ACL Injuries - A Runaway Problem in Skiing

At one time, the sport of skiing used to be famous for broken ankles. In the 1960s, boots grew bigger and stiffer, and protected the ankle. At this point, people began to break legs. Radial fractures of the tibia were commonplace enough that, at one time, they accounted for well over 10% of all skiing injuries. It was the stuff good jokes were made of – each publication invariably featured a photograph or drawing of someone in a huge cast on his or her leg, lounging by the fire in the lodge. So, binding companies went to work, and they solved the problem. They introduced new mechanisms, along with some serious standards, and drove the rate of broken legs way down into the low, single digits. By 1986, leg fractures accounted for only 2-3% of all skiing injuries. The jokes stopped.

But just as the industry began to celebrate the decline in broken legs, a new issue began to arise - ACL tears and ruptures. And with the introduction of “shaped” skis, the rate of ACL injuries soared higher and higher, rapidly becoming the #1 injury in skiing. There are 70,000 ACL injuries a year in skiing. 70,000! ACL tears and ruptures, alone, account for 1/3 of all reported skiing injuries. It is, by far, the worst medical issue our sport has ever known.

In fact, ACL tears and ruptures have become a much bigger problem than broken legs ever were. For one thing, the financial cost of treating a fracture is much lower, the recovery time much shorter, and bones heal more easily and completely. But it now costs an average of $20,000 for the initial repair of a torn ACL, making ACL injuries in skiing a $1 billion-a-year medical problem. Plus, it takes 6 to 12 months, usually including intensive physical therapy, for an ACL to heal well enough for the victim to ski again. Many don’t make it. In fact, one out of five skiers who injure their ACLs never skis again. For those who do return to the sport, their repaired knee will never be quite right again. It is much more likely to be reinjured, and much more likely to develop further complications.

Ski binding companies have tried to solve the problem, but until now, no one has been able to design a ski binding that can mitigate ACL injuries without pre-release issues.

KneeBinding did it. This new, knee-friendly binding has a patented PureLateral™ heel mechanism that keeps skiers in when they are supposed to, but that releases your foot when they need to. They have the unique ability to separate the normal strains of skiing from the unique combination of forces that would otherwise injure an ACL.

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