

Acupuncture and Moxibustion in the Management of Non-Cancer-Related Lower Limb Lymphoedema:

Three Case Studies

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Abstract

This paper presents case studies of three patients with non-cancer-related lymphoedema of the lower extremities, who participated in a project to assess the potential for using acupuncture and moxibustion as an adjunct to usual lymphoedema care. They illustrate how people with lymphoedema and complex co-morbidities (including morbid obesity) can benefit from treatment, and how reducing the symptom burden increases their ability to self-manage their chronic, incurable condition. They also demonstrate that acupuncture treatment can be effective even when large areas of the body are contraindicated to needling. Also shown are some of the practical challenges of dealing with morbidly obese patients. These case studies may influence existing perceptions of clinicians, patients, and acupuncturists about acupuncture's potential role in the management of lymphoedema, and they suggest that research into this area is warranted.

Key Words

Acupuncture, Moxibustion, Lymphoedema, Obesity, Quality of life, Chronic disease, Self-management

Introduction to Lymphoedema

People with lower extremity lymphoedema experience more severe symptoms, more infections, and lower health-related quality of life than those with upper extremity lymphoedema (Franks et al., 2006; Ridner et al., 2012). To date, research and service provision have focussed on cancer-related lymphoedema, particularly of the upper extremities (i.e. the arms in breast cancer). There is little in the literature relating to non-cancerrelated lymphoedema of the lower extremities. This is, to the author's knowledge, the first peer-reviewed paper to be published discussing the use of acupuncture in the management of noncancer-related lower limb lymphoedema.

Lymphoedema is chronic swelling caused by an imbalance between interstitial fluid production and transport, resulting in build-up of fluid and other elements in the tissue spaces. Impairment to the lymphatic system may be due to congenital malformation (primary lymphoedema) or damage to the lymphatic vessels or nodes (secondary lymphoedema) (Lymphoedema Framework, 2006). In the UK, there are an estimated 80-124,000 people with the condition, equivalent to the UK prevalence rates for Parkinson's disease, multiple sclerosis. and HIV (Macmillan Cancer Support, 2011). In the developed world, the main cause of lymphoedema is treatment for cancer. However, about a guarter to half of affected people have other forms of lymphoedema, including primary lymphoedema, or lymphoedema resulting from poor venous function, trauma, or cardiac disease (Lymphoedema Framework, 2006).

Lymphoedema is currently not curable. It is progressive, and requires specialist, ongoing treatment to keep it from worsening. Mild to moderate cases are managed with the 'four cornerstones of maintenance therapy' comprising skin care, wearing of compression garments, self-massage (simple lymphatic drainage (SLD)), and exercise and movement. Complicated and severe cases are managed with decongestive lymphatic therapy (DLT) or combined decongestive therapy (CDT), intensive treatment given daily for two to four weeks, comprising multi-layer bandaging and manual lymphatic drainage (MLD), followed by ongoing maintenance therapy (British Lymphology Society, 2007). A longterm chronic condition, lymphoedema requires patients to help themselves, and high levels of motivation and compliance with treatment are essential for ongoing management.

Lymphoedema is a complex condition. The chronic inflammatory response caused by chronic lymph stasis leads to tissue changes, including formation of large amounts of subcutaneous adipose tissue and progressive subcutaneous fibrosis (Rockson, 2001). Associated skin problems include dryness, hyperkeratosis, folliculitis, fungal infections, lymphagiectasis, papillomatosis, lymphorrhoea, ulceration, and varicose eczema. People with lymphoedema are at high risk for cellulitis, a potentially life-

threatening acute infection, which requires immediate medical attention and treatment with antibiotics. Patients with recurrent episodes of cellulitis are prescribed prophylactic antibiotics to be taken continually for two years or more (lifelong in some cases) (Lymphoedema Framework, 2006).

Other symptoms of lymphoedema include loss of normal sensation, pain, impaired function, discomfort, and feelings of heaviness in the affected limb(s) (Morgan et al., 2005). Furthermore, lower limb lymphoedema has a two-way association with obesity: obesity is a risk factor for lymphoedema, while the condition itself predisposes individuals to become obese (Fife and Carter, 2009). This is complicated further by the lack of mobility associated with both lymphoedema and obesity, leading to a vicious cycle of deteriorating health. Other co-morbidities include diabetes, hypertension, and cardiovascular disease.

The psychosocial consequences are manifold; lymphoedema is disfiguring, disabling, and distressing. Swelling and the wearing of specialist compression garments or bandages may cause social embarrassment, body image problems, loss of confidence and low self-esteem. Frustration, distress, anxiety, depression, relationship and sexual problems, social isolation, and inability to work are other associated effects. People with lower limb lymphoedema have lower physical and mental wellbeing, as well as lower social interaction when compared with a control group (Franks et al., 2006).

The Project

This project was carried out at Mount Vernon Hospital in Northwood, Middlesex, United Kingdom. It was a collaboration between the Mount Vernon Lymphoedema Service and the Lynda Jackson Macmillan Centre, a cancer information and drop-in centre with a special interest in researching innovative applications of acupuncture and moxibustion (acu/moxa). Following promising results of research into using acu/moxa in the management of cancer-related upper body lymphoedema (de Valois and Peckham, 2011; de Valois et al., 2011; 2012), we wished to explore the potential for its application in the management of lower limb lymphoedema. Acu/moxa was an adjunct to usual care for lymphoedema, and the aim of treatment was to improve quality of life rather than treat the lymphoedema itself.

We wished to include patients with cancer- and non-cancerrelated lymphoedema, and the aims of this project were to:

- assess patient interest in having acu/moxa treatment
- gauge potential for service development as well as for future research

- explore challenges to acupuncture (needling was restricted to points on and above the waist, see below)
- identify practical challenges, especially of accommodating morbidly obese (bariatric) patients.

The specialist lymphoedema nurse referred potentially interested patients under her care. Five of the six invited patients attended a meeting in October 2011 to discuss this project. Also present were the lymphoedema nurse, the research co-ordinator, and the research acupuncturist (the author), who explained and demonstrated acupuncture and moxibustion. The aim of treatment (to improve quality of life, rather than to treat the lymphoedema) was emphasised and we clarified that there would be no needling below the waist (see below). Patients agreed to complete questionnaires at intervals throughout and following the treatment.

Patients were contacted after the meeting to set up appointments. They were offered up to seven treatments, and were treated once a week in the Lynda Jackson Macmillan Centre. Treatments took place in November and December 2011. The author, a PhD research acupuncturist employed by the East and North Hertfordshire NHS Trust and a fellow of the British Acupuncture Council, delivered the treatments. She drew on both Five Elements and Eight Principles styles of acupuncture.

The objective of treatment was to 'treat the patient and not the disease', tailoring treatments to the individual as they presented, and adapting the treatment principles and points used as the patient changed through the course of treatment. The sole restriction was to avoid needling the affected area, that is, below the waist for all patients, whether their lymphoedema was unilateral or bilateral. The acupuncturist sought to establish rapport and develop strong therapeutic relationships. Lifestyle advice was given according to the individual's needs and capacity for making changes.

The hospital's health and safety and fire officers had previously approved the use of moxibustion in the Centre. We did not seek approval for its use in the lymphoedema clinic, where one patient was eventually treated.

Restrictions on Needling

Guidelines for best practice in the management of lymphoedema specify that skin puncture should be avoided. This includes accidental injury (such as cuts and insect bites) and non-accidental skin puncture (NASP) including medical interventions such as injections (Lymphoedema Framework, 2006). Inserting a needle into an affected or at risk area may overburden an already

compromised lymphatic system, thereby causing or exacerbating swelling (Cole, 2006). Of greater concern with lower limb lymphoedema patients is the risk of cellulitis, as these patients are already at increased risk of this infection.

Policy on lymphoedema management does not contraindicate acupuncture (Lymphoedema Framework, 2006), and the guidance given is the same as for all NASP interventions, which is to avoid needling the affected or at risk area (Filshie, 2001; Tavares, 2003). Recently, interest in questioning guidelines for avoiding NASP interventions has developed, with early stage research underway in several countries. Within the acupuncture field, Cassileth et al. (2013) in the USA are exploring the safety of needling into the affected arm in breast cancer patients. However, the study concentrates on a small sample (33 patients) with a very short follow up period (6 months), and it is too early to say for certain whether needling the affected area is in fact safe.

Our choice in this project was to ensure maximum safety, and interventions below the waist were avoided. Patients were comfortable with this, and expressed anxiety at the prospect of needling in the affected area. In addition to safety, there were practical considerations. Removal of bandaging or compression hosiery would have been time consuming and unwieldy (especially given the bulk and slowness of some of the patients). Of the six patients, only one (Graham) attended for treatment without wearing hosiery, choosing to remove this before attending for acupuncture. The condition of his legs was so poor that even without the restrictions needling would have been inadvisable.

CASE STUDIES

The case studies presented demonstrate the effects facilitated by the process of having acu/moxa treatment, as well as the practical challenges encountered. Treatment outcomes were monitored using the Measure Yourself Medical Outcomes Profile (MYMOP), administered at the first and last treatments. MYMOP is an individualised, patient-generated health status questionnaire on which patients specify up to two symptoms and one activity that are bothersome (Paterson, 1996). Patients also completed written questionnaires at the end of treatment, and at four and twelve weeks after the end of treatment. The patients represented in these case studies have given permission for their anonymised data to be published.

I treated these patients as they presented. I did not read their clinic notes prior to meeting them, as I wanted to hear their story as they chose to tell it. The lymphoedema nurse provided minimal briefing. My overwhelming impression, as the first day comprising six intake interviews unfolded, was of the great anxiety experienced by all the patients. This was in part due to their

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anticipation of acupuncture, but also seemed to be a condition associated with the lymphoedema itself. In later discussions, the lymphoedema nurse confirmed this impression. It was this anxiety that informed my decision to focus on calming the shen in these patients. All three patients participated in a weekly exercise class for lymphoedema patients, to which they had been referred by the lymphoedema nurse.

Case Study 1: "I was made to relax and feel okay in myself"

Lymphoedema history

Graham, 62, developed bilateral lymphoedema in the legs following varicose vein surgery 3 years prior to participating in this project. Symptoms recorded at his first assessment at the hospital's lymphoedema clinic included bilateral pitting oedema extending from knees into toes, indications of long-term lymphoedematous skin changes, extensive hyper-pigmentation on his left leg overlying an unresolved celllulitic area, a healed ulcer with weakened tissue over the scar area, and a severe chronic fungal infection on the toes. Swelling was controlled with hosiery, avoiding the need for intensive treatment such as high-pressure bandaging. Graham was also prescribed exercise (to improve muscle pump activity in the legs) and skin care, comprising daily moisturising and use of anti-fungal agents to control infections. The lymphoedema nurse reviewed his condition every three months. Following her advice, he participated in the specialist exercise group at the hospital.

Co-morbidities included obesity (he weighed 26 stone), type 2 diabetes, and high blood pressure and cholesterol. He suffered arthritic pain in his hips (radiating to his groin) and right ankle. Prescribed medication included Diovan®, doxazosin, Simvastatin®, metformin, and co-codamol.

General history

Graham was a gentle, shy, nervous man. Lymphoedema had forced him to give up his work as a labourer, which he had loved. Prior to the lymphoedema, he had been an active man who enjoyed playing sport and walking. Although he lived with his two brothers, he seemed isolated in the household, and mourned the loss of his mother who had died some time previously. His grief over these multiple losses was apparent.

He suffered sleepless nights. Tiredness affected his concentration, making him feel unsafe on the rare occasions when he went out. He was unable to walk more than 100 yards without resting, and used a walking stick. He suffered nearly constant pain in his groin, and in his right ankle. Helped by advice from the lymphoedema nurse, he had improved his diet and lost five stone during the year. Loose stools and urgency improved with the weight loss, but were still an issue. His size and poor mobility also made it difficult to wipe himself after a bowel movement.

Graham was socially isolated, lonely, and felt quite down. He enjoyed the weekly exercise class, but otherwise had little to occupy his time. His priorities for treatment were to improve the strength in his hip and groin, and improve his sleep. Shopping was the activity that was important to him, and that his condition made it difficult for him to do.

Treatment approach

Although keen to have acupuncture, Graham was very anxious about the needling. I attempted to address this anxiety in treatment 1 by using points to calm the shen, whilst giving Graham the opportunity to experience needling. His nervousness remained even after the minimal needle sensation of the Aggressive Energy Drain administered in treatment 2 (see table 1). At our third meeting, I introduced moxibustion using a moxa stick, which Graham liked. In subsequent sessions I used minimal needling, relying on moxa for the majority of the treatment. My main treatment principles were to calm the shen, tonify and warm yang, and support the spirit. At treatment 5, I began to focus on the Causative Factor (CF), choosing to treat the Metal element. I based this decision on my observation of his emotional state – on the profound sadness he exhibited, and the way he talked about the loss of his role, identity, and mother.

Progress through treatment

Graham "felt great" after his first session, but 24 hours later experienced a "terrible pain" in the shoulder that lasted 24 hours before clearing up. He was not sure if this was the result of acupuncture or exercise. His sleep improved immediately, and he started to be able to fall asleep within an hour of going to bed and sleep through the night. Getting eight hours of sleep each

night improved his concentration, and he began to feel better in himself. His energy was still poor, and he still needed to rest when walking short distances.

After treatment 2, he began to notice brief periods of respite from the groin pain. He gradually increased the frequency of his walking; by treatment 4 he was walking every day and it was becoming easier, with noticeably less aching in his hips. Mobility was improving, most notably in Graham's improved ease of wiping himself after a bowel movement. At treatment 4, the bowel problem flared up, and I addressed this using the front mu points (St 25 tian shu) to regulate the intestine. After introducing the CF treatment, Graham reported that his state was "exceptional ... have felt really good". By treatment 6, Graham was very enthusiastic about the changes, saying "everything is coming on in leaps and bounds now. I can honestly say that everything seems to be getting better." The positive benefits were necessary, as Graham's anxiety about needling continued – at treatment 4 he was trembling with every needle insertion, yet he was keen to continue treatment. At the final treatment, Graham reported that he felt "less down" and less despondent when at home alone.

Lifestyle advice

Although Graham had lost five stone, he was struggling with his diet. Shopping and preparing food were an effort and he was slipping back into old eating habits (such as relying on takeaways). I encouraged him continue to make healthy food choices. I explained how eating more warm foods would help to strengthen his Stomach and Spleen, and also suggested that he substitute fruit for the fatty, calorie rich snacks he was starting to depend on. By treatment 3 he was eating soups and porridge, and beginning to be in control of his diet again.

I also encouraged Graham to take exercise regularly. As well as his weekly exercise class, he increased his walking gradually to a daily routine. He found this hard at first, but by treatment 4 he reported it was becoming easier. He also resumed riding his bicycle, and his concentration had improved sufficiently for him to feel safe when cycling in traffic.

Long-term feedback

At the end of treatment, Graham wrote about the benefits of acupuncture treatment:

"My sleep has improved, my alertness has as well. My bowel movement has improved and my energy levels also. My walking has improved no end."

Four weeks after the end of treatment, Graham wrote that he was still benefitting from these changes although his groin and ankle were still troublesome.

Table 1: Graham's treatments

Тх	Tx Principles	Points	Notes
1	Calm shen	yin tang, Ht 7 shen men (bilateral)	Very anxious about needling
2	AE Drain ¹	Bl 13 fei shu, Bl 14 jue yin shu, Bl 15 xin shu, Bl 18 gan shu, Bl 20 pi shu, Bl 23 shen shu, (all bilateral) plus three check needles (LS)	Still very anxious
3	Calm <i>shen</i> Warm and nourish <i>qi</i> Support spirit ¹	yin tang, Ht 7 shen men (LS), P 3 qu ze (bilateral), P 7 da ling (RS) Moxa stick (five minutes each point) on: Ren 17 shan zhong Ren 8 shen que Ki 24 ling xu (bilateral)	Introduced moxa
4	Calm shen Warm and tonify yang Support spirit ¹ Regulate Intestine	yin tang, P 3 qu ze (LS), P 7 da ling (RS) Moxa stick (five minutes each point) on: Ren 17 shan zhong Ren 8 shen que Ki 24 ling xu (bilateral) St 25 tian shu (bilateral)	
5 - 7	Treat CF (Metal) ¹ Calm shen Support spirit ¹ Warm and tonify yang	Ll 4 he gu; Lu 9 tai yuan (bilateral, no retention) yin tang Moxa stick (five minutes each point) on: Ren 17 shan zhong Ki 24 ling xu (bilateral) Ren 8 shen que	

Abbreviations: LS: Left side RS: Right side

¹See Hicks, A., Hicks, J., and Mole, P. (2004) Five Elements Constitutional Acupuncture, Churchill Livingstone, Edinburgh.

For points related to all other treatment principles, see Deadman, P., Al-Khafaji, M., and Baker, K. (2007) A Manual of Acupuncture, Journal of Chinese Medicine Publications, Hove, UK.

Twelve weeks after treatment ended, Graham still enjoyed the benefits of improved sleep, concentration, and walking, although he reported the bowel problem had flared up again. He found the lifestyle advice helpful, saying "I did make changes with my diet, getting out walking short distances per day, also cycling." Graham also reported improved ability to manage his condition:

"I do feel I have control a bit, due to the acu/moxa and also the weekly exercise that I do."

At a focus group one year later he developed this theme, saying that the acupuncture sessions had been instrumental in giving him the motivation to improve self-management of his lymphoedema and overall health.

Graham found having acupuncture "quite daunting at first". His courage and perseverance paid off in many ways and perhaps most importantly in improving his own sense of self: "I was made to relax and feel OK in myself, and that was something in its self, as I am a nervous and shy man."

Case Study 2: "I was sceptical at first ..."

Lymphoedema history

Bruno, 53, was diagnosed with bilateral lymphoedema secondary to multiple causes at St George's Hospital Lymphoedema Service four years prior to participating in this project. Swelling started two years before this, correlated with the use of amlodipine (calcium channel blockers can contribute to peripheral oedema (Keeley, 2008)). Other factors contributing to his lymphoedema included cellulitis, trauma (from sports and accidents), reduced mobility and morbid obesity. On examination at St George's, his advanced and complex condition included bilateral varicosities, lymphorrhoea and skin changes including hyperkeratosis, papillomatosis, and bilateral elephantiasis, as well as chronic fungal infections for which he was taking systemic medication. He was referred for chronic decongestive therapy, advised to lose at least ten stone, and increase his mobility.

On coming for acupuncture, the lymphoedema was controlled with quarterly visits to the Mount Vernon lymphoedema service. Self-management conformed to the four cornerstones of lymphoedema management (described above).

Co-morbidities included obesity (he weighed 23.5 stone), high blood pressure and cholesterol, sleep apnoea, asthma, and osteoarthritis of the knees. He had a history of repeated bouts of cellulitis. Prescribed medications included indapamide, lisinopril, atorvastatin, lansoprazole and paracetamol.

General history

Bruno was a lively, warm, personable and jovial man. A selfemployed cab driver, he led a sedentary life; sitting in the car for long hours was not helpful to the lymphoedema. Formerly an active sportsman, leg swelling forced him to abandon the rugby, football, and weight training he enjoyed. Now his knees were too painful even to play golf. With a history of being overweight, Bruno had doubled his weight from 18 to 36 stone through comfort eating when his marriage broke down 12 years previously. A gastric sleeve operation had helped, but obesity remained a problem. His eating habits were poor. Since the operation, he often went all day without eating. He regularly missed breakfast, had cheese on toast for lunch (because it was quick) and in the evening ate a curry. He drank three litres of ice-cold water a day.

Attendance at a sleep apnoea clinic had improved his poor sleep. However, he went to bed only when exhausted and claimed to need only three to four hours sleep a night. He snored loudly, had vivid but not terrifying dreams, and suffered panic attacks as he was afraid of the dark. He had a history of sleeping in a chair, which again was very bad for the leg swelling. His bowels were regular; he urinated frequently passing little fluid. He was breathless on exertion, and a bout of pneumonia three years previously had damaged his lungs so the bottom third did not function. He described the pain in his knees as "agony".

Bruno had given up socialising when the swelling became so bad it was difficult to get clothing to fit. He was hurt deeply by the breakdown of his marriage, and craved companionship. His goal for treatment was to improve his motivation; exercise was the activity he wished to increase.

His tongue was red, with a white coat thickening towards the rear. The tip was very red, and there was a crack extending from the heart area to stomach area. The sublingual veins were blue and distended. His pulse was slightly rapid, and noticeably weaker on the right side.

Treatment approach

Bruno was nervous about having acupuncture, so I used minimal needling on the first treatment, aiming to calm the shen. After receiving positive feedback from this and the subsequent Aggressive Energy (AE) Drain, I continued to focus on calming the shen, as well as supporting the spirit, and warming and nourishing yang. In retrospect, it seems evident that Bruno was a Fire CF; however I did not consciously focus on this at the time.

Progress through treatment

Bruno reported he felt relaxed after the first treatment (on Friday morning), and in a better mood, saying "stressful things seemed

less stressful" that evening at work. This sense of improvement lasted for the weekend. He played golf on Sunday, walking the entire 18 holes, which he had not done for 10 years. This positive surge in energy played havoc with his knees, however, and they were very painful after the game. After resting on Monday, the pain subsided, and he reported that during the week he was able to walk without planning rest stops. His sleep was without dreams.

Bruno fell asleep during the AE Drain. His initial pulses showed improvement over the previous week, being less rapid and more even across the positions. At the end of the treatment, they were much stronger, and even across left and right sides. At treatment 3, he reported he had been sleeping really well, had played golf every day, and was feeling motivated and positive. He admitted he thought that these improvements were imaginary, until he compared notes with Graham and Faye in the exercise class. They too were noticing similar changes from their acupuncture treatment.

As treatment progressed, Bruno's sleep continued to improve; his body was telling him to go to sleep and he was responding to this message. Walking became less painful. He enjoyed the warmth and smell of moxa, and continued to fall into a deep sleep during treatment. At treatment 5, he reported he was feeling "on top of the world", and he now felt motivated to do more exercise and actively lose weight. He also felt that sensations in his legs were changing, that the muscle tone had improved. At the last treatment, he noted that the ache in his legs had ceased.

Bruno was somewhat suspicious about these changes, and he needed to share and compare what was happening with Graham and Faye to validate his experience. He found their feedback valuable, otherwise, he was convinced the changes were merely imaginary.

Lifestyle advice

Although my notes on Bruno's treatments are copious, I have recorded very little about lifestyle advice, apart from suggesting to Bruno that he drink water at room temperature, rather than icy cold.

Long-term feedback

At the end of treatment, Bruno wrote that: "Legs used to ache most of the time after even moderate walking. No pain at the moment and therefore I am walking more. Able to relax and sleep soundly which I don't normally do. I wasn't a sceptic but I had doubts about reflexology, aromatherapy, and acupuncture but I am very impressed with how much it seems to have benefitted me and helped me."

Table 2: Bruno's treatments

Тх	Tx Principles	Points	Notes
1	Calm shen	yin tang, Ht 7 shen men (bilateral)	
2	AE Drain ¹	Bl 13 fei shu, Bl 14 jue yin shu, Bl 15 xin shu, Bl 18 gan shu, Bl 20 pi shu, Bl 23 shen shu, (all bilateral) plus three check needles (LS)	
3	Calm shen Warm and nourish spirit ¹	yin tang, Ht 7 shen men (bilateral) Moxa stick on: Ki 24 ling xu (bilateral)l; Ren 17 shan zhong	
4-6	Calm shen Warm and nourish spirit ¹ Warm yang	yin tang, Ht 7 shen men (bilateral) Moxa stick on: Ki 24 ling xu (bilateral); Ren 17 Ren 8 shen que	Five minutes each point

Abbreviations: LS: Left side RS: Right side

¹See Hicks, A., Hicks, J., and Mole, P. (2004) Five Elements Constitutional Acupuncture, Churchill Livingstone, Edinburgh.

For points related to all other treatment principles, see Deadman, P., Al-Khafaji, M., and Baker, K. (2007) A Manual of Acupuncture, Journal of Chinese Medicine Publications, Hove, UK.

Four weeks after the end of treatment, he wrote:

"In the weeks since treatment the feelings of wellbeing and positivity have declined to where I was before treatments ... Sleep patterns are erratic and not as refreshing any more. Better sleep was a huge result of treatment ..."

Twelve weeks after treatment ended, he remarked that treatment should have been more often and for longer. His symptoms had gradually returned, although they were not as bad as before treatment. A recurring theme for Bruno was the need for external confirmation from peers to validate his experience of acupuncture. His feedback sheets repeatedly recommend "a discussion group amongst patients to compare views on results".

Nevertheless, in the final analysis, he was able to accept that acupuncture had some effect, saying "I was sceptical at first but now think in my case it was beneficial."

Case Study 3: "... a marked reduction in the lymphoedema in my legs"

Lymphoedema history

Faye, 73, was diagnosed with bilateral primary lymphoedema in 2000, following the onset of unexplained leg swelling accompanied by weight gain. Specialist care had been intermittent over the intervening eleven years, and included a two year break in her usual maintenance therapy due to issues with provision of lymphoedema services. At the time of joining this project, she was seen regularly by the lymphoedema nurse, who managed the condition with multi-layer bandaging. Recurrent bouts of cellulitis meant Faye was prescribed prophylactic penicillin, which she had been taking continuously for at least ten years.

Obesity related conditions were Faye's main health issues. Admitting to weighing 18 stone, she thought she "might weigh more". Short in stature, excess weight placed considerable strain on her system. Obesity related hypoxia was managed with home oxygen treatment, and she used a continuous positive airway pressure (CPAP) machine to manage sleep apnoea. Faye reported using oxygen for 16 hours per day, and breathlessness severely restricted her mobility. Osteoarthritis of the right knee could not be addressed surgically due to Faye's combined lymphoedema, obesity, and breathing problems, and pain further restricted her mobility. She had been diagnosed with essential hypertension at the age of 49, and developed asthma as an allergic reaction to beta-blockers in 2005. Prescribed medication included losartan potassium, aspirin, furosemide, and penicillin.

General history

Faye had a long history of disrupted sleep. Prior to the use of the CPAP machine, she would fall asleep at 2 am. Now she fell asleep at 10 pm, but the machine made sleep uncomfortable. She described her appetite as good but "faddy", and reported reasonable eating habits. She tried to eat healthily, managing three of her 5-a-day. Taking in fluids was a struggle as she did not like drinking water, but managed four glasses a day. Her bowels were "a nightmare", with a long-term history of blood in the stools. She had twice had interventions for haemorrhoids. Urination was infrequent and scant, in spite of taking diuretics.

Faye's activities were severely restricted and she was well supported by her husband. She enjoyed involvement with her son's family, and took pleasure in looking after her growing grandchild. She did not appear to grieve her loss of mobility; however she was highly anxious and also seemed quite passive. Her troublesome symptoms were her mobility and breathing, and walking was the activity that her condition made it difficult to do. Faye's tongue veered to the right and was short, red, with a wide swollen tip. Her pulses were deep and weak on all positions. Her complexion was pale and white.

Treatment approach

Faye's treatment was dominated by practical issues relating to her obesity and lack of mobility, and by her anxiety. She arrived at her first appointment breathless and exhausted from the walk from the Centre's front door to the treatment room, a length of 42 normal paces. As the hour progressed, it became increasingly evident that the facilities were inappropriate. Even if Faye had been able to get up on the treatment couch, her condition made it impossible for her to lie down. The backrest was insufficiently wide and sturdy enough to support her in a semi-upright position. The chair with an armrest that was available was not wide enough to accommodate her comfortably. Making Faye as comfortable as possible under the circumstances, I attempted to needle Ht 7 shen men, which was difficult to access and Faye found it painful. Given her breathing problems, I decided to work with her Lung energy, and needled LI 4 he gu bilaterally to let Faye experience needle sensation.

Following this treatment, I negotiated the use of the lymphoedema clinic for Faye's treatments. This meant she could be dropped near the entrance, and could be comfortably accommodated on the treatment couch designed to support bariatric patients. Having dealt with these practicalities, I could concentrate on treatment principles, which were primarily to calm the shen and regulate the Lung function (table 3). As we had not sought approval from the hospital's fire and health and safety officers for using moxibustion, I did not introduce it in Faye's treatment.

Progress through treatment

At her second treatment, Faye was happy to be in familiar surroundings. However, she was perplexed by acupuncture. She could not understand what it was about, nor how it addressed symptoms. Nevertheless, she reported improvements in sleep after the first treatment, as well as feeling more energetic and positive. Suspicious of the needles and disliking needle sensation, Faye declined having yin tang needled during this session.

At her third treatment, Faye spoke of the chronic shoulder pain in her right shoulder, and I addressed this using SI 3 hou xi. By treatment 4, Faye's sleep was continuing to improve and she was able to sleep throughout the night every night. She felt more motivated and enthusiastic about doing things such as exercise, and she had more mobility in her shoulder.

Table 3: Faye's treatments

Тх	Tx Principles	Points	Notes
1	Test sensitivity to <i>de qi</i>	LI 4 he gu (bilateral)	Pain on needling Ht 7 shen men
2	Calm <i>shen</i> Regulate Lung function	Ht 7 <i>shen men</i> (bilateral) Lu 9 <i>tai yuan</i> (bilateral)	
3	Calm shen Regulate Lung function Treat pain in right shoulder	Ht 7 shen men (bilateral) Lu 9 tai yuan (bilateral) SI 3 hou xi (RS)	
4	Calm shen Regulate Lung function Treat pain in right shoulder	Ht 7 shen men (LS) Lu 7 lie que (RS), Lu 9 tai yuan (LS) SI 3 hou xi (RS)	Bruising on Lu 9 <i>tai yuan</i>
5-7	Calm shen Regulate Lung function Treat pain in right shoulder	yin tang, Ht 7 shen men (RS) Lu 7 lie que (RS), Lu 9 tai yuan (LS) SI 3 hou xi (RS)	Bruising on Lu 9 <i>tai yuan</i> after treatment 5

Abbreviations: LS: Left side RS: Right side

¹See Hicks, A., Hicks, J., and Mole, P. (2004) Five Elements Constitutional Acupuncture, Churchill Livingstone, Edinburgh.

For points related to all other treatment principles, see Deadman, P., Al-Khafaji, M., and Baker, K. (2007) A Manual of Acupuncture, Journal of Chinese Medicine Publications, Hove, UK.

She reported bruising at Lu 9 tai yuan, which was slow to clear.

At her fifth treatment, Faye reported feeling "really different". She had had "a really good week", was feeling confident, doing more things, and feeling motivated. She was walking without her stick and sleeping well. Her shoulder movement continued to improve, and she was feeling better in herself. After discussing yin tang with Graham and Bruno at the exercise class, she decided to give it a try, and discovered it was not so bad as she had anticipated!

At her seventh and final treatment, Faye reported she was feeling relaxed in spite of Christmas preparations. She had the energy to deal with these and was very busy. She was sleeping well, and her shoulder was comfortable.

Lifestyle advice

In reviewing Faye's treatment, I note that I did not discuss lifestyle issues. In reflecting on her treatment, I realise that my attention was absorbed by the practical issues involved in making her comfortable, both physically and with the process of having acupuncture.

Long-term feedback

At the end of treatment, Faye wrote that:

"The improved sleep has given me more energy and motivated me to take on more exercise to increase my mobility."

She also reported that:

"On a recent visit to the lymphoedema clinic on examination there was a marked reduction in the size of my legs."

Due to circumstances, I was unable to follow this up with the lymphoedema nurse to ascertain if this was related to the acupuncture or other factors.

Four weeks after the end of treatment, Faye was still enjoying the improvements in her sleeping pattern as well as continued relief from the pain in her shoulder. In her feedback, she again mentions the reduction in swelling of her legs at the end of treatment.

Twelve weeks after treatment ended, Faye wrote that the longerterm benefit from treatment had been her ability to sleep longer.

She also noted that being more relaxed made her better able to concentrate on self-managing her lymphoedema. Her feedback at this point does not refer to the reduced swelling in her legs, and it is not clear whether this was a transient effect of treatment.

Conclusion

These case studies demonstrate that patients with lower body lymphoedema and complex co-morbidities have the potential to benefit from acupuncture and moxibustion. Benefits appear possible even when needling is contraindicated in large areas of the body, and when treatments appear to be minimal in relation to the complexity of their condition. These patients reported reduction in their symptom burden, most notably improvements in sleep and decreased pain. This alleviation freed them to focus on self-managing their chronic, incurable condition. Longer treatment may have provided greater benefit. This small, exploratory project also highlighted practical problems that may be encountered with dealing with morbidly obese patients, and facilities for bariatric patients are recommended. Research into this area is warranted.

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