

# Complementary therapies, bone health and osteoporosis

#### 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.

Many people are interested in alternative and complementary ways to support their bone health. This fact sheet 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 bone health.

#### 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 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 benefit my bone health?

At present, there just isn't evidence to say that complementary therapies can strengthen bones or reduce the possibility of having a broken bone (fracture) in a way that is scientifically measurable (apart for Tai chi – see below).

Despite a lack of evidence that complementary therapies improve bone strength, 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 may benefit your well-being, helping you to feel better.
- 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 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).

There are some studies showing that some complementary approaches can be helpful in dealing with pain (see the additional factsheet Living with osteoporosis: *Complementary therapies for pain and symptoms after fractures*).

#### 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 health or 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 most doctors, for example, will 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 all conventional medicines have to.

Where 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.

These can often seem compelling, particularly when such approaches are promoted as 'curing' osteoporosis or 'reversing' loss of bone density. The best way to know 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. If you are already taking medicines, you can ask your pharmacist for a Medicines Use Review (MUR) to talk through all your medicines with you and, in particular, to 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 and may be at a higher risk of breaking bones.

Make sure you choose someone who is properly qualified and that they belong to 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).

Selling medicines in the UK 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.

#### Natural progesterone

The main ingredient in "natural progesterone" products is a plant hormone progestogen which is extracted from wild yams. It is thought to be similar to the natural hormone, progesterone, produced in the body. Natural progesterone creams that can be rubbed into the skin and absorbed are claimed to help with menopausal symptoms, prevent osteoporosis and strengthen bones. The creams are marketed as offering women an alternative option to drug

treatments for osteoporosis. One American research study investigated the effects

of natural progesterone cream on both menopausal symptoms and bone density\*. Although it seemed effective in controlling hot flushes, there was no effect on bone density observed in the first year. This has been confirmed by a small, well designed British trial which, compared the effect of the progesterone cream to the identical looking placebo cream and a standard hormone replacement therapy (HRT) skin patch. Results showed no significant changes in bone density over two years in either of the cream groups although menopausal symptoms showed improvement. This study by Southampton University has been presented at major osteoporosis conferences. In summary, there is no evidence that natural progesterone improves bone strength. Natural progesterone cream shouldn't be used as an alternative to the standard synthetic progestogens used in combined (oestrogen plus progestogen)

alternative to the standard synthetic progestogens used in combined (oestrogen plus progestogen) hormone replacement therapy (HRT). Although there are some side effects associated with the use of synthetic progestogens in various HRT preparations, natural progesterone is an unlicensed product and may not protect the womb lining from increased cancer risks caused by giving oestrogen on its own.

\* Low bone density (osteoporosis) as measured on a 'bone density scan' means bones may have lost strength

#### 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 prevent bones from breaking. 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 traditional medicine and treat around 200,000 NHS patients every 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 an 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. Various parts of medicinal plants (leaves, stems, buds, flowers or roots) are used and some will have formed the basis for many of our modern drugs.

Although most herbs have not been studied in terms of their effect on bone health or fracture risk, it is claimed that some herbs might provide extra calcium, others might regulate the body's use of calcium, assist in bone healing or have oestrogen-like effects (these are called phytoestrogens) that might improve bone strength. In general, although individual herbs may have shown some effects in laboratory studies, there is no conclusive scientific evidence that herbal remedies are effective and will improve bone health or make fractures less likely.

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 above). 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.

Traditional Chinese medicine focuses on balancing the "life force" energy known as 'Qi' (pronounced "chee") in the body by using a mixture of herbs, non-plant based components and dietary changes. Traditional Chinese medicine practitioners believe that when Qi does not flow freely through the body, this can cause illness and that by restoring the flow of Qi health can be restored. A large review of all the relevant clinical

studies of Chinese herbal medicines to 2014 found that despite possible effects on cells under laboratory conditions, the benefits in terms of improving bone strength in humans is unproven.

#### **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, claims to bring relief of symptoms both close to the needles and in more distant parts of the body. Traditional acupuncture is believed to restore the free flow of Qi through the body in channels called meridians and so help to restore health.

There have been some small studies of the potential effects of acupuncture on bone building cells and sex hormone levels but its benefits on bone health are unproven.

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. 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.

## Can extra vitamins and minerals and nutritional supplements improve my bone health?

See the *Further food facts* factsheet for information about the part different nutrients play in bone health and whether dietary supplements are necessary.

## Can I take strontium citrate as a more 'natural version' of the osteoporosis drug strontium ranelate?

There are several alternative strontium salts which can be sold over-the-counter as a nutritional supplement, however there is a lack of available information about the possible side effects, long-term safety or effects of on bone. There is no evidence that this type of supplement will provide the same benefits as the licensed osteoporosis drug treatment strontium ranelate. It's unclear whether strontium citrate may also, artificially increase bone density scan results making them less reliable and needing careful interpretation. You might want to say if and for how long you have been taking strontium citrate if you have a bone density scan.

#### Touch, pressure and movement therapies

There are no claims that touch and pressure therapies will improve bone health.

#### **Exercise and movement therapies**

Tai Chi - Tai Chi is an ancient form of Chinese martial arts; it uses the principles of deep breathing and relaxation combined with slow controlled movements which can help improve posture and balance. Some classes teach a type of seated Tai Chi which can be enjoyed by anyone wishing to practice and have the benefits of Tai Chi, sitting down. Studies have looked into the potential benefits of Tai Chi for people with osteoporosis, but there is currently no convincing evidence that Tai Chi can prevent or treat the condition. Some research has studied the effect of Tai Chi in reducing the risk of falls among older adults who are at increased risk but the results aren't clear and more research is needed. Tai Chi though may reduce falls risk in the younger less-frail older person.

#### The benefits of a healthy lifestyle

Research shows that a healthy lifestyle has a positive effect on bone, at all ages. This includes a healthy, well balanced diet, plenty of exercise and keeping active in later life, safe sunlight exposure to provide vitamin D and avoiding smoking and excessive levels of alcohol. These measures are important in helping to maintain healthy bones and can adequately support bone health in individuals at low risk of a fracture. For more information see the charity's website or our booklet *All about osteoporosis* and our booklet *Exercise and osteoporosis*.

#### Other complementary approaches

It isn't possible to provide information on all the numerous complementary therapies available and whilst there may be no direct evidence of these improving bone health, these may still have a positive benefit on how you manage your general health and well-being.

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, what evidence is there that they work and important safety issues to consider when choosing a therapy.

www.nhs.uk/Livewell/complementaryalternativemedicine

Complementary and Natural Healthcare Council (CNHC).

Details of complementary therapy practitioners who meet national standards of competence and practice.

Tel: 020 3178 2199 www.cnhc.org.uk

The Institute for Complementary Medicine and Natural Medicine (ICNM) is a registered charity which informs the public about Complementary and Natural Medicine (CAM) and administers the British Register of Complementary Practitioners (BRCP), a multidisciplinary register of professional practitioners and therapists.

Tel: 020 7922 7980 www.icnm.org.uk

The British Homeopathic Association (BHA) 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

Tai Chi Union of Great Britain c/o 5, Corunna Drive Horsham West Sussex RH13 5HG

www.taichiunion.com

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:

**Q** 0808 800 0035



murses@nos.org.uk

To become a member or make a donation:

**3 01761 473 287** 



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To order an information pack or other publications:

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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.