local points that influences S2/S4 and pudendal nerves.	Electrical stimulation, 15Hz, continuous, with intensity to patient's noticing sensation, but not inducing pain.
	Sanyinjiao SP-6	Regulates urination and benefits the genitals, nourishes blood, yin and qi, meeting point of the three leg yin.	Mild lifting and thrusting to engender dull ache or awareness of needle at site.

Table 1: Primary acupuncture points to treat PLV

Second, add points based on channel diagnosis (Table 2). It is not unusual for the channel diagnosis to change over time or with the seasons, so care must be taken to reassess regularly to confirm diagnosis and adjust treatment as necessary.

If additional shen support is needed one can consider

adding Yintang for anxiety, or Baihui GV-20 and Shenting GV-24 for depression, angled toward one another. Additional point prescriptions and dietary modifications to address zang fu diagnoses or a Ren/Du block are described in Table 3. I primarily reference the dietary recommendations of Noll & Wilms (2009).

Diagnosis	Acupuncture point	Rationale	Needling methods
Qi stagnation and blood stasis	Xuehai SP-10	Cools and moves blood.	Mild lifting and thrusting to engender dull ache or awareness of needle at site.
	Ququan LIV-8, Zhubin KID-9, Yingu KID-10	Three point combination used to relax pelvic floor.	Mild lifting and thrusting to engender dull ache or awareness of needle at site.
Fire in the channel	Xuehai SP-10	Cools and moves blood.	Mild lifting and thrusting to engender dull ache or awareness of needle at site.
	Dadun LIV-1	Regulates Liver qi and benefits the genitals, alleviates pain. Bleed this point.	Bleed point.
	Xingjian LIV-2	Clears heat from the channel.	Mild lifting and thrusting to engender dull ache or awareness of needle at site.
Cold engendering fire	Guanyuan REN-4	Warms and tonifies Kidney (but can also treat lower abdominal pain radiating to the genitals, and drain intense heat causing burning sensation in the low abdomen).	Mild lifting and thrusting to engender dull ache or awareness of needle at site. May also use pole moxa around needle for 15 minutes or IR lamp. If severe cold, 3-9 cones of direct moxa then needle.
	Sanyinjiao SP-6	Meeting point of the three leg yin channels; invigorates blood, activates the channel to relieve pain, benefits the genitals, calms the shen.	Mild lifting and thrusting to engender dull ache or awareness of needle at site. Use with pole moxa, and follow the three leg yin to the medial mid thigh.
	Taichong LIV-3	Activates the channel, spreads Liver qi and regulates the lower jiao.	Lift and thrust to engender dull ache or awareness of needle at site.

Table 2: Channel-specific acupuncture point recommendations

Diagnosis	Treatments	Rationale
Liver qi depression	Guilai ST-29 + Qimen LIV-14	Course qi and blood in the low abdomen and unbind Liver qi in the ribs.
	Waiguan SJ-5 + GB-40	Hand and foot Shaoyang to course qi.
	Taichong LIV-3 + Neiguan P-6 + Zhongfeng LIV-4	Hand and food Jueyin to course qi and treat genital pain.
	Diet	Add teas and foods that course qi.
Blood stasis	Siman KID-14 + Shiguan KID-18	Move blood and opens the Chong Mai.
	Gongsun SP-4	Opens the Chong Mai.
	Diet	Add foods that vitalise and move blood, adjust temperature of recommendations to either clear heat/fire or cold in the channel.
Wood overacting on earth	Zhangmen LIV-13 + Sanyinjiao SP-6	Regulate wood and earth.
	Tianshu ST-25 + Guilai ST-29	Regulate bowels and course qi and blood in the lower jiao.
	Qihai REN-6	Regulates qi in the lower jiao and tonifies Kidney to support bowel regulation.
	Diet	Limit inflammatory foods, and supplement Spleen/Stomach with warm, cooked foods and Spleen tonic/qi coursing dietary recommendations.
Damp-heat	Zhigou SJ-6 + Yanglingquan GB-34	Hand and food Shaoyang to drain damp-heat.
	Diet	Add dietary recommendations to clear heat and drain damp.
Damp-phlegm accumulation	Yinlingquan SP-9 + Taibai SP-3	Nourish Taiyin and drain damp.
	Fenglong ST-40 + Taichong LIV-3	Course qi and transform phlegm.
	Shuidao ST-28	Hypogastric pain extending to the genitals.
	Diet	Add damp-draining or phlegm-transforming dietary recommendations.
Ren/Du block	Changjiang GV-1, Yinjiao GV-28, Huiyin CV-1, Chengjiang CV-24	Remove block, regulate Ren and Du Mai and benefit the genitals.
Heart/Liver blood vacuity	Shenmen HT-7, Zusanli ST-36, Sanyinjiao SP-6	Nourish blood to calm shen by tonifying the middle jiao to generate blood.
	Diet	Best if used with dietary modifications to nourish blood.
Spleen qi vacuity	Zusanli ST-36, Sanyinjiao SP-6, Taibai SP-3	Tonify Spleen. Use moxa and supplementing needling.
	Diet	Add dietary modifications to supplement the Spleen/Stomach.
Liver/Kidney yin vacuity	Zhaohai KID-6, Yinxi HT-6, Fuli KID-7	Nourish Liver, Heart and Kidney yin, calm shen.
	Diet	Add dietary modifications to nourish yin and calm shen.
Kidney yang vacuity	Taixi KID-3, Fuli KID-7, Qihai CV-6, Guanyuan CV-4	Warm and tonify Kidney yang. Use pole moxa and needling.
	Diet	Add warm yang and nourish blood foods.

Table 3: Additional acupuncture points and dietary recommendations

Acupuncturists should anticipate that the frequency of sessions and the overall duration of treatment will be longer than with other pain disorders, with therapeutic gains waxing and waning. A 12-week initial course is recommended when planning treatment. Start the treatment plan with twice weekly acupuncture sessions for six weeks. At the conclusion of the first six weeks, re-assess diagnosis and reduce to weekly sessions. Track pain levels and attempts at intercourse, if the patient is pursuing penetrative coitus. An alternative pain assessment is the insertion of a regular-size tampon with a cardboard applicator, also known as the tampon test. Having these on hand in clinic can be an efficient way to assess pain levels at the initial visit, at six weeks and at the end of a treatment course.

If pain has not improved after 12 weeks, refine diagnosis, adjust treatment, and continue with weekly sessions for another 12-week course, up to four courses. As a patient improves, taper treatment frequency to once every two weeks for two months, then once monthly for maintenance over three months. If a patient regresses in pain, increase frequency of sessions to twice weekly again for two to three weeks, then once weekly until the patient is back to baseline, then repeat the treatment taper.

My experience and research using this approach has yielded a minimum 50 per cent improvement in pain in most cases within 12 weeks. If this is not achieved, refer back to the vulvar specialist. Medications may be adjusted or PFPT may be engaged if not already. Clinical experience suggests these treatments work synergistically when performed over the same 12-week period, however, care must be taken to not induce undue burden on the patient with over-treatment.

Adjuvant therapies

Moxibustion

Moxa can be used in PLV when the diagnosis indicates it. If the patient accepts it, apply three to nine cones (with burn cream on the skin as a barrier) directly on Guanyuan REN-4. Considering the location of the sinew channel of the Spleen, one can also apply salt moxa on Shenque REN-8 as an alternative. While typically indicated for yang vacuity digestive disorders, this appears to be effective in managing PLV when cold has invaded the channel. Moxa can also be used for the qi stagnation and blood stasis channel pattern. In this case, apply pole moxa and follow the three leg yin channels from Sanyinjiao SP-6 to the mid-level medial thigh for approximately 15 minutes or until the channel is warm. If fire is lodged in the channel, naturally moxa is contraindicated.

Tui na

For patients with hypertonic pelvic floor muscles, add tui na or cupping to the treatment plan. Regardless of location, rocking of the hips and legs for approximately 5

to 10 minutes is indicated prior to needling. This unblocks the flow of blood and qi within the channels, sinews and muscles, and can soften the sinews and open the pelvis. Firm stroking (tui) the three leg yin channels from Sanyinjiao SP-6 to the groin may be indicated for a patient with cold or qi and blood stagnation in the channel. Partners of patients can be taught these techniques to use between sessions. Acupressure can also be considered in addition to needling. Use points on the anterior hip and thigh, pressing Biguan ST-31, Yinlian LIV-11, Ziwuli LIV-10 or Jimen SP-11 while the patient flexes the whole leg for approximately three seconds and then rests the leg back on the table. On the posterior hip/back with the patient in the prone position, press on Yaoyan M-BW-24, Baohuang BL-53, Zhibian BL-54 and ashi points along the lateral piriformis and gluteal muscle groups while patient extends posteriorly for approximately three seconds and then rests the leg back on the table. Press each point individually and make note of changes in muscle tone in the low abdomen and thighs, which should be noticeably softer on palpation.

Start the treatment plan with twice weekly acupuncture sessions for six weeks.

Cupping

For hypertonic posterior pelvic floor, cupping on the Bladder and Gall Bladder channels of the low back and gluteal muscle group is indicated. For the anterior thigh, running (also known as sliding) cupping with mild suction can be performed along the Liver, Stomach and Gall Bladder channels, with the direction of the cupping following the flow of the channel. When the muscles are hypotonic, which is rarer, then do not rock or cup. Use vigorous stroking to engage the affected channels and support the Spleen's influence over the muscles.

Diet

Dietary modifications should be considered within treatment planning, as middle jiao insufficiency with or without dampness is common. Basic recommendations are indicated in all cases as the middle jiao is the post-natal source of qi and blood, influences the muscles, and provides blood to the Liver for storage and discharge. Add individualised dietary food group recommendations based on diagnosis: to drain heat, expel cold, drain damp, transform phlegm, tonify qi or nourish blood and/or yin. From a conventional perspective, the low oxalate diet has been recommended therapeutically, however, its effectiveness to reduce vulvodynia pain is unclear (Groysman, 2010). A trial limiting high oxalate foods like bran flakes, spinach, beets, rhubarb, potato crisps or chips,

for example, for two-three weeks to determine if there is a change in pain is appropriate. If there is improvement, continue with high oxalate food restriction.

Lifestyle modifications

At the initial visit, encourage the patient to ask her partner to join her. After learning about the severity and triggers for pain, if penetrative intercourse is a primary cause for pain, it is not unreasonable to encourage the couple to take a break from having intercourse. Assure them they can and should resume attempts after the first course of treatment. If a patient smokes tobacco, direct treatment toward smoking cessation as smoking is strongly associated with pain chronicity and severity (Scott et al., 1999).

Self-care is vital to vulvodynia management and empowers patients with agency over their own care. Cosmetic and hygiene products can be reviewed for propylene glycol, a known vulvar irritant. Cleansing the vulva only requires rinsing with lukewarm water at a temperature that is comfortable. To dry, pat the area with a soft, cotton towel, taking care not to rub the skin. Underwear, if worn at all, should similarly be constructed of breathable cotton and all synthetic materials avoided as they can trap moisture and irritate skin. Readers can access an extensive list of self-care tips from the National Vulvodynia Association at <http://www.nva.org/tips>. Consider minor modifications to these recommendations based on Chinese medicine principles, ie avoid cold or ice.

Lubricants

In addition to the anaesthetics she may be prescribed to stop pain with intercourse, emollients to nourish skin and aid healing can be used. Note that tingling can occur with application of ointments or creams but should resolve after one minute. Coconut oil or shea butter are good alternatives to commercial lubricants as they are not tacky or sticky and do not generally irritate skin.

Additional tips

In clinic, several key topics have emerged as important in understanding PLV. Appropriate history taking is extremely valuable in understanding the clinical presentation of vulvodynia. First, actively listen to the patient and reflect back your understanding of her pain, using her words. Trust what she is saying is true and engage her as an active participant in her healing. Elicit a thorough medical and menstrual history, determine the onset of pain, circumstances surrounding its onset, as well as the quality and severity of pain upon provocation. Typical questions will include the following: Are you currently partnered? Are you sexually active? Does it hurt when you have sex? (Using a line drawing of a vulva as an illustration) can you point to where you have pain? When does the pain occur? Does pain occur with specific touch? Does pain occur at penetration, deep pelvic thrust, after

intercourse, and/or at non-sexual times? Pain with specific touch or after intercourse and localised only to the vulvar vestibule is indicative of primary involvement of the skin. Deeper pain implies more muscle/tendon involvement. Utilise this line of questioning to learn more about how PLV affects the patient and inform your diagnosis.

Second, history taking should also include questions regarding hygiene practices such as hair removal, products used such as depilatories for hair removal, lubricants, cleansers and type of underwear used. Hair removal, as noted above, is discouraged as it may irritate vulvar tissue and exacerbate pain.

Third, review medications to determine if they might be contributing to pain. Of specific interest are medications that affect hormones such as those that inhibit or reduce oestrogen like tamoxifen, anastrozole, letrozole and raloxifene. The birth control pill may also be implicated, although there is disagreement amongst experts as to whether it may contribute to the pain. While acupuncturists should not practise outside of their scope and recommend a woman stop these medications, do consider contacting or encourage the patient to discuss with their provider to consider alternative therapies.

Case

A 34-year-old nulliparous woman presented with vulvar pain that was inhibiting her ability to conceive. Her main goal was to build a family with her partner. Because intercourse was painful, she avoided it entirely. In about six months time she was planning to do assisted reproductive treatment in the form of in vitro fertilisation (IVF). She wanted to have more than one child.

During our initial interview, I asked her first about her vulvar pain. She had seen a vulvar specialist who had diagnosed her with provoked, localised vulvodynia. Onset was unclear, but she wondered if she always had it. She recalled burning pain with tampon insertion as a teenager. She described the pain as localised to the vaginal opening and more specifically in the posterior aspect, or fourchette, of the vulva vestibule. The pain occurred with pressure, touch or friction of the skin. She described the pain as searing when provoked by specific touch to the vulvar vestibule or with intercourse. Further, intercourse left her feeling raw and burned for several days. She rated severity as 8 of 10 on a Numerical Rating Scale (NRS), with 0 being no pain and 10 being the worst imaginable pain. Palliative treatment of lidocaine would temporarily relieve pain during vestibular touch, but the burning and raw pain sensations would show up after the touch. She explained that as a result of these experiences she and her partner largely avoided intercourse or sexual touch. She did not find that lubricants reduced the pain or duration of residual burning or rawness. She did not report any skin splits or changes in the skin and had not tried cooling or warming treatments on the vulvar tissue.

During the history taking, she confirmed menarche at age 14. Her menses were regular in frequency, every 28 to 29 days, and she bled for two days with a moderate flow, then ceased menses for one day, and resumed for one more day. She described the initial blood as dark red with large, gelatinous clots, and reported very painful, spasm-like cramps on the first two days. When her menses resumed, the blood was dark brown. Premenstrually, she would become more irritable with a tension headache and mild low back ache.

She reported feeling cold, with cold hands and feet, and she preferred to vacation in the desert of Palm Springs (California) in the summer. She also reported thirst and liked to drink cold water. She experienced intermittent, mild tension headaches, and infrequent palpitations when anxious. Her bowels opened regularly and were well-formed and easy to pass. Urination was frequent, clear and painless. She described herself as irritable and expressed feeling resentment that she required IVF to build her family. While she avoided intercourse due to the pain, she also said she had a low libido. Her partner also had a low libido and erectile dysfunction.

She exercised regularly, swimming two to three times a week in a heated, salinated pool, but would skip this when she was on her period. She began swimming in high school, often early in the morning in a cold pool, and during her menses she would force insertion of a plus-size tampon as she worried she might bleed through.

Her tongue was pale, with a purplish hue, and a thin, white, dry coating. Dark blue sublingual veins were also present. Her pulses were overall deep, slightly thin and tense in all positions, with a moderate rate. Palpation revealed the abdomen was of normal temperature, and the lower abdominal, gluteal and piriformis muscles were all hypertonic. Palpation of the foot Jueyin channel revealed several knots between Zhongfeng LIV-4 and Ququan LIV-8. She was lean and muscular, with clearly visible, dark blue veins on her arms, legs and abdomen. Her skin was dry.

Diagnosis

Due to the initial insult of persistent swimming in a cold pool, especially when menstruating, her tendency toward cold and love of warmth, I diagnosed cold invading the Liver channel and transforming to heat. The heat in this case was evidenced by the vulvar burning and tendency toward thirst. Secondly, I diagnosed blood stasis, as evidenced by her very painful menses and dark, clotted menstrual blood. The tension headaches, emotional burden of her vulvar pain, and the unfulfilled wish for a family evidenced Liver qi depression. Finally, frequent, clear urination and mild low back pain prior to her menses suggested mild Kidney vacuity.

Treatment

The treatment principles were to expel cold, stop pain by coursing qi, vitalise the blood, and tonify the Kidney. We chose a multi-modal treatment plan: acupuncture, moxa/ infrared lamp, dietary recommendations, tui na, and a topical application for the vulvar tissue. I recommended acupuncture twice weekly for six weeks, and then once weekly for 20 more weeks. She declined oral Chinese medicinals, and her partner declined Chinese medicine treatment.

Intercourse left her feeling raw and burned for several days ...

Acupuncture treatment included both manual and electrical stimulation and alternated between supine and prone positions at each visit. Supine visits began with tui na rocking of the legs to open the hips and soften the pelvic muscles. I also stroked the three leg yin channels from ankle to just above the knee to approximately the level of Xuehai SP-10. Acupuncture points were based on the following selection and modified as necessary:

- Ear points: Genitals, Shenmen, Sympathetic, Brain, Point Zero.
- Body points: Zhongji REN-3, Guanyuan REN-4, Guilai ST-29 or Qichong ST-30 (whichever was more tender), Ligou LIV-5, Xuehai SP-10, Taichong LIV-3, Neiguan P-6 or Hegu LI-4 (whichever made the pulse softer during palpation) and infra-red lamp on the low abdomen and feet.

After 20 minutes the needles were removed. I then gently palpated the lower abdomen and upper thighs on the left side (approximately around Guilai ST-29, Chongmen SP-12, Fushu SP-13, Biguan ST-31, Weidao GB-28, Ziwuli LIV-10 and Yinlian LIV-11) to find the most tender and/or tense spots. After finding these I would gently press them while asking her to briefly raise her whole leg a few inches off the table and then drop it back to the table. This was to force muscle resistance against the localised point pressure. Upon her returning her leg to the table, I would gently stroke the point and then repeat the process three times. I would then move to the other side and repeat the process. At the end of the treatment, I sent her home with a moxa stick to perform indirect moxa on her low abdomen and along the Liver channel of the lower legs for about 15 minutes a day.

For prone treatments, the treatment began with the same supine tui na method of rocking the legs and stroking the three leg yin channels as described above. She was then repositioned prone for acupuncture treatment which was based on the following point selection, again modified as required:

- Body points: Mingmen DU-4, Ganshu BL-18, Gaohuangshu BL-43, Sanyinjiao SP-6.
- Electrical stimulation: At BL-32 and BL-34, 100Hz, continuous stimulation with mild intensity using Pantheon Research electrical stimulator (Venice, CA). The infra-red lamp was positioned over the low back and feet.

Similar to the supine treatments, I would end the session by palpating the low back, hip and buttocks, looking for the most tense and/or tender points. Pressing on the point combined with forced muscle resistance (raising the whole leg off the table and then releasing) followed by gentle stroking on the area was repeated up to three times on each side to aid in softening the pelvic floor muscles.

Dietary recommendations included basic Spleen school recommendations to drink room temperature or warm beverages, avoid cold water, and supplement her diet with warming foods. I also recommended application of *Run Ji Gao* (Vital Compass brand) on the vulvar opening in the morning and evening before bed. Lifestyle modifications included the basic vulvar care tips as suggested by the NVA (see above) and the suggestion that she and her partner should not have intercourse for six weeks. When they were ready, I highlighted the importance of using a good, non-sticky, lubricant. Additionally, I encouraged her to make efforts to stay warm as much as possible and to avoid swimming during menstruation.

At the end of the first six weeks, she noticed a considerable reduction in her pain.

Treatment progression

At the end of the first six weeks, she noticed a considerable reduction in her pain, down to 3 out of 10 on the NRS. At this point, I suggested trying gentle penetrative touch with lubricated fingers after applying lidocaine. By the end of the 20 weeks, she and her partner were able to have penetrative intercourse about once weekly. Her partner used an erectile dysfunction medication, quartering the dose (in order to control the duration of erection). At this stage she rated pain at no more than 1 out of 10 and there were no residual burning or raw sensations. Her menstrual pain significantly improved as well, with fewer clots in her menstrual blood. She continued to experience a daylong pause during her menses. Chinese medicinals would have been therapeutically appropriate to address these symptoms. She also noted she was feeling warmer and less irritable.

She and her partner decided to move forward with IVF, so she took a six-week break from acupuncture treatment, which extended to 10 weeks as she was awaiting her

period. When she returned for acupuncture treatment, she decided to delay their IVF by six more months. She and her partner decided they wanted to continue to try on their own as they were able to have intercourse with little pain.

Conclusion

Provoked, localised vulvodynia can seem intractable to patients and health providers. Acupuncture and Chinese medicine may provide significant benefit to these patients, especially when used as an adjuvant to conventional medicine. The core methods described here resulted in significant pain reductions in women with PLV in a pilot study. Treatment success comes from a patient, dynamic and nimble therapeutic approach that is responsive both to the patient's needs and preferences as well as the variations in PLV clinical presentations.

Lee Hullender Rubin, DAOM, MS, LAc, FABORM, FISSVD, is a Doctor of Acupuncture and Oriental Medicine at the Osher Center for Integrative Medicine, University of California, San Francisco. She is also an academic and clinical researcher who has investigated the role of whole systems traditional Chinese medicine on assisted reproduction therapies, and most recently completed a pilot study on the feasibility and acceptability of acupuncture as an adjuvant to lidocaine therapy for provoked, localised vulvodynia. Dr. Hullender Rubin is a fellow of the American Board of Oriental Reproductive Medicine, and the first licensed acupuncturist to become an International Society for the Study of Vulvovaginal Diseases fellow.
 Email: lee.hullenderrubin@ucsf.edu
 Website: <https://osher.ucsf.edu/patient-care/patient-care-team/lee-hullender-rubin>

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