# WHEN TO USE REFLEXOLOGY

Edin Lakasing and Debbie Lawrence look at the benefits of zone therapy

## Summary

Reflexology, also known as zone therapy, is a specialised foot massage that aims to improve health and wellbeing and induce relaxation. While it remains under the umbrella of complementary and alternative medicine, its use in mainstream nursing and medical practice is steadily increasing, and many nurses are also trained reflexologists. This article discusses its historical evolution, training regimens, the mechanism of action, its clinical indications, literature supporting the evidence base and contraindications.

#### Keywords

Complementary and alternative medicine, reflexology, relaxation, spirituality

REFLEXOLOGY HAS its roots in ancient civilisations. A wall carving in the tomb of Ankhmahor in Egypt, dated around 2,500 BC, shows doctors working on patients' hands and feet. Traditional representations of the Hindu deity Vishnu are covered in symbols coinciding with reflex points. In the 4th century BC, a Chinese doctor, Wang Wei, inserted acupuncture needles at points on his patients' bodies, and then applied thumb pressure to their soles to release healing energy.

Modern reflexology is, however, a 20th century phenomenon. In 1915 William Fitzgerald, an ear, nose and throat surgeon in Hartford, Connecticut, explored analgesia delivered by applying pressure to the corresponding reflex point, discovering the five energy zones in each foot that are referred to today. In the 1930s Eunice Ingham, a physiotherapist in St Petersburg, Florida, used zone therapy, concluding that the feet were the most responsive in accessing zones elsewhere in the body because of their sensitivity. This led her to map the entire body onto the feet, thus establishing reflexology which was introduced to the UK in 1966 by Doreen Bayley, one of her students.

Modern reflexology is studied by registering with a recognised body such as the Vocational Training Charitable Trust (VTCT) or the Federation of Holistic Therapists (FHT). The course takes at least 18 weeks of full-time study, preceded by courses in anatomy and physiology. Insurance is obligatory, as is membership of the Association of Reflexogists, which offers ongoing training and sets out the ethical framework for practice. As a healing art, it yields best results when applied with dedication, focused intention and compassion (Norman and Cowan 1989).

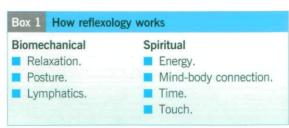
#### How it works

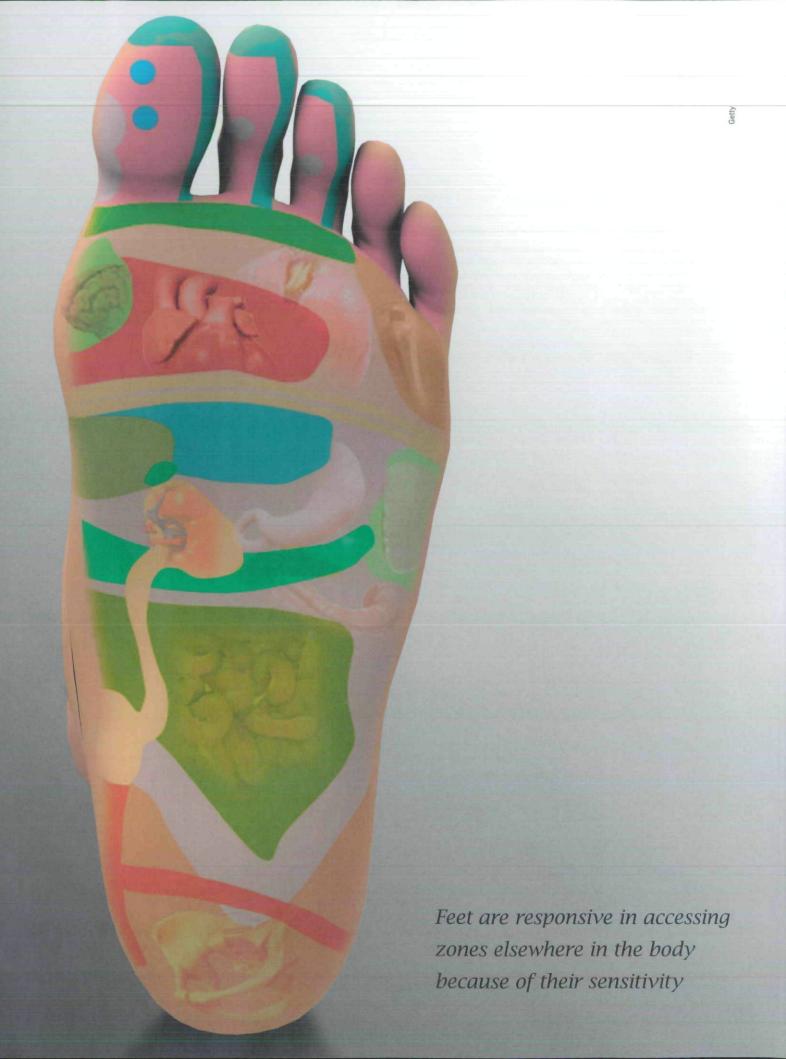
Reflexology works by stimulating nerve endings in the feet, sending impulses via the spinal cord to other parts of the body. It is more targeted than conventional foot massage, although the methods do overlap. It promotes relaxation, improves circulation and may help with the disposal of waste products of tissue metabolism, particularly lactic acid.

Reflexology is not an exact science. However, it is thought seven mechanisms are involved in its therapeutic role (Box 1). Three fall into a chiefly biomechanical method (the scientific model in which mainstream clinicians are trained), and four fall within the spiritual realm (more familiar to complementary therapists). The demarcations are not distinct. Elements of the seven mechanisms overlap, and most contain biomechanical and spiritual factors.

#### Biomechanical

Relaxation Stress is a fact of modern life. Long hours at work, lack of time for recreation and personal life and a competitive materialistic culture have a corrosive effect on emotional wellbeing. Despite six decades of post-war economic growth, the evidence suggests that society is less contented than before (Hamilton 2003). Healthcare workers can vouch for the large number of presentations with





stress-related disorders, comprising psychological complaints such as anxiety and depression, as well as physical manifestations of stress in the form of palpitations, hyperventilation, irritable bowel and chronic muscular tension. Such presentations are as prevalent among the well off as they are in poorer populations (Lakasing 2006).

Reflexology can, by inducing a sense of meditative relaxation, re-awaken the parasympathetic nervous system (Hewitt 1992). This helps those bodily systems that function better when parasympathetic control is dominant, particularly the gastrointestinal and hepatobiliary systems (Pitman and MacKenzie 1997). Another physiological system thought to be important in the mechanistic model supporting reflexology is that it may release beta-endorphin and encephalins from the brain. These are the endogenous opiate peptides that have a slight euphoriant effect (Kuhn 1999).

Posture Whether sitting at a desk, walking or waiting on a train platform, slouching forward is a common failing and may have an adverse effect on the functioning of some internal organs, particularly the lungs and gut (Bertherat and Bernstein 1989). Reflexology may help improve posture, via a mechanism similar to relaxation.

Wearing high heels, particularly the stiletto, puts a strain on the joints and ligaments of the legs, ankles and feet, and may be relieved by reflexology.

Lymphatics As people age, significant changes occur to the circulation of the lower limb. The arterial flow becomes impeded by atheromatous deposits, while the venous drainage becomes sluggish as degeneration of the valves in both the superficial and deep venous systems leads to chronic venous stasis, with pooling of tissue fluid including waste products such as lactic acid. This places an increasing burden on the low-pressure lymphatic system, the main non-venous channel for clearing excess tissue fluid.

Reflexology may help this aspect of the circulation, usually by direct pressure, and there may be benefit in reducing pressure in veins if patients' feet are above the level of the pelvis, so that gravity may help redistribute blood and tissue fluid evenly.

# Spiritual

Energy Sometimes known as chi, qi or ki, energy flows through the body. An imbalance of energies can cause disease. These imbalances may include circulatory disruption secondary to trauma (Wright 1999). Just as acupuncture and shiatsu work on energy pathways known as meridians, and reiki works on the energy of the chakras, so reflexology

works on the energy pathway known as zones. There are ten main zones passing through the body from the head to the hands and feet. By stimulating each zone on the feet every organ in the zone is stimulated, improving function.

Mind-body connection This concept recognises the interplay between psychosocial and physical factors in the genesis of illness. Persistently negative thoughts are associated with poor self-reported physical health, and reflexology may help patients adopt a more positive attitude (Hay 1984). This is, to some extent, analogous with how cognitive behaviour therapy (CBT) works.

Time One consequence of busy lives is a reduction in interpersonal contact and discourse. A frequent complaint from patients about conventional health care is that clinicians, however hard-working and attentive, are invariably under time pressure. By contrast, reflexology treatment sessions should allow an hour of protected time during which the bond with the therapist becomes essential, perhaps helping to release other hitherto repressed emotions (Nelson 2001). This is similar to Balint (1957) observing that the doctor can become 'the drug'.

Touch Touch is a tool in human bonding recognised across virtually all cultures, and in itself is therapeutic, allaying stress and fear (Lidell 1984). Reflexology, and massage more generally, may be popular because it is a hands-on treatment. In conventional health care clinicians rarely heal directly with their hands.

#### Clinical indications

Subject to reasonable precautions and common sense, reflexology is a safe treatment and can be used across a wide spectrum of patients for many conditions. It must, however, be practised within an ethical framework, without purporting to be a diagnostic tool or a definitive cure.

Given its capacity as an anxiolytic and relaxant it is suitable for patients with a range of psychological problems including anxiety, depression and insomnia. The best trial evidence of efficacy has been for conditions where there is a strong psychological element present, for example migraine and tension headache (Launso *et al* 1999), premenstrual syndrome (Oleson and Flocco 1993), and in urinary symptoms in patients with multiple sclerosis (Siev-Ner *et al* 2003). It can be helpful in cancer patients, even in end of life care, where it may help relieve anxiety and pain (Wilkinson *et al* 2008), and has been used with similar effect in nursing

home residents with mild dementia (Andersen and Hodgson 2007).

An objective analysis of the role and therapeutic benefits of reflexology is made difficult by the paucity of research papers (Wilkinson et al 2008). Even in good quality studies, such as that by Stephenson et al (2000) who showed that patients with breast and lung cancer benefitted from pain reduction after reflexology when compared with a control group, the heterogeneity of the conditions, how evolved the tumours were, and other treatment (conventional and alternative) patients were receiving, mean that results have to be interpreted with caution. With these factors limiting the value of clinical trials, allowance must be made for individual experience, however qualitative and subjective, and should be taken into account when assessing the viability of provision of reflexology under the NHS (Fitzpatrick 2008).

#### Treatment

Treatment typically lasts an hour. A health history is taken, including significant past and current illness, medication, smoking status and alcohol intake. As a courtesy to the therapist, the feet should be clean and toenails trimmed. The feet are inspected for any contraindications to treatment. The massage medium, usually aqueous cream, is applied and the treatment routine, involving pressure over both the dorsal and plantar aspects of the foot as well as the ankle, begins. Pressure is applied by the thumb and fingers, typically in a methodical 'walking' movement. The patient is then given a glass of water.

## Contraindications

The presence of severe pain, which may indicate a serious problem such as a fracture or an attack of gout or osteomyelitis, is a contraindication as is any infection (bacterial or fungal) which the treatment may spread. Patients with any lower limb ulcer

# Implications for practice

Reflexology is a specialised foot massage which has its origins in ancient therapies. A combination of biomechanical and spiritual factors help to explain how it works. It is a useful adjunct to conventional treatment in several conditions, particularly in tension headache and migraine, premenstrual tension and terminal illness. Painful acute conditions affecting the feet, arterial disease and neuropathy are the only contraindications.

should not be treated, as these invariably indicate significant arterial or venous compromise. A known history of (untreated) peripheral vascular disease, or the suspicion that it may be present even if undiagnosed, would preclude treatment. For the same reason people with diabetes should be treated by light pressure only because of the risk of tissue damage secondary to accelerated atheroma and neuropathy, and even so only if the feet are healthy.

### Conclusion

Reflexology is a specialised foot massage, targeting specific areas of the feet which correspond to other parts of the body. It is believed to work by a combination of biomechanical and spiritual factors. There is some evidence from clinical trials for efficacy in several illnesses, particularly those with a significant psychosocial component, though the heterogeneity of subjects and the presence of many confounding variables pose limitations on such research. If basic precautions are taken, including a proper assessment, this is a very safe treatment which may benefit patients.

### Find out more

- Vocational Training Charitable Trust: www.vtct.org.uk
- Federation of Holistic Therapists: www.fht.org.uk

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