

# Can we really do anything about back pain?

by RORY CLEMENTS, Daily Mail

Back pain is the most common affliction in Britain, causing misery to 80 per cent of the population and costing more than £10 billion in health care and lost production.

Last week it was said that increasing numbers of children are suffering - with the blame laid squarely on their indolent lifestyles. The charity BackCare estimates that one in three young people aged 16-24 had back pain in the past year.

Yet it is also very mysterious: the cause of only one in ten cases of back pain can be pinpointed with any accuracy

Most of us suffer from what is known as non-specific back pain - we simply never know why we've got it.

However, there is much we can do to help ourselves conquer it.

*Read our factfile below to help you treat and beat back pain.*

## How does the spine work?

The spine consists of 29 bones called vertebrae, five of which are fused together towards the bottom of the column. The vertebrae are separated from each other by gristly discs filled with a softer, flexible gristle.

Pain can occur anywhere along the spine, but is particularly common in the so-called lumbar region - the lower back where the spine curves inwards.

A canal runs through the vertebrae and this contains the spinal cord, from which nerve roots emerge to link up with various parts of the body. Once the spinal cord reaches the lumbar region, it spreads into a bundle of separate nerves known as the cauda equina, or horse's tail.

The other main element of the back is a complex system of muscles, which enable you to move and to keep your posture.

Pain is likely when there is a problem with one or more of these elements: bones, discs, nerves or muscles. This can be due to damage, strain or wear and tear.

One long-standing question is whether there is a design flaw in the system. Certainly, the spine was not originally designed for walking on two legs.

Almost all animals with spines move on all fours and they get less back pain than us. In evolutionary terms our spine adapted to vertical use in a relatively short period - maybe too short a time.

## Who is most at risk?

The flabby and inactive, according to orthopaedic surgeon Mr Jeremy Fairbank of the Nuffield Orthopaedic Centre, Oxford, are most at risk. 'Lack of fitness is the biggest problem,' he says.

The groups traditionally considered most at risk - nurses, pregnant women, new mothers, sports people, ballet dancers, manual workers and computer operators - are not necessarily in any particular danger.

Nurses may have a difficult job, with a lot of lifting, but thanks to specialist training in lifting techniques and with the help of mechanical lifting aids, the chance of their developing back pain has been reduced.

Sports people, gymnasts and dancers are actually less likely to get general back pain than the rest of us.

## **What are the main problems?**

Modern thinking is that strains and misalignment of muscles are a major problem, particularly in young people - and this is where fitness comes in. By keeping the muscle welltoned, we minimise the risk.

Prolapsed discs - what used to be called slipped discs - are another source of pain. The disc itself doesn't slip, but the tough exterior can get a defect or tear, and part of the soft interior squeezes out at the back and presses against a nerve root, causing inflammation and pain. If there is a history of prolapsed discs in your family, you are much more likely to get one yourself.

Sciatica is pain in the legs or hips caused by pressure on a nerve from a prolapsed disc in the back. To cure the sciatica, you have to address the back problem.

In middle-aged and older people, osteoarthritis and the bone-thinning disease osteoporosis can cause back pain.

Some people in this age group suffer what is called spinal stenosis - narrowing of the canal which contains the spinal cord. As the canal narrows, the bone pinches the spinal cord, causing lower back pain and leg pain. The main symptom is difficulty in walking.

Perhaps five per cent of back pain has a psychological element. People who are stressed may get chronic pain syndrome, in which their problems are expressed as pain. These people may be helped by counselling.

For about one per cent of people, back pain may be a symptom of a serious condition such as cancer. When you go to a doctor, this should always be their first consideration.

In poorer parts of the world, spinal tuberculosis is one of the biggest causes of back problems, and this is beginning to increase again in Britain as TB starts to get a new hold.

## **How can you treat it?**

The good news is that the vast majority of back aches cure themselves within a few weeks without any intervention. But there are ways to help the process and ease the pain.

Manipulation of the spine by an osteopath (who assesses and treats the whole body) or chiropractor (who concentrates on vertebral misalignments in the spinal column) can help people who have acute pain - that is pain of less than six weeks' standing.

If the pain lasts longer than six weeks, it is known as chronic pain, and does not respond well to manipulation.

Some physiotherapists use manipulation, but not all. Much of what they do nowadays involves working on deep tissues and prescribing fitness and exercise programmes.

Physiotherapy has made dramatic strides in the past ten years, and some of the old ideas have been thrown out. Bed rest - the first option in the past - is hardly ever recommended now. And traction is no longer believed to be effective.

Any method of getting fit and strengthening muscles will help, particularly swimming, cycling, walking and circuit training. Take advice from a physiotherapist before attempting high impact sports such as road-running.

Epidural injections of a steroid and anaesthetic can ease nerve root pain. It may not help the problem mend quicker, but can take away the pain while you're waiting.

Prolotherapy is a more controversial therapy. This is an injection of dextrose, glycerol and phenol which is supposed to trigger the growth of new connective tissue, tightening up ligaments around the spine.

## **What about surgery?**

Operations are only performed as a last resort - and are always dangerous. There are three main types of operation - discectomy, decompressions and spinal fusion.

Discectomy is used to relieve pain caused by prolapsed discs. A small incision is made in the back and the surgeon removes the bit of disc tissue that has squeezed out and is causing the pain.

The success rate is 90 to 95 pc in relieving some or all of the pain. The downside is that 5 pc of people are unhappy with the outcome, sometimes suffering damaged nerves.

Decompression is used on middle-aged and elderly patients who suffer spinal stenosis - narrowing of the canal which carries the spinal cord. The canal is widened to remove the pressure on nerves.

The success rate is about 70 pc, but again there are dangers and 5 pc of people might be made worse.

'You have to think about it very carefully,' says Mr Fairbank. 'In rare cases, people could end up paralysed. But for the ones it works for, it makes a dramatic difference.'

Spinal fusion is used for a few people with chronic back pain. One vertebra is fused to another, making the spine less flexible but potentially reducing the pain.

This operation is used about ten times more often in America than in the UK.

Its success rate is only about 50 pc. Of the other patients, some will remain the same but about 10 pc will be made worse. The operation is generally seen as a last resort .

A much less common procedure is disc replacement - for which, says Mr Fairbank, the evidence is shaky. In this operation, developed in East Berlin 30 years ago, a damaged disc is replaced by two metal plates with a plastic ball between them.

### **How can you prevent back pain?**

Again, the big message is to keep fit and active. Just this simple rule can do much to keep you free of pain.

For specialised, highly-trained athletes and dancers, more specialised techniques are necessary. Ballet dancers were once prone to back problems, but dramatic advances have improved their lot.

Sharon Morrison, a physiotherapist and sports medicine specialist, has had great success in keeping the Birmingham Royal Ballet dancers free of back pain using preventive measures - particularly Pilates.

Pilates is a movement, breathing and posture regime originally developed for dancers, and now fashionable among celebrities including Madonna and Julia Roberts. It is also becoming more widely available to ordinary people who want to improve their flexibility.

But dancers are very different to rest of us. 'The big problem with normal people is postural, because most of their day is spent seated,' says Sharon.

She adds that it is important for people who sit at desks all day to get up and walk around frequently.

Comfort and support of the lower back is vital - in your bed, your desk-chair, the height of your computer screen, your driving seat, and even your shoes.

Mind-body regimes such as tai chi and the Alexander Technique - a method of re-educating your body to keep it less stressed by the normal activities of the day - are also said to be able to protect against back pain.

Yoga, while making the body more supple and flexible, may not be quite so good for back pain. It involves getting the body into extreme postures and maintaining them.

You can help yourself by using sensible lifting and carrying techniques. If you need to pick up a load, keep the



back straight and bend the knees rather than bending from the waist. If you are carrying bags, keep the weight symmetrical so the spine doesn't bend one way or the other.

Wear a rucksack squarely and close to your back - don't sling it over one shoulder.

*For more information, contact the BackCare charity on 020 8977 5474.*