

Spinal Injuries – Skiing and Snowboarding

Winter sports have become more and more popular in recent years; skiing and snowboarding are the ones that gain much popularities as they are fun and challenging. However, without proper training or precautions, the results might be devastating.

Is skiing dangerous?

From my experiences, there are actually not a lot of injuries that happened during skiing. However, by saying so, we still need to be aware of the risks behind.

Cause of ski injuries

Among all the ski injuries, most of the accidents are caused by falling. Particularly for those who don't know how to ski or amateurs who haven't properly learned how to stop and turn, thus end up bumping into others or hard objects.

Types of injuries

Most of the injuries can be categorised into the two types: either it is a soft tissue rupture or a bone fracture. The fracture of a bone can happen in any part of our body; starting from ankle, knee, wrist, shoulder and to spine. Among all, knee injuries are the most common. Spine, on the other hand, only accounts for approximately 10% of total injuries. Still, the damage to the spine can be quite severe.

Causes of spinal injuries

Most of the injuries happen when skiers bump into each other, tree trucks or chairlift. Sometimes falling during snowboarding can twist or stress the spine or the soft tissue structures that are supporting the spine.

Carrying the equipment improperly: Some injuries occur when people are carrying their gear in a wrong posture

which leads to the pressure lies upon the pelvis and spine. When carrying your gear, always bear in mind to have them close to your torso.

Fatigue is also one of the leading causes of injuries. A lot of injuries actually happen when skiers start to get tired and lose their balance after a long day.

Symptoms of spinal injuries

Unlike a simple bruise on your arm, spinal injuries demonstrate some severe symptoms, such as loss of limbs function, pain at any point at the back, loss of sensation in any part of the body or even being unconscious.

Tips on avoiding get hurt

Get proper training: A lot of people treat skiing and snowboarding as fun sports; indeed, it is when you have adequate training. My advice is to take a proper lesson from a ski instructor if you are new to this sport.

Exercise: a person that is out of shape, is prone to get himself injured.

Know your limits: I suggest starting with the easiest hill each time before trying out the more challenging terrain. A lot of the injuries happen to first-time skiers due to their lack of skills in coping with the high speed.

Wear proper protective equipment: Helmet is something I would recommend for beginners. However, there are studies shown that under a high-velocity impact, the helmet itself is less effective than we thought.



Who is not fit to ski?

Age is not really a concern if the person is in shape. I have seen people in their golden years who are still physically fit. However, for those that are suffering from an unstable spine or elders that shows a sign of osteoporosis, I would recommend them to avoid skiing.

For those who have undergone spine surgery, or those who have minor problems with their back. Can they ski? Yes, only if they play on the general slope.

In a nutshell, know your limits, get proper training and have fun conquering the slopes!

About the author

Dr Hung-Tsan CHOW is an orthopaedic surgeon focusing on the spine. He is a ski enthusiast and he can be seen at the slopes of Korea, Hokkaido and Switzerland during ski season.