Acupuncture for vulvodynia

J Powell MRCP F Wojnarowska FRCP

J R Soc Med 1999;**92**:579–581

SUMMARY

Vulvodynia is the sensation of burning and/or pain of the vulva in the absence of abnormal clinical findings. We offered acupuncture to twelve patients with this syndrome. All had experienced severe distress and impairment of sexual function and usual treatments had failed. The patients attended weekly for acupuncture and progress was monitored at each visit by enquiry, a questionnaire and a visual analogue scale for pain. Half had treatment for the first five weeks only, the other half for the second five weeks only.

Side-effects were negligible. Two patients felt so much improved that they declared themselves 'cured'; three believed their symptoms had improved and wished to continue acupuncture; four felt slightly better and judged acupuncture more effective than any other treatment; and three noted no effect at all.

Acupuncture is time-consuming and a large part of its beneficial effect in this study may have come from the regular specialist contact. However, in view of the patients' lack of response to other measures their satisfaction with the acupuncture was surprisingly high.

INTRODUCTION

Vulvodynia was first discussed as an entity by Weisfogel in 1976[1]. The heading, 'Battle with a unicorn. The burning vulva' raised a question whether the condition was real or a myth. By 1985 it was named vulvodynia[2], separate from pruritus vulvae and characterized by the International Society for the Study of Vulval Disease as 'chronic vulvar discomfort often described by burning, stinging or rawness'. Since then, patients with these distressing symptoms, now regarded as a vulval pain syndrome, seem to have increased steadily in number. Of those who are referred to specialized vulval clinics, many have consulted at least two other doctors before attending and there is often a history of inappropriate treatment (both self-treatment and prescribed)[3].

Before vulvodynia is diagnosed, other causes of vulvar burning must be excluded. These include fungal, bacterial and viral infections, inflammatory dermatoses such as lichen sclerosus and lichen planus, contact sensitivity and eczema, and lesions such as surgical scars and recurrent fissuring. Treatment is notoriously difficult. It is essential to reassure the patient that she has a recognized problem and that it will almost certainly improve with time. Emollients, lubricants and avoidance of irritants, combined with low-dose amitriptyline, offer relief in many patients[4]. Other treatments include topical steroids, antifungals, antihistamines and local anaesthetic gel. However, there remains a large group of patients who do not respond.

The Churchill, Oxford OX3 7LJ, UK

Correspondence to: Dr Jenny Powell

Acupuncture is successfully used in many chronic pain syndromes, and we wished to assess its effectiveness in vulvodynia.

PATIENTS AND METHODS

We selected twelve patients with vulvodynia aged from 18 to 68 years. All had vulval pain and burning, were free from abnormalities on examination or investigation and had longstanding symptoms unresponsive to the usual suggested treatments[4]. Many had tried other measures (Table 1). All patients attended weekly for ten weeks.

'Control' acupuncture points cannot be used since a needle or pressure at any point may cause a response, so each patient acted as her own control. Six had treatment for the first five weeks only, and the other six for the second five weeks only. They were counselled at each visit and their progress was monitored whether they were receiving acupuncture or not. Progress was monitored by general enquiry, a visual analogue scale pain score, and a score from an adapted 'quality of life questionnaire' (by kind permission of Dr Andrew Finlay)[5]. These assessments were continued for five weeks after treatment in both groups.

Treatment involved insertion of four fine needles just under the skin at recognized acupuncture points—two in one leg (spleen meridian points 6 and 9), one on the dorsum of the foot (liver meridian point 3) and one in the contralateral hand (large intestine meridian point 4).

We had interesting verification of the points we had chosen to use when a Chinese colleague translated an ancient text: for many centuries *The Yellow Emperor's Classic*

Table 1 **Treatments tried before recruitment to acupuncture study**

Treatment	Patient No.											
	1	2	3	4	5	6	7	8	9	10	11	12
A. Routinely tried												
Low-dose amitriptyline	+	+	+	+	+	+	+	+	+	+	+	+
Remove irritants	+	+	+	+	+	+	+	+	+	+	+	+
Emollients/lubricants	+	+	+	+	+	+	+	+	+	+	+	+
Topical steroids	+	+	+	+	+	+	+	+	+	+	+	+
Systemic antihistamines	+	+	+	+	–	+	+	+	+	+	+	+
B. Offered where applicable												
Systemic antifungal		+			+	+		+				+
Local anaesthetic	+	+	+	+		+	+			+	+	
Counselling/psychotherapy	+	+			+	+	+					+
Hormone therapy				+	+			+	+	+		+
C. Occasionally helpful												
Low oxalate diet		+			+							+
Caudal block					+							+
Other antidepressant		+			+					+		
Intralesional steroid	+							+				
Alpha interferon injection												+

+=treatment tried and not effective or only slightly effective

of Internal Medicine recommended points spleen 6 and 9 for external genital pain.

RESULTS

According to their pain and questionnaire scores patients fell into three groups—good responders, short-term responders and non-responders (Figure 1). The two good responders judged themselves cured and were happy to be discharged from the clinic (interestingly, one of these had been unable to take amitriptyline because of side-effects, and so had missed the most commonly effective treatment). Three patients recorded symptom control during the acupuncture period but relapsed after cessation. These short-term responders wished to continue with acupuncture.

Four patients judged acupuncture possibly more effective than previous treatments though their scores did not change substantially, and three felt no improvement at all (one said she might as well have been having her hair done). The only unwanted effects were minor bleeding or discomfort at the needle site. All the recorded responses occurred during the treatment period, whether this was the first or second five weeks of attendance.

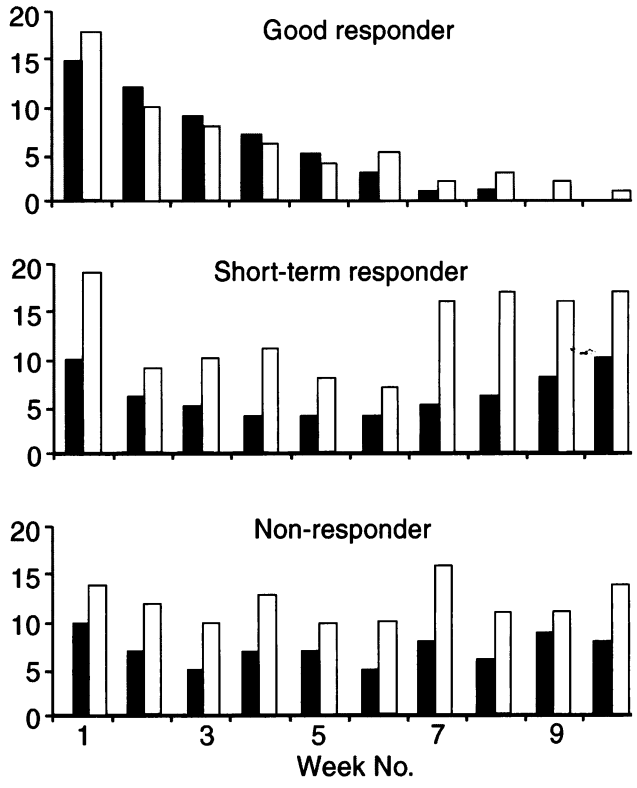

Figure 1 **Sample scores in a good responder, a short-term responder and a non-responder. Acupuncture weeks 1–5, follow-up without treatment weeks 6–10**
(■ Pain score; □ questionnaire score)

DISCUSSION

Vulvodynia is commonly associated with interstitial cystitis, irritable bowel syndrome and myalgic encephalomyelitis.

Because sexual problems and depression are frequent concomitants, some have regarded it as a psychosomatic disorder; however, any chronic pain can cause depression, and the doses of amitriptyline effective in vulvodynia are much lower than those required in depression[4]. Moreover, patients with vulvodynia do not differ in psychiatric morbidity from those with vulval disease[8]. Rather, it seems that vulvodynia is an atypical pain syndrome, where pain is felt in the absence of the usual nociceptor stimulus. To simplify, there are two nociceptor pathways. In the first, transmission is via the slow non-myelinated C fibres and a transmission cell to the crossed spinothalamic tract, the thalamus and then the cerebral cortex. In the second, transmission is via the myelinated A delta fibres, rapid pain fibres acting via encephalins synapsing with two cells in the spinal cord—inhibitory transmission cells and Waldeyer cells which connect not only to the spinothalamic tract but also to a descending pain-inhibitory channel of serotonin fibres. This explains why serotonin reuptake inhibitors such as amitriptyline can be helpful in this type of pain. In vulvodynia, there may be an initial trigger, such as candidal infection, episiotomy or 'anti-sexual-partner feeling', generating inappropriately persisting impulses in non-myelinated C fibres. This sensitizes the dorsal horn neurons, which then respond abnormally to light touch and pressure transmitted from myelinated A delta fibres, and maintain these unpleasant sensations by the action of efferent sympathetic fibres on the myelinated fibres. Acupuncture raises the level of β endorphins and its effect is reversed by naloxone[9]. Also, amitriptyline can enhance the effect of acupuncture and vice versa, since both 'desensitize' the dorsal horn. Acupuncture needles are therefore assumed to affect the A delta fibres, and we hoped that acupuncture might 'switch off' the overactive, malfunctioning pain sensory system.

Our results are surprisingly good, considering that the patients had been unresponsive to any other treatment. Acupuncture is time consuming, and much of the benefit may derive from regular time spent with a specialist with a particular interest in this disease. In the questionnaires completed in the five weeks after treatment even non-responders showed slight improvement, and this was clearly because patients wanted to express gratitude for the time spent on them. Among the treatments listed in Table 1, we would class acupuncture as group B or C but not yet A.

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