

LOW BACK PAIN

INTRODUCTION

Low back pain is one of the common complaints of people young and old. Virtually everyone will have had at least one bout of low back pain by age 30, and it is a major cause of temporary disability.

Rarely does low back pain indicate a serious structural problem with the back. Most often it is due to muscle and ligamentous strains. These can result from an obviously strenuous or awkward activity, leading to an acute onset of pain. Or, probably more commonly, they are the result of minor injuries and postural problems that occur in normal, day-to-day activities, and thus will not have a definite beginning.

Fortunately, most low back pain resolves spontaneously, and a few simple measures can help it along. For an acute injury, a brief period of relative rest is in order, often coupled with some anti-inflammatory pain medicines and/or muscle relaxants. In this event, some cool compresses for 20 minutes 4 times a day for the first 24-48 hours will also help pain and relieve muscle spasm.

For people with pain of a more chronic nature, or starting a couple days after an acute injury, warm compresses and hot showers often relax the back and provide pain relief. In addition, at this time it is important to begin exercises to relieve muscle spasm, increase mobility, and balance the strength of the muscle groups in the back. It is often helpful to continue such exercises even after the pain is gone, to prevent recurrences. Several useful exercises are explained below.

Often there are several lifestyle changes than can be made to reduce the risk of low back pain. Some of these will be reviewed later.

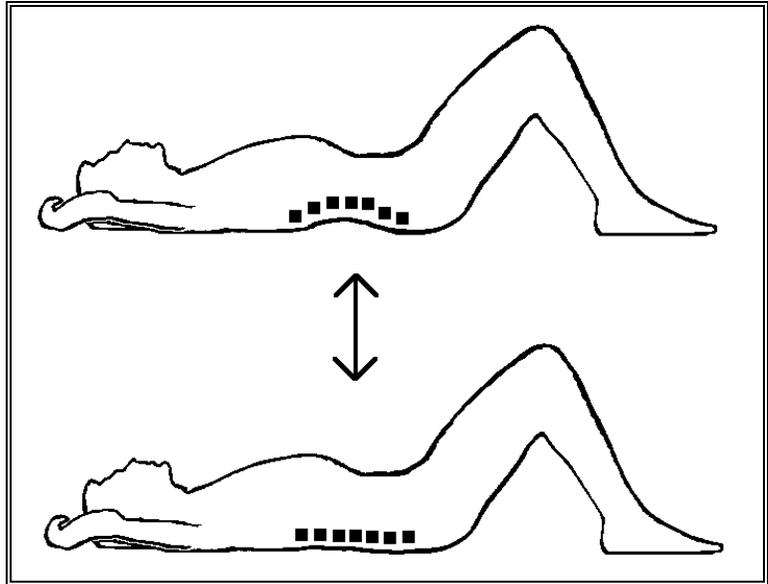
EXERCISES

Some of these exercises may seem very simple, while some may be a bit painful or difficult at first. In general, do the exercises in slow, steady movements, without jerking or bouncing. Breathe evenly; don't hold your breath. Do the exercises to the extent your pain will allow, stretching just to the point of tenderness, or a little beyond. After the exercises, your back may feel a bit tight or sore, but it shouldn't be in obvious pain. If the back is sore after the exercises, apply ice for about 20 minutes after you are done, and the next time you do the exercises be even more careful. If pain is still getting worse a couple weeks after you begin the exercises, let the doctor know.

Unless told otherwise, DO 5 REPETITIONS OF EACH EXERCISE 4 TIMES A DAY. When this can be done easily with little or no pain, add one repetition per week, eventually reaching 10 repetitions of each exercise.

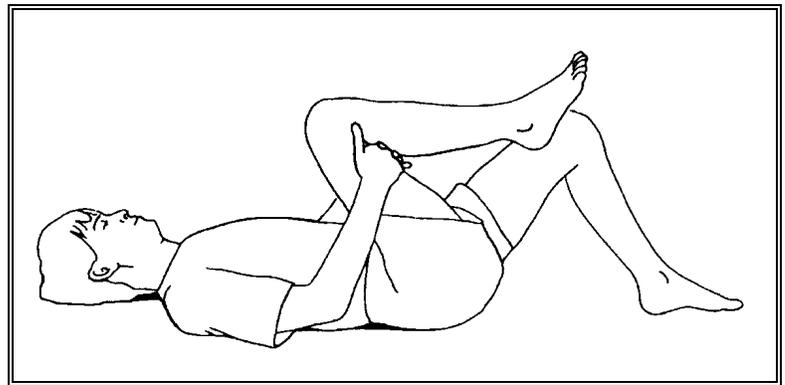
Exercise 1 (Pelvic Tilt)

Lie on your back as shown. Tighten your stomach muscles and rotate your pelvis forward, trying to force your back as flat against the floor as possible. Hold it there for 5 seconds, then relax.



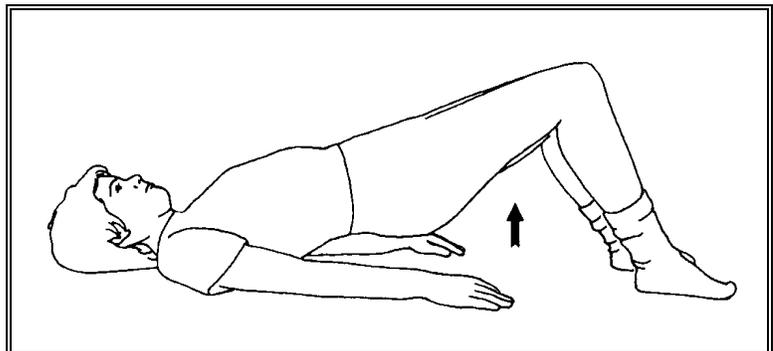
Exercise 2 (Knee Pull)

Lie on your back as shown. Slowly pull one knee up as far as you can, then grasp it with your hands, and pull it as close as possible to your body. Make sure to keep your hips on the floor. Hold it there for 5 seconds, then relax. Repeat for the other knee.



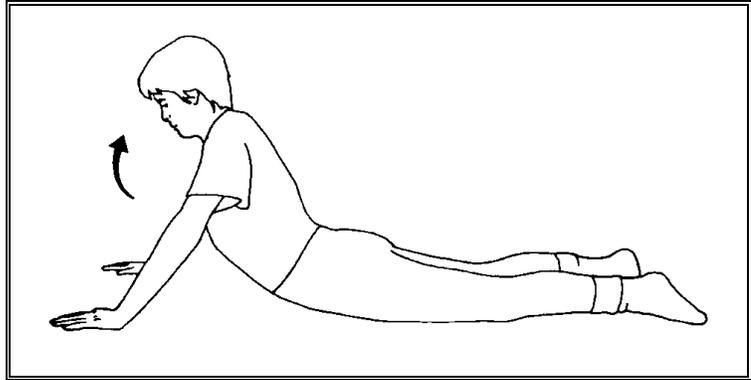
Exercise 3 (Bridging)

Lie on your back as shown, then slowly arch your back, lifting your buttocks as high as you can. Hold for 5 seconds, then relax.



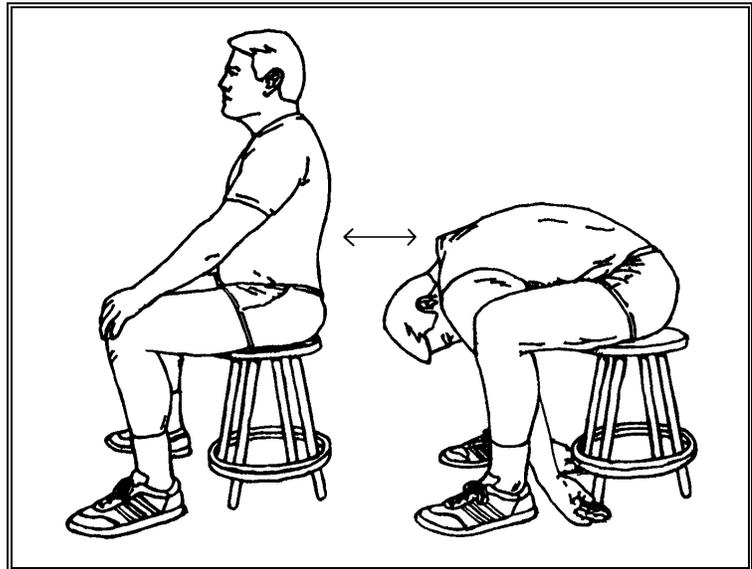
Exercise 4 (Press-Up)

Lie face down with your palms on the floor about shoulder width apart. Slowly push up, keeping your pelvis and legs on the floor. Hold for 5 seconds, then slowly lower back down to the floor.



Exercise 5 (Low Back Stretch)

Sit upright on a chair or stool with your feet flat on the floor. Slowly bend over, reaching as far as possible under the chair. Hold there for 5 seconds, then slowly straighten back up completely.



HINTS FOR A HEALTHY BACK

- **WEIGHT.** Obesity is one of the most common factors contributing to back pain. It puts more mechanical stress on your back and legs, while decreasing your exercise tolerance and compromising your body mechanics for even the most basic of activities. Even modest weight loss will reduce the frequency and severity of your back pain.
- **EXERCISE.** In addition to the back exercises above, exercise is important for your body in general. A physically active person is less likely to be overweight, and has more reserve for the occasional strenuous activities than can be troublesome for the back. Even modest daily exercise, such as walking, will make you less likely to have back pain, in addition to making you healthier overall.
- **SLEEPING.** A firm mattress is best for your back; on all but the firmest mattresses, it may be helpful to place a $\frac{3}{4}$ inch plywood bed board under the mattress. The best sleeping position is on your side, with the hips and knees bent. It is also OK to sleep on your back, with a pillow under the knees. The worst sleeping position for your back is on your stomach. If, however, you find yourself always ending up in this position, placing a pillow under your waist will relieve some of the stress this position puts on your back.
- **SITTING.** Sit in a chair with a firm back, with the hips as far back against the chair back as possible. Sit upright, keeping your back straight. The proper chair height allows your feet to be flat on the floor, with your knees slightly higher than your hips. Desk work should be done at a height such that your hands are at the level of your elbows.
- **DRIVING.** To the extent possible, sit as described in sitting in a chair above. Short drivers may need to use pedal extenders to allow them to comfortably reach the pedals without sitting too close to the steering wheel. (Sitting too close to the steering wheel increases the risk of injury in the event of a collision, and increases the risk of injury from an airbag.) A thin pillow or rolled-up towel behind the low back may be helpful. Remove your wallet or other objects from your back pockets. When driving long distances, stop to walk and stretch at least 5 minutes out of every hour, or more often if necessary.
- **STANDING.** Stand as straight as possible, not slouching. If possible, rest one foot on a stand about 6 inches higher than the floor, alternating which foot is elevated. Work with your hands should be done on a table that allows you to work with your hands at the level of your elbows.
- **ALTERNATING POSITIONS.** Spending too long in the same position, no matter how proper the position, leads to stiffness and pain. When doing desk work, make sure to get up at least once an hour to stretch and walk, if only for a moment. When standing for long periods of time, shift your weight from leg to leg, stretch and walk about some, or sit for a few minutes. Take a few minutes once or twice a day to go through your back exercises.
- **LIFTING.** Always squat to lift objects, rather than bending over at the waist. Make a habit of doing this even for relatively light objects. Hold heavy objects close up against your body, rather than out at arm's length. Balance your load between both arms. If something is too heavy, large, or awkward to safely handle it yourself, seek assistance.
- **PUSHING/PULLING.** Whenever possible, push, rather than pull, heavy objects.

CONCLUSION

Low back pain will visit us all from time to time; think of it as one of the compromises we make for walking on two legs instead of four. However, these simple measures, along with the passage of time, will provide relief to the vast majority of people. If your back pain is getting more severe or frequent despite these recommendations, please let the doctor know, in case further evaluation is in order.