

Conditioning is first step to preventing knee injuries

By Kathryn Reed

Most people don't give tips for how not to visit their business. But that's exactly what doctors Terry Orr and Jonathan Finnoff did.

In a 90-minute presentation last week, the two did a tag-team lecture about Ski and Snowboard Injury Awareness before more than 30 people at Lake Tahoe Community College. Working in the field of orthopedics through Barton Health and both being affiliated with the U.S. Ski Team, these two know how to help people stay out of the operating room as well as what to do if someone needs that level of care.

For every 1,000 skiers on the slopes, one person will hurt her knee. Half of those injuries will be to the MCL or medial collateral ligament, while a third are to the ACL or anterior cruciate ligament.



Jonathan
Finnoff with
Tahoe Center
for
Orthopedics
talks about
knee injuries.
Photo/LTN

Of the quarter million ACL injuries each year, most are non-contact.

“Most of the time it’s someone running or landing in a jump,” Finnoff said. “One out of 10 collegiate female athletes will tear their ACL.”

Women are more apt to have an ACL injury than a man. Part of it has to do with women having smaller ACLs, but Finnoff also said research also shows there are “tons of hormone receptors in the ACL.”

Pre-puberty boys and girls tend to jump from a box and land with their knees going in. This is hard on the joint. Post-puberty, guys tend to land with their knees in alignment with the rest of their body. Not so for gals; they are still turning their knees in.

This is another contributing factor to why women have more ACL injuries. However, if they go through proper training, they can learn how to land a jump in a way that will be less impactful to their knees.

Prevention comes via core stability, endurance and strength training. A dynamic warm up is suggested, but static stretches should be avoided before athletic activity.

While everyone laughed when the doctors pointed out the irony of someone saying they got hurt on the last run of the day, the truth is fatigue plays a role.

This is why preseason conditioning is so important. Knees take a beating on the slopes. If the muscles surrounding them aren’t strong, they will be more susceptible to being hurt.

Ligaments, they said, are like ropes. If they exceed their tension limit, they snap. People can hear and feel when a ligament tears.

“One of the busiest times for us with knee injuries is April

with the variable conditions,” Orr said. “Be aware of what you are skiing on and use caution when we have conditions like we have now.”

It’s days where ice, slush and ideal conditions are all on one run that can pose risks. Skis can jerk or slide, causing knees to twist.

A quick anatomy lesson was given – bone, cartilage, ligaments, muscles and tendons. Pictures of what an intact knee looks like compared to one with torn ligaments were shown.

But it’s not just knees these docs worry about.

“You need to armor-up,” Orr said. “I’m surprised by how many people don’t wear a helmet. It doesn’t make sense.”

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The Jan. 5 lecture is one in a series Barton Health is putting on. Details about the free upcoming lectures are online.