

Article

Broken Heart Syndrome

A Typical Case

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This case describes a combination external treatment for “Broken Heart Syndrome” that includes a lavender footbath, massage using moor extract, and oxalis ointment to the abdomen applied by an Anthroposophic nurse for a specific personality type. Lavender footbaths have been used since ancient times for relaxation and calming, while moor extract has been used medicinally in Europe since the middle ages for warmth and environmental protection. Rhythmical massage using moor extract and oxalis ointment poultice to the abdomen are part of the tradition of Anthroposophic nursing when managing stress induced by emotional and physical trauma. An elderly lady with specific characteristics diagnosed as Broken Heart Syndrome received one treatment a week for 4 weeks given by an Anthroposophic nurse at an integrative medical center. Between treatments, education was given to enable self-treatment in the home. The nursing treatments, each using lavender footbaths, moor extract massage, and oxalis ointment poultice to the abdomen, proved very effect, and no negative effects were reported. External applications need to be considered by nurses caring for specific personality types with Broken Heart Syndrome.

Keywords: *older adults; stress and coping; botanicals/herbals; integrative*

Introduction

Broken Heart Syndrome

Broken Heart Syndrome (BHS) is a recently acknowledged medical condition triggered by extreme physical or emotional stressors that is found to mainly affect postmenopausal women (Virani, Khan, Mendoza, Ferreira, & Marchena, 2007). It was first reported in Japan in 1991, where it was named Takotsubo cardiomyopathy due to the presentation of cardiac changes, with weakened heart muscle in the left ventricle causing transient ballooning in the apex of the left ventricle (Dote, Sato, Tateishi, Uchida, & Ishihara, 1991). Since this time, it has been reported worldwide and is acknowledged by the American College of Cardiology and the American Heart Association as a unique form of reversible cardiomyopathy (Bybee

& Prasad, 2008). Hassan (2012) posits that it is activated by neurogenic stunning of the myocardium. On investigation, ECG and cardiac markers show minimal change and there is no myocardial arterial blockage (Sanchez-Jimenez, 2013). The presentation is the same as acute coronary syndrome, with the additional history of extreme physical and/or emotional stress. A definitive diagnosis is obtained from an echocardiograph (Sanchez-Jimenez, 2013). Generally, the symptoms are chest pain and tightness accompanied by shortness of

Authors' Note: Appreciation is extended to the following: the participant in the study; the anthroposophic nurses at Helios Integrative Medical Centre, Christchurch; and the Canterbury District Health Board earthquake recovery coordinator for the elderly. Please address correspondence to Tessa Therkleson, 88 Pomare, Road, Tirohanga, Lower Hutt 5010, New Zealand; e-mail: tessa@ratohealth.co.nz.

breath. Typical management is the same as for a heart attack until symptoms settle.

During the 4 days following the magnitude 6.3 earthquake in February 2011 in Christchurch, New Zealand, there were 3 times more BHS admissions to Christchurch Hospital than had been previously recorded (Chan et al., 2013). This earthquake was the second major quake within 6 months and generated a vertical 2.2G force, the highest peak ground acceleration ever recorded (Stevenson, Kachali, Whitman, Seville, & Vargo, 2012). Throughout the following year, recurrent aftershocks left many elderly traumatized and requiring hospitalization for BHS. The Canterbury earthquake recovery coordinator often recommended Anthroposophic nursing therapy for the elderly suffering stress-related conditions. Anthroposophic nursing therapy complemented existing treatment in these individuals and anecdotal reports showed that it was effective.

Anthroposophic Nursing

Anthroposophic nursing was founded in 1923 at the Ita Wegman Clinic, Switzerland, guided by Dr. Ita Wegman (1876-1943). The foundations of Anthroposophic nursing are described by Steiner and Wegman (1967). Typically, Anthroposophic nurses cultivate an inner meditative life (Steiner, 1993) that increases consciousness of the human being and supports mindful practice. Fingado (2011, 2012) describes this nursing practice and the range of therapies typically used. In New Zealand since 1996, there has been a postgraduate education in Anthroposophic nursing for registered nurses (Anthroposophical Nurses Association in New Zealand, 2012a, 2012b, 2012c).

Anthroposophic nursing upholds a holistic approach that encompasses physical, emotional, mental, spiritual, and social aspects (Kienle et al., 2013). Each person is considered to have four bodies that relate to the elements and natural world, within the context of family, culture, and society (Layer, 2006; Therkleson, 2007): (1) the “I” organization that relates to the element of warmth and is unique to the human being, (2) the consciousness that relates to the airy element and is shared with the animal kingdom, (3) the life/etheric body that relates to the element of water and the plant kingdom, and (4) the physical body that relates to the earth element and inorganic world of minerals, metals, and so on. Illness arises when there is an imbalance between

these four bodies; generally this is between the life body and conscious awareness. Anthroposophic nurses typically use plant and mineral substances to restore imbalances in the four bodies.

This case relates to one BHS patient, who suffers an imbalance between life body and consciousness, manifesting low vitality, general exhaustion, and anxiety attacks. Overall health and well-being are compromised, while emotional life is disturbed. Treatment is directed to the physical body and works on restoring life vitality and emotional imbalance in an environment of warmth and conscious caring. This BHS patient received weekly therapy sessions provided by Anthroposophic nurses that involved lavender footbath, rhythmical *einreibung* using moor extract (WALA *solum uliginosum*), and a warm oxalis ointment poultice. Additionally, the patient was provided with a “heart pad” to use at home as required. Details of this combination therapy are described in the following section.

Therapeutic Plant Substances

Lavender (*Lavendula officinalis*)

Lavender officinalis (lavender) is from the Labiatae family and there are over 25 species. *Lavendula officinalis* is the most aromatic and its flowers are used in preparing extracts and oils. Lavender prefers a sandy, dry, sunny environment, being native to the Mediterranean. Lavender has been used for its healing qualities since ancient times (Castleman, 2003). The Romans used it to dress wounds and scent baths—hence its name, being a derivation from the Latin, *lavare*, meaning to wash or bathe. In botanical literature lavender flowers are claimed to relax the nerves and provide antiseptic qualities (Newall, Anderson, & Phillipson, 1996; Tyler, 1987). Studies show that lavender has a strong antimicrobial activity (de Rapper, Kamatou, Viljoen, & van Vuuren, 2013), while lavender aromatherapy is found relaxing and supportive of depressive symptoms (Yim, Ng, Tsang, & Leung, 2009). Bathing feet in lavender is an ancient practice that is part of the tradition of Anthroposophic nursing, when patients need to be warmed and calmed (Fingado, 2012).

Moor Extract

Since the 1300s in England, Ireland, and Europe, organic substances from the moors have been used

therapeutically. Clinics and spas in Bohemia, Germany, and the Czech Republic are renowned for offering the healing waters and substances from peat that develops in moor bogs. The International Peat Society (2005) claims ailments that benefit from peat extracts are skin, heart, blood, metabolic, and motor neuron disorders. In the 1920s, Rudolf Steiner proposed that substances from moors such as peat and moor extract could offer protection and healing in times of environmental stress and trauma, including radiation and extreme cold (Smits, 1960). Moor extract is often combined with other substances, for example, WALA *Solum uliginosum* (*Solum uliginosum*).

WALA *Solum uliginosum* (*Solum uliginosum*) was developed in the late 1940s by WALA Heilmittel GmbH in Bad Boll, Germany, from the research and experiments of Hauschka (1978), who found it could protect people from destructive and chaotic environmental changes. Jensen-Hillringhaus (1974) has recorded case studies on the internal use of *Solum uliginosum* for weather-sensitive conditions such as sclerosis, degenerative spinal illnesses, sclerotic arterial disease, and peptic ulcers. Moor extract is harvested from the light-colored, water-laden peat near the surface of a moor bog and is produced by WALA Heilmittel GmbH as an aqueous solution in a separation/production process that extends over many months. *Solum uliginosum* composite oil comprises moor extract, lavender oil, *Equisetum arvense* or horsetail, and *Aesculus hippocastanum* or horse chestnut.

A study found that *Solum uliginosum* combined with rhythmical *einreibung*, a light, rhythmical massage described by Fingado (2011), significantly lowered the intensity of chronic back pain, reduced negative feelings, and initiated an improved ability to cope with trauma (Ostermann, Blaser, Bertram, Matthiessen, & Kraft, 2008). *Solum uliginosum* rhythmical *einreibung* is a treatment given by Anthroposophic nurses to activate warmth and relaxation and provide a protective barrier against environmental stress and trauma.

Oxalis (*Oxalis acetosella*)

Oxalis acetosella (oxalis) is from the Oxalidaceae plant family and is one of 350 species. It is a small European forest plant, commonly known as wood sorrel, growing in moist, shady areas. Traditionally, oxalis "clover-like" leaves were used as food and medicine,

although the entire plant has been used (Luczaj & Szymanski, 2007). Culpeper (1979) describes the medicinal virtues as purifying the blood, strengthening the stomach, and being excellent for fevers. Grieve (1931/1981) suggests that oxalis strengthens digestion, settles nausea, and aids removal of abdominal cramps and obstructions. Oxalis accumulates oxalic acid and the salt potassium oxalate that give it an acidic quality; there is more of this salt in oxalis than in any other plant. Steiner and Wegman (1967) suggest that oxalis can be used to strengthen a weakened life body and sluggish digestion. Typically, in Anthroposophic nursing oxalis ointment is applied on the upper abdomen as a poultice for nervous disturbances of the digestive system and following traumatic experiences (Fingado, 2012).

Heart Pad

A heart pad was provided for use at home; it comprised a mixed ointment of plant and metal substances spread thickly on a 10 cm² silk cloth, with a thick cotton backing. The cloth was stored in a sealed plastic bag until required for use. The mixed ointment was Aurum, rose, and lavender, which is typically used in Anthroposophic nursing to bring a sense of relaxation following anxiety, stress, and/or disturbed inner balance (Fingado, 2012). Aurum is used in homeopathy to manage certain cases of depression and heart sadness (Sevar, 2007) and rose to revitalize and bring balance to depleted life forces (Pelikan, 1997). The heart pad is warmed prior to use and removed from the sealed plastic bag and the ointment side applied over the left breast at night time.

Case History

Following a severe aftershock in 2012, an 82-year-old Caucasian woman, who was normally strong, independent, and living alone, was found by a tradesman sitting in her home unable to move and seriously traumatized. She was pale and breathless, with a racing heartbeat, knots in her stomach, and a severely bleeding nose. She was taken to the medical center, where investigations were undertaken and she was found to have a blood pressure of 210/110 and no myocardial pathology. She remained for 24 hours under observation and returned home on a beta-blocker, with a diagnosis of BHS. The following year, she experienced tensions and ongoing stress

due to the frequent earthquake aftershocks, continual ground shaking, and insurance repair issues in relation to her damaged home; social isolation caused by community disruption; damaged infrastructure; and loss of familiar buildings. This patient gave her signed consent to share her story.

Presenting Condition

One year after admission to the medical center, this lady was referred for Anthroposophic nursing treatments. Physically, the elderly lady appeared solid and well-built, with grey wavy hair and grey blue eyes. Her blood pressure was slightly elevated on arrival, 180/90, and she was taking a daily beta-blocker. The etheric, one of the four bodies previously described, appeared depleted; she had loose dry skin, grayish pallor, low body energy, and general exhaustion, and her thinking was scattered. Her sense of conscious awareness was disturbed and she described experiencing anxiety, frequent panic attacks, and feelings of foreboding, difficulty sleeping, and nightmares. She suffered occasional episodes of arrhythmia, shortness of breath, and an epigastric knot. She had general body tension, had lower back pain, and felt the cold acutely and her voice was brittle and weak. Her relationship to herself and others was fractured; she was socially isolated as friends, neighbors, and local businesses had moved out of the area. She had lost her strong sense of self and felt unable to move forward. Her world and life had changed completely and she was stunned into inaction.

Nursing Therapy

Four weekly sessions were given with the intention to revitalize the four bodies (described under "Anthroposophic Nursing"), that is, bring warmth, enliven the life forces, and positively engage the sense of consciousness and "I" organization. The lavender footbath was given to relax and warm the patient. At home, the elderly lady found it helpful to visualize the footbath experience, when struggling to cope with daily stressors. *Solum uliginosum* rhythmic einreibungen was given for protection and warmth and to release tension and anxiety. Oxalis cream was applied over the solar plexus to release the epigastric knot resulting from the trauma suffered and to strengthen the connection between the upper and lower parts of her body. The "heart pad"

spread with Aurum, rose, and lavender was applied over the heart each night to strengthen the center and provide an inner space of peacefulness.

Response

The response to the treatments was described by the patient and reported by the nurse.

First treatment: The patient was slow to settle into the process, explaining that she had never received a massage. Following the treatment, she was calm and rested. The following week, she reported that the sense of inner calm and relaxation continued for 3 days after the treatment, sleeping rhythm improved, and she experienced fewer nightmares.

Second treatment: On arrival the patient described still being nervous, jumpy and fearful, and reactive to the frequent small aftershocks; while the sleeping rhythm had improved she still occasionally experienced nightmares.

Third treatment: The patient described heart palpitations had settled, she was aware of increased daily energy, and she had no further nightmares. Her expression appeared more relaxed, open, and brighter.

Fourth treatment: The patient is now feeling a lot stronger and more able to cope with the continual ground shaking, small aftershocks, and structural repairs to her earthquake damaged home. She is sleeping well with no nightmares and is sustaining the new found energy explaining, "I am more myself again, more in my body."

Following the four weekly treatments, the elderly lady reported being more alert, sleeping better, experiencing no nightmares, and feeling warmed and more relaxed. Her skin color improved; the facial grey pallor shifted to warm glowing cheeks. Overall, she was more able to cope with life's issues, grounded, and more integrated. Five months later, she reported regaining her creative energy and a renewed interest in watercolor painting.

Discussion and Recommendation

Typically, BHS is triggered by extreme emotional and physical stress that seems to activate neurogenic stunning of the myocardium (Hassan, 2012). In this

case, there was extreme emotional and physical stress following recurrent aftershocks, and the elderly lady's usual ability to cope was numbed. Often, the usual BHS management does not address the underlying mental, emotional, and personal symptoms that result from the stress of repeated earthquakes. Typically, the stress is expressed in an increased incidence of peptic ulcers (Yamanaka et al., 2013) and posttraumatic stress (Guo et al., 2013; Roncone et al., 2013). The treatment given in this case addressed a wide range of symptoms. The footbath has been associated with traditional healing and nursing practices (Libster, 2012), while lavender aromatherapy is found to be relaxing and supportive of depressive symptoms (Yim et al., 2009). Light pressure massage is effective in severe anxiety (Billhult & Määttä, 2009), and a review by Field (2014) summarizes aromatherapy massage as resulting in a mild relief of anxiety, depression, and pain and enhanced immune function. Rhythmical einreibung using *Solum uliginosum* is found to improve the mood and the ability to cope with trauma in patients with chronic lower back pain as well as reduce negative feelings (Ostermann et al., 2008). Oxalis tincture is used in Eastern medicine to relieve digestive disturbances (Kumar, Rani, & Sagwal, 2012), and its use in Anthroposophic nursing is consistent with traditional healing practices. The Aurum heart pad was applied at home to support a state of calm and healthy inner balance (Layer, 2006).

Following one Anthroposophic nursing treatment each week for 4 weeks, this case showed a positive response that was confirmed in the patient's verbal feedback and the nurse's written recordings. The treatment did not interfere with the existing medication; rather, it enabled a traumatized elderly lady to overcome fear and find renewed courage in responding to her world and that of others. Anthroposophic nursing treatments need to be considered, when there are limited options available to manage trauma and stress.

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