



Living with osteoporosis: Complementary therapies for pain and symptoms after fractures

What is osteoporosis?

Osteoporosis occurs when the struts which make up the mesh-like structure within bones become thin causing them to become fragile and break easily, often following a minor bump or fall. These broken bones are often referred to as 'fragility fractures'. The terms 'fracture' and 'broken bone' mean the same thing. Although fractures can occur in different parts of the body, the wrists, hips and spine are most commonly affected. It is these broken bones or fractures which can lead to the pain associated with osteoporosis. Spinal fractures can also cause loss of height and curvature of the spine.

Pain can be one of the most common reasons why people seek out complementary therapies. If you have broken a bone as a result of osteoporosis (including spinal fractures), this approach may be an option you want to explore to provide relief from the pain and other symptoms too.

Complementary therapies are increasingly being used alongside conventional medicine as part of pain management plans and some hospitals run pain clinics which offer a wide range of treatment options including complementary approaches.

This factsheet aims to inform you about some of the complementary therapies you might hear about and asks whether these approaches have been shown to be effective in improving well-being and reducing the pain or symptoms that can follow having one or a number of fractures (broken bones).

What are complementary therapies?

A wide range of treatments exist under the umbrella term of 'complementary/ alternative therapies', each having its own unique theory and practice. They aim to help your recovery and wellbeing 'complementing'

more standard medical medicine. For some people they provide a non-drug 'alternative' instead of traditional medicine.

Complementary therapies tend to emphasise the importance of taking a 'holistic' (or "whole picture") point of view, which means they aim to treat the entire person and support both physical and mental wellbeing. From a holistic viewpoint, your body works as one big system and everything you do - from what you eat and drink, to how stressed you are, might affect your general health and well-being.

Many complementary and alternative therapies share their origins with 'Eastern' health traditions - they may not fit in with what you usually think of as "health care." In the past, conventional Western medicine and complementary therapies were thought of as very separate, however there are now some NHS health care settings (such as hospices) where you may experience the two working alongside each other in a more 'holistic' (whole-person centred) approach.

Can a complementary therapy approach help me cope with pain?

Yes, there are some studies showing that some complementary approaches can be helpful in relieving certain types of pain and improving well-being but often results aren't clear. This may be because traditional scientific research may not be best suited to evaluating any benefit of complementary therapies, or it may be that the complementary therapy approach just isn't effective enough.

More reliable research studies are being carried out to try to collect more meaningful evidence for some types of therapy.

Some research shows people may feel a positive benefit from using complementary therapies because they feel an improvement in their quality of life, which, for them is important. These approaches are chosen for the following reasons:

- Improving relaxation and reducing stress. They may benefit your well-being, helping you to feel better and more able to cope with your pain and other symptoms.
- Sometimes a conventional treatment can leave you feeling you have little control over your health and treatment decisions and you might feel that in using a complementary approach you are taking a more active and positive role in your health.
- You may feel comfort from the therapeutic touch, talk, time and care that a complementary therapist offers.
- You may prefer the idea that they seem more 'natural'.
- Perhaps you are unable to tolerate conventional pain relievers (analgesics) or drug treatments and complementary therapy offers you another option to try.
- You may hold strong personal beliefs about health, treatment and illness and this may be important to you especially if your health problem is longer lasting (chronic).

What about the research?

Information from research that tells us whether a healthcare treatment is safe and effective is called 'evidence'. The licensing of conventional medicine is based on scientific evidence gathered from large, well designed, costly trials, usually comparing an active treatment to a placebo (a placebo is anything that seems to be a "real" medical treatment, but isn't).

Establishing how well complementary or alternative therapies work to improve pain and how you feel can be difficult because the complementary approach is often very individual.

There can be problems designing reliable, large, scientific studies to examine their effectiveness and so finding 'scientifically measurable' proof that they work is less likely.

Without this evidence, many doctors will often be unwilling to recommend these therapies. In addition, complementary medicines haven't been forced by law

to go through the same large, costly research trials that the conventional medicines have to.

Where compelling reports (testimonials) of people's individual experiences are 'evidenced' be aware that it's not always easy to be certain if these are genuine and reliable.

Some complementary therapies are criticised for having a 'placebo effect' alone (ie when you expect your symptoms to improve, often they do). The placebo effect can be real, and powerful; even in conventional scientific drug trials.

Of course, improvement in a health condition due to the placebo effect is still a welcome improvement but if you choose a treatment that provides only a placebo effect, you might miss out on the benefit that a scientifically proven treatment might provide. Of course this is a choice you may prefer to make.

The best way to prove whether a health treatment works better than a placebo treatment is by checking the evidence but to date there has been very little research into many complementary approaches. More good quality research looking at the effectiveness and the safety of complementary therapies is needed.

Are complementary approaches safe?

There's no simple answer to this question, as the safety of any complementary therapy will depend on which therapy it is and on the type of conventional treatment you might also be already taking. Although many of the complementary approaches have good safety records, that doesn't mean that they're risk-free for everyone. The following suggestions will help you to be as safe as you can:

- If you are considering using a complementary approach, check with your health care provider (doctor, consultant or nurse) to make sure that it is safe for you especially if these include dietary supplements such as vitamins, minerals and herbal products.
- Some complementary therapies (eg herbal medicines) might stop conventional treatments working as well as they should so if you're already taking medicines, you can ask your pharmacist for a Medicines Use Review (MUR), in which they will talk through all your medicines with you and in particular check for any drug interactions.
- Remember that occasionally therapies may have side effects. It is important to know what the

possible side effects are before you start using them.

- A product is not necessarily safe because it is called 'natural'.

Let your therapist know your medical history before starting treatment and explain that you have osteoporosis which has resulted in a broken bone (fracture) and pain, and that you may be at a higher risk of breaking more bones in the future.

Make sure you choose someone who is properly qualified and that they belong to a relevant professional association. Most complementary practitioners in the UK are not controlled by law (except chiropractors and osteopaths) but acupuncture, homeopathy and medical herbalism have professional organisations, although it's optional to belong. The NHS Choices website has details on regulation and The Complementary and Natural Healthcare Council in 'Useful Contacts' gives more information about finding a therapist (see below).

Some complementary therapies for pain relief have been integrated into the mainstream NHS (eg physiotherapy, pain clinics) and as a result some GPs may refer people for NHS funded complementary therapies if they decide it is appropriate and available.

For example, there is evidence that osteopathy and chiropractic are effective at treating persistent low back pain. Usually individuals seek treatment from private practitioners although some private health insurance policies may also cover their expense.

Selling medicines in the UK now requires licensed certification, overseen by the Medicines and Healthcare Products Regulatory Agency (MHRA), the body responsible for overseeing all medicines in the UK.

Registered herbal products now carry the THR (Traditional Herbal Registration) leaf logo to show good quality and that the herb has been used in traditional remedies for more than 30 years.

The THR scheme covers products bought in UK shops and online retailers. With many unregulated internet sites selling medicines, the MHRA warns against buying herbal remedies online, unless from a trusted UK retailer.

Homeopathy

The central principle of homeopathy is that "like cures like" and by using much-diluted remedies, the body's energy and its own natural healing mechanisms are activated. There are many types of homeopathic remedies available and a practitioner will select the appropriate remedy and dose based not only on your symptoms but on you as an individual and the wider overall impact of the ailment.

The effectiveness of homeopathy has been widely studied although not specifically to relieve pain and symptoms after a fracture. Although some benefits following homeopathy treatment have been reported it has never been proven that the remedy itself has been responsible. However you may feel benefit from the whole-person care offered by this system of medicine.

Homeopathy is available on the NHS in some areas of the country and at the NHS homeopathic hospitals in London and Glasgow, but as with all NHS services, this remains under review. In the UK around 400 GPs practise homeopathy alongside conventional treatment in the community and treat around 200,000 NHS patients per year.

Homeopathic medical doctors are regulated by their professional medical organisation (GMC), and are registered with the Faculty of Homeopathy.

Non-medically trained homeopaths usually belong to a registering organisation that require their members to have attained a recognised qualification in homeopathy, have insurance and undertake some form of continuing professional updating.

If you try homeopathy ask the advice of a qualified, registered homeopath and check with your pharmacist first before purchasing any over-the-counter remedies. Tell the homeopath if you are taking any prescribed medicines.

Herbal medicine

Herbal medicine is one of the oldest forms of medicine, having been used in all cultures and civilisations for centuries. Herbal preparations form the basis for many of our modern drugs for example aspirin is based upon an extract of willow, which was used by the American Indians for the relief of pain.

Herbs may have anti-inflammatory and pain-relieving

properties, and some herbs are known to have spasm reducing effects on the muscles. There are some plants that should be avoided because they might be harmful so it is important to seek expert help.

As the quality (and strength) of herbal remedies from outside the UK might vary, all herbal products for sale in UK shops and from online retailers are required to carry the THR logo (a mark of registration explained earlier on page 3). Unlike licensing for mainstream medicines, registration shows the herbal medicine has a license to be sold rather than giving proof of its effectiveness. An authorised herbal practitioner however doesn't need a license and can still continue to prescribe patients with individual herbal medicines which are made up in their own clinics.

Further information and a list of practitioners can be obtained from the National Institute of Medical Herbalists in the 'contacts' list below.

Acupuncture

Acupuncture involves the stimulation of certain sites in the body by very fine needles being inserted into the skin. The treatment which originated in China many years ago, can bring relief of symptoms both close to the needles and in more distant parts of the body. Western acupuncture is based on scientific evidence that shows the treatment can stimulate nerves under the skin and in muscle tissue.

This results in the body producing pain-relieving substances, such as endorphins. Orthodox practitioners such as physiotherapists who use this approach would say it is likely that these substances are responsible for any beneficial effects seen with acupuncture.

Traditional acupuncture is based on the belief that an energy, or "life force", flows through the body in channels called meridians.

This life force is known as Qi (pronounced "chee"). Traditional acupuncturists believe that when Qi does not flow freely through the body, this can cause illness and acupuncture can restore the flow of Qi, and so help to restore health. Symptoms may be relieved immediately or over a period of time.

Currently there is no definite evidence from research that acupuncture can provide relief from the pain

of spinal fractures and more research is needed. In 2016 NICE updated its draft guideline on treating low back pain and no longer recommends acupuncture because evidence shows it is not better than sham treatment.

If you use a private acupuncturist check they are registered with the British Acupuncture Council or another recognised professional body. The British Acupuncture Council represent the largest group of practitioners and hold a nation-wide register.

Some NHS hospital Physiotherapy Departments may also offer acupuncture on the NHS.

At present, the practice of acupuncture is not regulated by law however, there are proposals for both acupuncture to have this status in the near future.

Touch, pressure and movement therapies

Massage therapy

The practice of massage therapy is an ancient form of physical medicine and continues to be used widely and in many settings. There are many different massage techniques which involve the stroking, pressing, kneading and warming of the skin and muscles. The masseur will usually use bare hands and may use oils to make it easier to slide their hands across the skin. Massage aims to help increase relaxation, alleviate anxiety and stress associated with illness and improve general well-being.

Research studies have so far not given a clear picture how massage works but there are claims it may stimulate the blood and lymphatic circulation and help to remove toxins and waste products from the body. (The lymphatic system drains watery fluid from tissues of the body and returns it to the blood.) Massage can help relieve pain through the stroking action of the massage on the nerve endings in the skin.

This may help to lessen the feeling of pain due to the release of endorphins – the body's natural pain-reducing chemicals.

Massage may also break up pain signals being sent to the brain, effectively "closing the gate" to the reception of pain before it can be detected.

Several different techniques that may be used during massage therapy including traditional, therapeutic

Swedish massage; Thai massage (a form of body work involving assisted stretching); Shiatsu (a Japanese form of massage using finger and palm pressure and stretching techniques); reflexology (the application of pressure to the zones of the feet, hands, or ears, which are thought to correspond to various body parts); and myofascial release (a deeper, stronger massage).

Massage has been recommended by the Chartered Society of Physiotherapy for the management of various pain-related conditions, especially those where the muscles and skeleton are affected.

There is no specific research evidence that massage can relieve pain following a fracture, however there is a small amount of emerging evidence that massage may be effective for treating low back pain when compared to placebo or sham therapies and other interventions (such as relaxation techniques) in improving short-term pain and disability.

Deep muscle massage and spinal manipulation are not appropriate if you are at high risk of breaking a bone, especially if you have already had spinal fractures because pressure on the spine could potentially cause a further fracture.

However a gentle massage using the fingers or the palms of the hands may be beneficial, enjoyable and may be helpful for pain symptoms, increasing relaxation and improving general wellbeing.

Aromatherapy and aromatherapy massage

Aromatherapy involves the use of fragrant plant essential oils to help improve wellbeing and quality of life. These oils may be applied through gentle massage and occasionally added to baths or diffusers for relieving stress, depression and insomnia, or simply for relaxation.

Oils which are associated with having a pain-relieving effect include camomile, lavender and rosemary, while various oils such as rose are thought to be uplifting. Remember, oils should never be taken internally or applied undiluted to the skin. Gentle massage with diluted oils may help ease muscle spasm and pain. Unfortunately, there is limited scientific evidence to show that aromatherapy can cure or prevent any type of disease.

However, some research suggests essential oils such as Lavender may help with anxiety and back pain, as

well as improving quality of life.

Aromatherapy as a treatment is usually arranged privately but some doctor's practices and hospital trusts do refer within the NHS system.

Before using any essential oils always read the label or consult a qualified aromatherapist. If you are taking regular medication, check with your doctor or the Aromatherapy Council.

Reflexology

Reflexology focuses on the feet and works on the theory that certain areas on the feet correspond to different parts of the body and the health and wellbeing of an individual depends upon free-flowing energy within the body. If this flow is interrupted, ill-health can follow. By massaging particular points on the feet it is claimed that the energy can flow freely again. It is suggested that reflexology may increase blood and lymphatic circulation, help digestion and the immune system and aid relaxation which in turn, may help reduce pain.

If you have had broken bones in your feet due to osteoporosis, tell the therapist at the first appointment and they will then decide if treatment is appropriate. The massage used does not have to be vigorous or deep, and gentle massage may be more helpful in aiding relaxation.

Osteopathy and chiropractic

Although osteopathy and chiropractic are two separate disciplines they have many similarities and both therapies consist of a number of different techniques. Chiropractors tend to focus on the joints of the spine and nervous system and osteopaths place more emphasis on soft tissues and muscles and the moving of joints. The aim of these therapies is to help to improve the function of joints, ease pain and reduce muscle spasm.

There have been some studies to suggest that spinal manipulation techniques can have a positive effect on chronic (long term) low back pain. It is very important that if you have fragile bones especially if you've already had a fracture that you are treated cautiously and direct pressure on the spine is avoided. However, since both osteopathy and chiropractors use a wide range of approaches - some of which don't involve manipulation, they can still be considered to help with pain as long as the practitioner is made fully aware of your medical

history before commencing treatment.

In the UK both practices are regulated by law. Osteopaths must be registered with the General Osteopathic Council and chiropractors with the General Chiropractic Council.

Exercise and movement therapies

The Alexander Technique - This is a method of breathing and gentle exercise that focuses on improving posture and mobility and strengthening the deeper muscles around the spine.

Many people seem to find that 'unlearning' and then 'relearning' the way we hold and move our bodies can help to improve the co-ordination and balance of the head, neck and back as well as the breathing and digestion. Some people with postural changes caused by spinal compression fractures have found this a helpful technique to learn.

Pilates - This is an exercise technique which also concentrates on correct body alignment. It was originally developed by Joseph Pilates in the 1920s and practised by dancers to improve fitness.

Pilates consists of a specific programme of exercises to help to improve flexibility and strength; it also focuses on using the body's deep core muscles in the trunk and pelvis. These are muscles that help to support the body's skeletal structure.

This type of exercise may be helpful to strengthen the spine and it's supporting muscles. This might help with the long term pain problems that you may have if spinal fractures have changed the shape of your spine. However, it is important to be cautious with any awkward stretching exercise which involves bending forward at the waist and touching your toes or forcefully twisting. You may want to adapt the poses and your technique.

Yoga - Yoga originates from India and has been practised for over 5,000 years. It is based on Hindu philosophy and follows a system of exercises to encourage physical and mental well-being. It involves learning a series of different movements, physical postures, breathing techniques and meditation. There are many different types of yoga however the most common technique is Hatha Yoga. Pilates and Yoga are exercise methods which use controlled and focused movements and can help

to improve posture and develop muscle strength. For some people yoga may help to alleviate pain symptoms resulting from spinal fractures. As long as special care is followed with regard to the potentially dangerous movements which have already been mentioned, these approaches may provide a beneficial exercise activity if you are of an older age and have osteoporosis.

It is always recommended that you check with a health care professional (such as your GP or physiotherapist) who has a knowledge of your medical history and risk of fracture before taking up any new exercise.

Do inform your instructor if you have osteoporosis so he/she can adapt the movements to suit you. The charity's booklet *Exercise and osteoporosis* has more information.

Other complementary approaches

It isn't possible to provide information on all the numerous complementary therapies available and whilst there may be limited direct evidence of these improving pain or symptoms relating to a fracture, these may still have a positive benefit on how you manage your general health, well-being and your pain too. The charity provides more information on 'non drug approaches' in the booklet *All About Osteoporosis* on pages 98 and 99 and on the website in the *Living with Fractures* webpage and linked factsheets.

There is no one way of managing health that suits everyone, but it's important to find a path that suits you best as an individual and review things from time to time. Through positive thinking we can help create a better experience of managing our health.

Useful contacts

The website 'NHS Choices' has more information on complementary therapies available including: how to choose a practitioner, how complementary and alternative medicine is regulated, evidence and safety issues to consider when choosing a therapy.

www.nhs.uk/Livewell/complementary-alternative-medicine

The Institute for Complementary Medicine and Natural Medicine (ICNM) is a registered charity with information about Complementary and

Natural Medicine (CAM) and administers the multi-disciplinary British Register of Complementary Practitioners (BRCP).

Tel: 020 7922 7980

www.icnm.org.uk

The British Complementary Medicine Association (BCMA)

Tel: 0845 3455977

www.bcma.co.uk/

British Medical Acupuncture Society, Royal London Hospital for Integrated Medicine.

Tel: 020 7713 9437

www.medical-acupuncture.co.uk

The British Acupuncture Council.

Tel: 020 8735 0400

www.acupuncture.org.uk

Aromatherapy Council.

www.aromatherapycouncil.co.uk

The Society of Teachers of the Alexander Technique

Tel: 020 88856524

www.alexandertechnique.co.uk

General Chiropractic Council

Tel: 020 7713 5155

www.gcc-uk.org

British Reflexology Association

Tel: 01886 821207

www.britreflex.co.uk

British Homeopathic Association works to make homeopathy available for everyone through providing useful and factual information.

Tel: 01582 408675

www.britishhomeopathic.org

A list of homeopaths (medical and non-medical) can be found at **www.findahomeopath.org**

The National Institute of Medical Herbalists is the United Kingdom's leading professional body representing herbal practitioners. Head Office can put you in contact with the NIMH Information Service which aims to provide accurate information for anyone who has a query relating to herbal medicine.

Tel: 01392 426022

www.nimh.org.uk

General Osteopathic Council

Tel: 020 7357 6655

www.osteopathy.org.uk

The **National Osteoporosis Society** is the only UK-wide charity dedicated to improving the prevention, diagnosis and treatment of osteoporosis and fragility fractures. The Charity receives no Government funding and relies on the generosity of individuals to carry out its vital work.

For osteoporosis information and support contact our Helpline:



0808 800 0035



nurses@nos.org.uk

This fact sheet is one of a range of publications produced by The National Osteoporosis Society. If you would like more general information about osteoporosis see our booklet *All about Osteoporosis*.

This information reflects current evidence and best practice but is not intended to replace the medical advice provided by your own doctor or other health professional.