

# Medical **A to Z**

## Back pain (non-specific low back pain)

Non-specific low back pain (NSLBP) is commonly categorised as tension, aching and stiffness that affects the lumbar region of the back without any underlying serious cause or damage.<sup>1-3</sup>

### Causes

NSLBP is not associated with an underlying health condition or serious damage to the spine or back, but is commonly caused by sprains and strains affecting the muscles and ligaments;<sup>1,2</sup> disc prolapse (a slipped disc); damage to a spinal facet joint;<sup>2</sup> or nerve damage.<sup>1,2</sup>

Potential causes of NSLBP may include poor posture; lifting and carrying incorrectly;<sup>1-3</sup> prolonged periods of standing, sitting in chairs, bending or driving; sudden, awkward movements;<sup>1,2</sup> and over-stretching. At other times, the cause of this type of back pain is not apparent.<sup>1</sup>

Related factors that may increase the risk of developing NSLBP include pregnancy, which places additional strain on the back;<sup>1,3</sup> being overweight,<sup>1,2</sup> which may put pressure on the spine; smoking, which may cause tissue damage in the back; long-term use of medication that weakens bones; and stress, which may potentially cause tension in the back muscles.<sup>1</sup>

### Symptoms

The most common type of back pain,<sup>1</sup> NSLBP affects the area between the bottom of the ribs and the top of the legs.<sup>1-3</sup> The pain occasionally affects the buttocks and thighs.<sup>1</sup>

NSLBP may develop immediately following an isolated incident, such as twisting the back, or may develop gradually, for example due to prolonged poor posture.<sup>1-3</sup> Possible symptoms may include tension, aching, stiffness<sup>1,2</sup> and muscular spasm in the affected area.<sup>1-3</sup>

### References and further reading

- 1 NHS Direct ([www.nhsdirect.nhs.uk](http://www.nhsdirect.nhs.uk)).
- 2 Peters Dr M. *BMA A-Z Family Medical Encyclopedia*. Published by Dorling Kindersley Ltd. (ISBN: 978-1-4053-2987-3).
- 3 Kumar P. Clark M. *Clinical Medicine (sixth edition)*. Published by Elsevier Ltd, 2005. (ISBN: 978-0-7020-2763-5).
- 4 Low back pain: early management of persistent non-specific low back pain, *National Institute for Health and Clinical Excellence (NICE)*. Source: NICE ([www.nice.org.uk/CG88](http://www.nice.org.uk/CG88)).
- 5 Little P et al (2008). Randomised controlled trial of Alexander technique lessons, exercise, and massage (ATEAM) for chronic and recurrent back pain, *British*

### Orthodox treatment

Most cases tend to improve naturally with time, with a combination of painkillers and staying active, but constant pain for three days or intermittent bouts of symptoms for longer than six weeks require GP advice.<sup>1-3</sup>

For short-term NSLBP (less than six weeks), symptoms may be relieved by applying heat to the affected area (hot water bottle, hot bath), or alternatively, the application of cold can help to ease pain (such as an ice pack).<sup>1</sup> Adapting the sleeping position can help, and moderate activity, such as walking, may help speed recovery.<sup>1,2</sup>

Long-term NSLBP (more than six weeks) may require stronger medication to relieve the pain and involuntary muscle contractions, and treatments such as exercise programmes,<sup>1-3</sup> manual therapy and acupuncture.<sup>1,2</sup> Other treatments may include interferential therapy (IFT), therapeutic ultrasound, traction,<sup>1</sup> and transcutaneous electrical nerve stimulation (TENS). Surgery, such as spinal fusion surgery, may be considered as a last resort.<sup>1,2</sup>

Long-term lifestyle factors may need to be addressed to prevent NSLBP returning, such as losing weight, reducing stress, and improving posture.<sup>1,2</sup>

### Complementary therapies

The National Institute for Health and Clinical Excellence (NICE) guidelines recommend that patients with persistent, NSLBP\* have access to a choice of treatments, including structured exercise, manual therapy or acupuncture.<sup>4</sup> One of the aims of the key recommendations is to have a high impact on patient outcomes, particularly pain, disability, and psychological distress. Alongside medication and self-care advice, it is recommended that clinicians offer one of the following in the early stages of care management: a tailored



exercise programme, which may include aerobic activity, movement instruction, muscle strengthening, postural control or stretching; manual therapy, including spinal manipulation, spinal mobilisation and massage; or acupuncture.

A randomised controlled trial revealed that 24 lessons in the Alexander technique – or six lessons followed by exercise prescription – may have long-term benefits for chronic NSLBP.<sup>5</sup> A systematic review to assess the effects of massage therapy for NSLBP looked at 13 randomised trials. The authors concluded that ‘massage might be beneficial for patients with sub-acute and chronic NSLBP especially when combined with exercises and education’.<sup>6</sup>

A systematic review on shiatsu and acupressure revealed fairly strong evidence for the use of acupressure in the treatment of pain, especially dysmenorrhoea, low back pain and labour pain, and the evidence base for shiatsu and musculoskeletal and psychological problems was also promising.<sup>7</sup> The 2009 Annual Evidence Update on CAM for Low Back Pain by the National Library for Health provided evidence for (among others) massage, herbal massage, acupuncture, spinal manipulation and ‘other therapies’, including pilates, Alexander technique and yoga.<sup>8</sup>

*\*Applicable to patients with pain for more than six weeks but less than one year.*

### With thanks to

Backcare ([www.backcare.org.uk](http://www.backcare.org.uk)) which kindly provided information and advice on the condition.

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**NB:** The information provided in this article is not all-encompassing, and is intended as an overview only. It should not be used for the purposes of ‘diagnosis’. Members or clients presenting with any symptoms should always consult a GP or other relevant health practitioner. The advice of a doctor, pharmacist or other suitably qualified person should be sought before taking any form of medication or treatment.