The Treatment of Postmenopausal Atrophic Vaginitis and Dyspareunia with Acupuncture and Chinese Herbs: A Case Study

Abstract

Atrophic vaginitis is a disturbing condition with a wide prevalence amongst postmenopausal women, resulting in thinning and atrophy of the vaginal epithelium, mucosal dryness, vaginal discomfort, vulvodynia, dyspareunia and/or increased incidence of urinary symptoms including stress incontinence and urinary tract infection. It is associated with a decrease in circulating oestradiol that frequently occurs during the menopause transition and is implicated in a decreased quality of life amongst aging women. This paper evaluates the effectiveness of acupuncture and Chinese herbal medicine as a non-hormonal treatment alternative in the correction or management of atrophic vaginitis and its accompanying symptoms. It details the case of a 54-year-old post-menopausal female treated over the course of three months, which resulted in a complete resolution of symptoms of vaginal discomfort, dryness and dyspareunia. It is concluded that acupuncture and Chinese herbal medicine may be an effective alternative treatment for the symptoms associated with atrophic vaginitis.

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Keywords: Menopause, atrophic vaginitis, vulvovaginal atrophy, dyspareunia, acupuncture, traditional Chinese medicine, TCM.

Introduction

Atrophic vaginitis (AV), or vulvovaginal atrophy (VVA), is a common condition affecting roughly 10 to 40 per cent of postmenopausal women (Ibe et al., 2010). It is most commonly the result of the decline in circulating oestradiol that occurs after menopause or oophorectomy, leaving vaginal tissue thin, pale and friable (Willhite et al., 2001; Bachmann et al., 2000). As a result of these structural changes, post-menopausal women often experience dryness, burning, pruritus, irritation and dyspareunia, as well as a host of urogenital symptoms including dysuria, incontinence and/or frequent urinary tract infection (Willhite et al., 2001).

To date, oral hormone replacement therapy (HRT) has been the most commonly used treatment option. In fact, despite current evidence showing the efficacy of local oestrogen therapy, systemic HRT continues to be the most commonly dispensed and requested form of therapy for AV (Kingsberg et al., 2009). However, as outlined by the Women's Health Initiative, positive correlations exist between systemic oestrogen use and an increased risk of endometrial hyperplasia and carcinoma, as well as breast cancer (The North American Menopause Society, 2007). This has raised concern over the use of oral HRT, particularly amongst women with a high risk of uterine or breast cancer, or those who are in remission. Because of these concerns, alternative treatments have been proposed and increasingly utilised in recent years, the most conservative of which is the use of vaginal lubricants and moisturisers. However, the use of such products is often inadequate for many women and minimally absorbed local vaginal oestrogen therapy is therefore recommended (Kingsberg et al., 2009).

Chinese medicine

According to the first chapter of the *Nei Jing Su Wen* (Inner Classic Basic Questions): 'At seven times seven or approximately 49 years of age, the kidneys are depleted, the *tian gui* is exhausted, menstruation ceases, and women can no longer get children' (Unschuld, 2003). This passage, which dates to somewhere between the 2nd century BCE and the 1st century CE reflects the basic principle that as women age, their Kidney essence declines. When the essence wanes, it can affect either the Kidney yin, Kidney yang, or both. Since blood is a yin substance, women are particularly susceptible to a decline of yin at midlife due to the long history of blood loss that occurs with each menstruation. Because Kidney yin is directly responsible for proper moisturisation, lubrication and suppleness of the epithelial tissues, it stands to reason that its deficiency would lead to dryness, thinning and loss of elasticity in the vagina (which is in itself a yin tissue). Further, waning of the Kidney yin leads to deficiency of Liver blood, a yin substance that is responsible for maintaining structural integrity of the genital organs (Maciocia, 1989).

While menopausal syndrome is discussed at length in Chinese medical literature, atrophic vaginitis as a separate condition has far less presence in traditional Chinese medicine (TCM) gynaecological texts, with only three authors addressing it specifically (Flaws, 2006; Jin, 1998; Maciocia, Obstetrics & Gynecology in Chinese Medicine, 1998). Furthermore, searches of Pubmed and Ebsco databases (including Medline, Alt Health Watch, and AMED) yielded fewer than five results on the treatment of vaginal atrophy with either acupuncture or Chinese herbal medicine. According to Jin (1998), this condition is differentiated into either

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阴湿 (yin shi, meaning vulvar deficiency) or 阴痒 (yin yang, meaning 'yin itch' or vulvar pruritus). Yin shi refers to deficiency of Liver and Kidney causing local dryness, irritation and itching with possible white dystrophic lesions on the vulva. Yin yang, on the other hand, does not present with vulvar lesions (Jin, 1998; Wiseman & Ye, 1998), and is typically caused by one of two disease patterns in TCM: either damp-heat pouring downwards or Kidney yin and Liver blood deficiency with dryness. In cases where menopausal symptoms are accompanied by dryness and thinning of vaginal tissues, Kidney yin and Liver blood deficiency is the likely TCM diagnosis (Maciocia, 1989). The appropriate treatment principles in such cases would be to nourish Kidney yin and Liver blood, resolve dryness and clear deficient heat.

While acupuncture treatment has been shown to reduce the vasomotor symptoms associated with menopause (Sunay et al., 2011), the treatment of postmenopausal atrophic vaginitis usually involves herbal medicine (Jin, 1998). However, acupuncture combined with herbal medicine would likely provide maximum treatment efficacy. Point prescriptions should be designed to nourish the Kidneys (either yin or yang), regulate the Ren mai (Conception vessel) and Chong mai (Penetrating vessel), and nourish Liver blood to relieve dryness, as well as addressing any excess components such as heat.

Herbal preparations for menopausal syndrome are chosen based on pattern differentiation. For patterns where Kidney yin/Liver blood deficiency is primary, a widely used herbal formula is *Zuo Gui Yin* (Restore the Left Kidney Decoction) (Jin, 1998). One study using animal models based its research on the yin-nourishing functions of the formula, finding that it increased oestradiol production and reduced associated symptoms in perimenopausal rats (Zhao et al., 2011). However, Maciocia also lists *Zhi Bai Di Huang Wan* (Anemarrhena, Phellodendron, and Rehmannia Decoction) and *Geng Nian An* (Peaceful Menopause) as herbal alternatives to *Zuo Gui Yin* for the treatment of menopausal syndrome, both of which nourish yin and clear heat.

Case history

A 54-year-old female presented in the clinic in May 2010 with a chief complaint of postmenopausal vaginal dryness and dyspareunia of three years duration. Symptoms included mild burning, vaginal dryness and burning pain during intercourse. A diagnosis of atrophic vaginitis was made based on vaginal examination alone. Local hormone therapy in the form of conjugated equine oestrogen cream (Premarin) was prescribed, and was applied to the vaginal tissue as required over the course of two years, with vaginal lubricants used prior to intercourse to reduce intracoital discomfort. Topical progesterone cream was also applied intermittently for systemic hormone support. Due to patient concern about the possible long-term side effects of hormone therapy, these medications were discontinued while TCM was explored as a possible alternative.

Additional history included previous hot flushes and night sweats, cold hands and feet, dry skin, lips and nails, as well as chronic dry eyes and dark floaters with partial visual obstruction. Thinning of the hair was reported, as well as intermittent low-pitched tinnitus and dizziness. The patient's diet was healthy, although there was pronounced thirst at night, chronic dry constipation and a history of haemorrhoids, with herbal laxatives used daily to promote bowel movements. Emotional stress was high due to work demands and financial strain. Her past medical history included long-term emotional strain and haemorrhoidectomy, and her family history was unremarkable. The patient was married with one child and was working as a self-employed interior painter and designer.

The patient had a thin frame with some loss of muscle tone. Her eyes and complexion were clear with good shen. She had dark circles under her eyes, and her lips were dry. Her voice was low in pitch and her countenance was mildly pensive. The tongue was red with a thin, white coating at the root and a red, peeled tip and edges; the tongue body was thin and small. The pulse was thin and wiry in the left cun and guan positions, slippery and wiry in the right cun and guan positions, and deep and weak in both chi positions.

The patient was diagnosed with Kidney yin deficiency with deficient heat, Liver blood deficiency with dryness and concurrent Liver qi stagnation due to prolonged emotional strain. The pattern of Kidney yin deficiency was apparent in her small frame, history of perimenopausal hot flushes and night sweats, tinnitus, dark floaters, dizziness, thinning hair and dry tissues, as well as the thin and wiry pulses in the left cun and guan positions. Deficient heat was evident in the red tongue body, red and peeled tongue tip, and history of hot flushes and night sweats. Liver blood deficiency with dryness was apparent from the multiple manifestations of dryness, as well as from the long history of dry and hard stools, thinning hair and dizziness. Liver qi stagnation, while a less obvious part of her diagnosis,

was seen in the chronic, low-grade emotional strain, tendency to cold hands and feet and constipation related to stress. It was also apparent in the wiry pulse and the red edges on the tongue.

Treatment

The treatment principles were to nourish Kidney yin and Liver blood, clear deficient heat, moisten dryness, course the Liver qi and calm the shen. The recommended course of treatment consisted of one month of weekly acupuncture and daily herbal therapy, with one or two further courses of treatment if symptoms persisted. Acupuncture treatment was performed with DBC .20 x 15mm or .20 x 30mm filiform needles; needle lengths were chosen according to acupuncture point and physical anatomy of the patient. The following distal, abdominal and auricular points were needled and retained for 25 to 30 minutes per session:

(Symbols denote needle technique: + tonify, - reduce, = even)

Ququan LIV-8 +
Sanyinjiao SP-6 +
Zhaohai KID-6 +
Taichong LIV-3 -
Neiguan P-6 =
Shanzhong REN-17 =
Zhongji REN-3 +
Guanyuan REN-4 +
Yintang M-HN-3 =
Auricular: Shenmen, Uterus, Kidney, Liver, Heart

The herbal formula prescribed was modified *Zhi Bai Di Huang Tang* and *Er Zhi Tang* (Anemarrhena, Phellodendron, and Rehmannia Decoction plus Two Ultimate Decoction), as follows:

Shu Di Huang (Radix Rehmanniae Glutinosae Conquitae) 12g
Shan Yao (Radix Paeoniae Lactiflorae) 12g
Shan Zhu Yu (Fructus Corni Officinalis) 12g
Fu Ling (Sclerotium Poriae Cocos) 6g
Mu Dan Pi (Cortex Moutan Radicis) 6g
Ze Xie (Rhizoma Alismatis Orientalis) 6g
Zhi Mu (Rhizoma Anemarrhenae Aaphodeloidis) 9g
Huang Bai (Cortex Phellodendri) 9g
Nu Zhen Zi (Fructus Ligustri Lucidi) 9g
Han Lian Cao (Herba Ecliptae Prostratae) 9g
Gou Qi Zi (Fructus Lycii)12g
Wu Wei Zi (Fructus Schisandrae Chinensis) 12g
Zhi Shi (Fructus Immaturus Citri Aurantii) 9g

Zhi Bai Di Huang Tang was chosen because of its ability to nourish Kidney yin while clearing deficient heat or fire. As mentioned above, a commonly recommended formula for the treatment of postmenopausal Kidney yin deficiency is *Zuo Gui Yin* (Restore the Left Kidney Decoction) (Liang, 2010; Jin, 1998; Maciocia, 1998); however, *Zhi Bai Di Huang Tang* was chosen in this case because of its ability to drain fire. *Er Zhi Tang* (Two Ultimate Decoction) and Gou Qi Zi (Fructus Lycii) were added to further nourish the yin and blood, along with Wu Wei Zi (Fructus Schisandrae Chinensis) to moisten dryness and calm the shen, and Zhi Shi (Fructus Immaturus Citri Aurantii) to regulate the qi and encourage regular bowel movements. The above doses of raw herbs were placed into a grinder and ground into a powder, then distributed in equal doses into seven teabags and sealed. The patient was instructed to steep one teabag in two cups of boiling water in a tightly covered glass jar for a period of 10 to 12 hours and drink the infused tea in two divided doses the following day. This was repeated daily for the entire course of the four-week treatment.

At the four-week reevaluation the patient reported slight reduction of vaginal dryness but no improvement in dyspareunia. The stools, though still dry, were more regular. The tongue had changed from red to slightly red, indicating a partial clearing of heat, while the pulses remained thin and wiry on the left. Because her pattern had not changed significantly, the same formula was modified accordingly. *Er Zhi Tang*, being light in nature, was replaced with Dang Gui (Radix Angelicae Sinensis) and Sha Shen (Radix Adenophorae seu Glehniae - in a relatively large dose to moisten dryness). Zhi Shi was removed due to the change in bowel function. The new formula was as follows:

Shu Di Huang (Radix Rehmanniae Glutinosae Conquitae) 12g
Shan Yao (Radix Paeoniae Lactiflorae) 12g
Shan Zhu Yu (Fructus Corni Officinalis) 12g
Fu Ling (Sclerotium Poriae Cocos) 6g
Mu Dan Pi (Cortex Moutan Radicis) 6g
Ze Xie (Rhizoma Alismatis Orientalis) 6g
Zhi Mu (Rhizoma Anemarrhenae Aaphodeloidis) 9g
Huang Bai (Cortex Phellodendri) 9g
Gou Qi Zi (Fructus Lycii) 12g
Sha Shen (Radix Adenophorae seu Glehniae) 12g
Dang Gui (Radix Angelicae Sinensis) 9g

The patient was advised to continue herbal treatment with the above formula for another four to eight weeks, with a two-week reevaluation to monitor efficacy.

Results

After two weeks of the above formula, the patient experienced marked reduction in vaginal dryness. She discontinued acupuncture treatment, but continued herbal therapy for an additional four weeks, after which time vaginal dryness and dyspareunia were resolved. She continued to take this formula intermittently for several months to maintain comfort levels and did not resume hormone therapy, either systemic or local. To date, the patient continues to use the above formula at intermittent intervals and periodically uses a personal lubricant for intercourse to ensure intracoital comfort.

Discussion

With local hormone therapy being a convenient and relatively low-risk method of treatment for AV and its associated symptoms, it is worthwhile to recommend such therapies to the majority of patients. However, in cases where hormone therapy creates a higher risk of endometrial proliferation, endometrial hyperplasia or other adverse events, or when the patient declines its use due to personal attitudes to hormone therapy, TCM may be a beneficial option. While most TCM texts instruct the use of *Zuo Gui Yin* for post-menopausal yin deficiency, this author speculates that *Zhi Bai Di Huang Tang* should be considered in cases where deficient heat or fire are present. In cases when marked dryness is present, fire may be implicated in the scorching of the fluids. Likewise, the additions of Dang Gui and Sha Shen may be of benefit when dryness is pronounced.

Conclusion

Few studies exist that explore acupuncture and Chinese herbal medicine in the treatment of atrophic vaginitis or dyspareunia. This successful case illustrates that there is a need for further investigation in this area. Well-designed, randomised controlled trials that explore the efficacy of acupuncture, herbs, or combined therapy would provide more conclusive information and guide future treatment of this condition. ■

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