Research on Symptoms, Treatment and Prevention of Lumbar Muscle Strain

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Abstract. The rapid development of the medical industry has eased the health worries of many people. For example, uterine cancer and breast cancer are no longer as incurable as they used to be. Benign tumors basically do no harm to people's health. However, diseases such as lumbar muscle strain have not received much attention in today's medical field. Lumbar muscle strain is an injury caused by excessive fatigue. When the lumbar muscles are overused or overloaded, there will be ischemia, spasm, tension, pain, swelling and other inflammatory manifestations. That is, we feel "low back pain." This kind of illness cannot be improved very well by going to the hospital for surgery. Through this paper, we will introduce what lumbar muscle strain is, what its clinical manifestations are, and what solutions are available for different groups of people. The experimental conclusion of this paper is that there is still a lot of room for development in the field of treating lumbar muscle strain. At present, physiotherapy is the method to solve the least side effects of lumbar muscle fatigue, and the effect is relatively obvious. However, the way to avoid the disease is to pay attention to your posture, control your weight, and eat a healthy diet.

Keywords: strain, physiotherapy, method, illness

1. Introduction
Nowadays, with the development of medical technology, many difficult and complicated diseases that were once identified are now effectively controlled, such as breast cancer and uterine cancer. However, some non-life-threatening but troubling health problems have not received enough attention. Among them, lumbar muscle strain is a good example. Lumbar muscle strain, functional low back pain, chronic low back injury, or lumbar is a chronic traumatic inflammation of the lumbar muscles and their fascia or periosteum attachment points, and is one of the most common causes of low back pain. [1] It is hated because it is everywhere. In addition to the elderly, young people, especially those who are obese or in poor posture, are also prone to lumbar muscle strain. What is even more incredible is that some professionally trained athletes also have the same problem. This paper not only helps people fully understand lumbar muscle strain, but also provides reasonable treatment for young people, old people and athletes. It is hoped that through the introduction of the principle of lumbar muscle strain, clinical symptoms, causes, and solutions for different groups of people, people can pay more and more attention to this disease. Not only that, young people, athletes and old people can treat or even prevent lumbar muscle strain.
2. Symptoms of lumbar muscle strain

Lumbar muscle strain is a difficult condition to treat. Lumbar or lumbosacral pain, soreness, and repeated attacks are the most common symptoms[2]. Pain can change as a result of climate change or fatigue, such as daytime fatigue aggravation. Rest can help to alleviate symptoms. The superposition of many pathogenic factors can cause muscle fibers to degenerate or even torn a small amount, forming scars, fibrous cords, or adhesions, resulting in long-term chronic low back pain. Those suffering from lumbar muscle strain must maintain a sedentary lifestyle. The image may show the lumbar curvature of the pelvic retroversion straightening backward, as well as an intervertebral disc herniation and a black disc.

Usually, the main causes of a lumbar muscle strain are as follows:

1. The waist is sore or swollen, and some are tingling or burning.
2. Aggravate when you are tired, lighten when you rest; lighten when you exercise properly and change your posture frequently, and aggravate excessive activity.
3. People can't keep bending down to work. And they are often forced to stretch or punch the waist from time to time to relieve the pain.
4. Tenderness points can be found in the waist, most notably in the sacral spinous muscle, the posterior iliac spine, the posterior sacral spine, or the transverse process of the lumbar spine.
5. The shape and activity of the waist were not abnormal, and there was no obvious lumbar spasm, and the lumbar activity of a few patients was slightly limited.

Doctors can easily diagnose this disease based on symptoms, signs, and other clinical manifestations, but it must be distinguished from other lumbar degenerative diseases such as lumbar disc herniation, lumbar spondylolisthesis, and so on. Treatment and prevention of lumbar muscle strain

Although lumbar muscle strain may sound scary, it is actually easy to treat and prevent compared to other diseases. First of all, for the elderly, especially middle-aged and elderly workers engaged in physical activities, we should avoid overwork. This is because long-term high-intensity physical work, such as moving goods, will increase the burden on the waist a little bit, leading to lumbar muscle strain. Secondly, proper functional exercise can also slowly treat lumbar muscle strain. The elderly cannot exercise as intensively as young people, so low-intensity and easy-to-stick movements are more suitable for them. The treatment of psoas muscle strain requires strengthening psoas muscle exercises to prevent muscle dystonia, such as lying on the stomach, removing pillows, vigorously raising the head, and stretching the hands and feet into the air. At the same time, people can also lie on their backs on the bed, rest their heads on the bed, and lift their shoulders.

Young people are much less likely to have lumbar muscle strain than the elderly, but that doesn't mean they don't have the problem. For them, incorrect posture and obesity are the biggest causes of lumbar muscle strain. When young people are writing, excessive leaning forward or bending over will increase the burden on the waist. If it is not corrected in time, it will lead to lumbar muscle strain for a long time. At the same time, obese children will have a lot of pressure on their waists when they walk, run, jump and other similar activities, so it is necessary for young people to keep their weight within a reasonable range.
For athletes, physiotherapy is ideal. In fact, blocking therapy (0.5%-1% procaine plus prednisolone acetate or hydrocortisone acetate as pain point blocking) and medication (primarily anti-inflammatory painkillers, injections of corticosteroids and oral non-steroidal anti-inflammatory drugs, topical muscle relaxants and analgesics) are especially effective and quick, but they can reduce an athlete's performance, which can have a negative impact on their performance. The therapeutic effect can be enhanced by using suitable physiotherapy and practicing under a doctor's supervision. Physical therapy techniques currently available include electromagnetic, ultrasonic, infrared, laser, and many others. These therapeutic techniques release tendons and activate collaterals by acting on the human body with sound, light, electricity, heat, etc. It is important to remember that lumbar muscle strain does not require surgery, and that in certain cases, it may even make symptoms worse.

Firstly, avoid dampness and cold.
Don't sleep casually in a wet place.
Depending on the climate change, dress more at any time, take off wet clothes or dry your body after sweating and raining[3].
Secondly, acute lumbar sprain.
Patients should receive active treatment and rest at ease to prevent the progression to chronic diseases.
Thirdly, warm up before exercise[4].
When exercising or strenuous activity, prepare to warm up. After the body is fully warmed up, the injury caused by exercise can be avoided.
Fourthly, correct bad working posture
Poor sitting posture, such as bending over for too long, or sitting too low at a desk, etc., can cause lumbar muscle strain. It is recommended that patients can change their position after sitting for an hour.
At the same time, a cushion with a lumbar protrusion can be used to relieve the pressure on the waist and help avoid lumbar muscle strain.
When carrying heavy loads, lean forward slightly with your chest, slightly bend your hips and knees, and walk steadily without taking large steps. [5]. These can help us avoid lumbar muscle strain.
Fifthly, avoid overwork.
The waist is the center of human movement, and overwork will inevitably cause injury and low back pain. Therefore, attention should be paid to the combination of work and rest in various work or labor.
Sixthly, Avoid Soft Mattresses
A mattress that is too soft cannot maintain the normal physiological curvature of the spine, so it is best to add a 10 cm thicker mattress to the board.
Finally, avoid obesity.
Being too fat will inevitably bring extra burden to the waist, especially for middle-aged and elderly women and postpartum women. During the period of easy weight gain, it is even more necessary to control the diet and strengthen the exercise.

3. Conclusion
In short, lumbar muscle strain is a disease that deserves people's attention. It happens not only to the middle-aged and the elderly but also to the young and even athletes. [6]. It is not as threatening to people's lives as cancer, but it will greatly affect people's lives and reduce people's happiness and athletes' performance. Therefore, with the development of medical treatment, lumbar muscle strain deserves our attention. At present, there are still great limitations in the medical treatment of lumbar muscle strain. This is because most of its treatments are from a personal point of view, such as correcting posture, strengthening exercise and warming up before training. However, this kind of medical treatment has a long treatment cycle and a slow time to take effect. Therefore, it is hoped that with more attention to the treatment of lumbar muscle strain, people can develop a more effective treatment.
References
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