

Back Braces: Can They Provide Pain Relief?

If you're experiencing back pain, a back brace may provide support and relief. But how can you know if a back brace will address your problem, mask your pain, or worsen your condition? This article will walk you step-by-step through the questions to ask and possibilities to consider in determining if a back brace is right for you.

What do back braces do?

A back brace—also referred to as a support belt, waist belt, or support brace—can provide pain relief for back pain [1]. Various braces will have different components [2], so speak with your healthcare provider about the combination of adjustment tabs, adjustment cords, wings, and panels that could be right for you.

- Adjustment tabs, also called pull-tabs, are often made of Velcro. They enable the wearer to fit the brace to his or her torso, and to find optimal comfort and back support.
- Adjustment cords, or cables, function similarly to adjustment tabs and help the wearer achieve the right fit and comfort level.
- Wings are the side panels of a brace, which wrap around the torso and provide a strong back support to the wearer.
- Panels can be anterior and posterior, and are often detachable, so that the wearer can determine what provides him or her the most back support and comfort.

You'll also want to ask your healthcare provider about the type of consistency—rigid, semi-rigid, or flexible—that will best address your needs.

- Doctors prescribe rigid back braces for lower back pain or instability [3]. They may also be helpful for treating compression fractures of the spine, and can help prevent hypertension by immobilizing the pelvis [4,5]. Rigid braces are typically made from hard plastic or metal. These stiff materials hold the spine in place to promote healing and alignment.
- Semi-rigid back braces may be prescribed after spinal fusion. In particular, if you undergo spinal fusion surgery for idiopathic scoliosis and have only an anterior fusion, you will likely require a semi-rigid post-operative brace [6].
- Flexible back braces allow for a wide range of motion. They are often available over-the-counter or through online retailers. If your doctor recommends a flexible back brace that you purchase yourself, consider scheduling an appointment with them to

determine the tab and cord adjustments that will provide the most support, comfort, and pain relief.

Some braces can be tailored to your torso, while others can be inflated to provide optimal support.

For some patients, a retail back brace will suffice. For others with more complex cases of back pain, the best results will only be achieved through a custom-fit brace provided by an orthosis specialist.

How do back braces provide pain relief and healing?

Back braces support proper posture [7] and can be used to stabilize the lower back [8]. Back braces can also help straighten the spine in cases of scoliosis [9]. Back braces decrease pressure on the spine, discs, muscles, and ligaments, and may decrease secondary muscle spasm [10]. They can also prevent painful maneuvers such as hyperextension.

How do I know if a brace will provide me pain relief?

Back braces can be useful for patients suffering from:

- Spinal stenosis [11]
- Spinal osteoarthritis [12]
- Scoliosis [13]
- Herniated disc [14]
- Fractured vertebrae [15]
- Isthmic spondylolisthesis [16]

Back braces can also provide pain relief for sufferers of general low back pain. Talk with your health care provider about the potential benefits of a back brace for your specific type of pain.

How effective are back braces?

For low back pain, the research is mixed as to whether or not back braces provide pain relief. Some studies have found that back braces can augment other care mechanisms such as a corset [17] while other studies have led to inconclusive results [18], or found that back supports and education did not result in significant improvement over education alone in cases of low back pain [19].

Studies show that back braces seem to help patients with scoliosis in terms of of spinal curvature reduction when coupled with exercise [20]. Younger patients with scoliosis tend to prefer bracing to surgery, as back braces can potentially improve spinal alignment enough that the need for surgery is eliminated [21,22].

Braces also appear to be helpful for those suffering from back pain due to manual labor. Many lumbar supports inhibit flexion-extension movements, which makes them useful for treating pain for workers whose occupations involve lifting heavy objects [23].

Some doctors recommend back braces after surgeries such as decompression or spinal fusion for spinal stenosis [24]. Doctors may also suggest a specific type of spinal brace called a corset after a surgery like microdiscectomy, in which a surgeon operates on a painful lumbar herniated disc [25]. Research indicates that corsets provide a similar level of relief as spinal manipulation, massage therapy, and electrotherapy in cases of subacute low back pain [26].

Summary

Back braces can provide pain relief for people suffering from back problems such as scoliosis, herniated discs, sciatica, and low back pain [27]. They may also aid in recovery from various spinal surgeries. A discussion with your health care provider should help you determine if you need a back brace and, if so, the best kind for you.

I think I need a back brace. How do I choose one?

Start by talking to a health care provider about which kind of brace could be right for you. Your condition may require a prescription for a custom-fit brace that follows your spine's curvature. If instead your doctor assesses that an over-the-counter brace will work for you, he or she may have suggestions about style, brand, and features to include or avoid. Many over-the-counter braces can be found online as well as in drug stores.

When searching for the best back brace for you, remember that comfort is important. Discomfort will likely deter you from wearing your brace, which will reduce any benefits from bracing.

How do I use a back brace correctly?

Before you put on your back brace, make sure your skin is clean and dry. If you use lotion, ensure that it is fully rubbed into your skin. Put on a clean, dry undershirt before you put on your brace. Once you have an undershirt on, take your time putting on the brace. Adjust the compression to the level you and your doctor have determined, and check any tabs, cords, panels, wings, or supports for proper positioning and optimal support and comfort.

Wear loose-fitting clothing over your brace so that you don't overheat, as sweat can result in chafing from your brace. If you find yourself becoming uncomfortably hot, you may want to remove your brace sooner than your doctor initially recommends. Your doctor will likely recommend that you wear your back brace only once a week, so try to plan your wardrobe accordingly.

Isn't a back brace going to look weird on me?

Many modern back braces come in discreet styles and dark colors to minimize noticeability. If your doctor recommends an over-the-counter back brace, do a quick online search for your specific need. You'll find that there are categories such as back braces for men, back braces for women, back braces for children, plus-size back braces, lumbar support braces, posture correctors, and bestseller back braces. Filtering by category, in addition to your doctor's recommendations, can help you narrow down your options and make an informed choice.

Ensuring a proper fit and design—whether an over-the-counter support such as a copper fit back brace, neoprene back brace, or a back support belt, or a medical back brace prescribed by your doctor— will help you feel as comfortable as possible. Working to find a high level of comfort in your brace can help reduce your anxiety about what to wear with your brace or the thought of others seeing you while wearing your brace.

When should I wear my back brace?

If your doctor recommends only wearing your brace for a few hours at a time, ask about the ideal setting. Depending on your condition, you and your doctor may determine that, for example, a back brace for the car or a posture corrector for work while you sit at a desk may serve you most effectively.

What can I do while wearing my back brace?

When wearing your brace, you may feel that you can take on heavier-duty manual work, but you should take care to not over-exert yourself. Stay aware of your physical limits and allow the brace to help you achieve optimal function within safe, reasonable boundaries. If you are unsure about manual labor, exercise, or an otherwise physically-exerting task, ask your doctor about the potential risks before you begin.

What about risks or side effects?

As we mentioned, back braces can cause minor skin irritation. In most cases, wearing an undershirt over healthy, dry skin will keep this from happening. If you notice any rashes, irritations, or blisters on the skin your brace has come into contact with, notify your doctor.

Additionally, overuse of a brace may prevent your muscles from regaining strength and supporting your body. Only wear the brace as often as your doctor tells you to do so. If you notice increased discomfort or weakness on the days you are not wearing your brace, mention this to your doctor. You should also notify your doctor if you feel that you need additional treatment or education to get the most out of wearing your back brace.

Outside of these considerations, properly-worn braces show few negative side effects [28].

Summary

Some conditions require custom-fit braces made by an orthotist. Other patients will find that an over-the-counter back brace or lumbar support provides pain relief. In order to achieve optimal results, keep your skin clean and dry, take your time adjusting your brace each time you wear it, and heed your doctor's instructions regarding the type of brace you need and how often to wear it.

What else do I need to know?

Braces are a relatively low-risk treatment method for several musco-skeletal conditions. They can provide short-term back pain relief, lumbar support, posture improvement, and muscle spasm relief, and can help alleviate lower back pain. Your doctor may offer medical advice such as pairing back brace usage with physical therapy, considering orthosis for other parts of your body, or specific exercises to strengthen your back muscles.

Summary

If you choose to use a back brace, take care to find the best fit, design, and style for your needs. Keep in mind that overuse of your brace can lead to muscle weakness, which could ultimately compound your pain, so be sure to use the brace as directed by your healthcare provider.

Sources

1. <https://www.ncbi.nlm.nih.gov/pubmed/1533832>
2. <https://www.umms.org/ummc/health-services/orthopedics/services/spine/patient-guides/braces>
3. <https://www.ohsu.edu/spine-center/spinal-bracing>
4. <https://www.umms.org/ummc/health-services/orthopedics/services/spine/patient-guides/lumbar-compression-fractures>
5. https://ftp.uws.edu/udocs/Public/CSPE_Protocols_and_Care_Pathways/Protocols/Lumbar_Spondylolysis_&_Spondylolisthesis.pdf
6. https://www.wakehealth.edu/-/media/WakeForest/Clinical/Files/Orthopaedics/pi_spine_preparing_for_spinal_surgery.pdf
7. <https://www.ncbi.nlm.nih.gov/pubmed/20452305>
8. <https://my.clevelandclinic.org/health/diseases/10303-spondylolysis/management-and-treatment>
9. <https://www.ncbi.nlm.nih.gov/pubmed/26386869>
10. <https://www.srs.org/patients-and-families/conditions-and-treatments/adults/conditions-of-the-spine/he-aging-spine>
11. <http://www.columbianeurology.org/neurology/staywell/document.php?id=419858>
12. <https://www.aafp.org/afp/2012/0101/p49.html>
13. https://www.health.harvard.edu/a_to_z/scoliosis-a-to-z

14. <https://www.hopkinsmedicine.org/orthopaedic-surgery/specialty-areas/spine/conditions-we-treat/>
15. <https://www.cedars-sinai.org/health-library/diseases-and-conditions/c/compression-fracture.html>
16. <https://nyulangone.org/conditions/spondylolisthesis-in-adults/treatments/nonsurgical-treatment-for-spondylolisthesis>
17. <https://www.ncbi.nlm.nih.gov/pubmed/6458250>
18. <https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD001823.pub3/abstract>
19. <https://www.ncbi.nlm.nih.gov/pubmed/17762804>
20. <https://www.ncbi.nlm.nih.gov/pubmed/19732429>
21. <https://www.ncbi.nlm.nih.gov/pubmed/598144>
22. <https://www.ncbi.nlm.nih.gov/pubmed/17513954>
23. <https://www.ncbi.nlm.nih.gov/pubmed/10954643>
24. <https://nyulangone.org/conditions/spinal-stenosis-in-adults/treatments/surgery-for-spinal-stenosis>
25. <http://www.uscspine.com/treatment/microdiscectomy.cfm>
26. <https://www.ncbi.nlm.nih.gov/pubmed/7855683>
27. <https://www.umms.org/ummc/health-services/orthopedics/services/spine/patient-guides/rehabilitation-low-back-pain>
28. <https://www.ncbi.nlm.nih.gov/pubmed/26101179>