Knee specialists give advice how to avoid visiting them

By Kathryn Reed

People were wincing and audibly uncomfortable. And it wasn't even their knee being tweaked.

Knees are a big issue – not just with skiers. Two people who have seen their share of knee injuries in South Lake Tahoe spoke to nearly 100 people Wednesday night at Lake Tahoe Community College. Terry Orr, orthopedic surgeon with Barton Health and a doctor for the U.S. Ski Team, along with Chris Proctor, physical therapist with Barton, dispensed a slew of information.



Even though their paychecks are predicated on people injuring themselves, they spoke a bit about how to avoid seeing them beyond the lecture circuit.

Orr said the best ways to avoid injuries are to get in shape, check your equipment, know the weather conditions, avoid collisions, and wear protection.

Much of the Jan. 26 two-hour presentation focused on the anterior cruciate ligament, better known as ACL, because of the four ligaments in the knee it is the one most commonly injured.

Growing in numbers are non-contact ACL injuries. Video of a soccer player going down as he is striking the ball brought forth a chorus of "ohhhs" from the assembled group. External forces, like the turf, contribute to these injuries. Non-contact ACL injuries used to mostly be seen in females, now guys are catching up.

"You get the right forces at the right spot and you get an injury. It doesn't take a ton of force," Proctor said. Much of it depends how a person lands.

Proctor used a sample of 15 females and 15 males, all local, from the last two years to demonstrate how the sexes get injured.

Females: 4 from soccer, 3 basketball, 3 volleyball, 4 skiing, 1 gymnastics.

Males: 4 football, 11 skiing/snowboarding.

"It fits with what the industry is saying. A lot of injuries are attitude related," Proctor said.

As a physical therapist, he often is seeing patients the day after Orr has performed whatever knee surgery was needed. The goal is to get the person back doing his or her sport six months after surgery. But it could be another year before the person is not thinking about their knee.

Credit was given to Drs. Robert Johnson and Jasper Shealy, and engineer Carol Ettlinger for spending years analyzing 10,000 videos to narrow what happens during ski injuries. The research was whittled down to six elements that lead to ACL injuries:

- Uphill arm is back
- Skier is off-balance to the rear
- Hips are below the knees
- Uphill ski unweighted
- Weight on the inside edge of downhill ski tail

• Upper body generally facing downhill ski.

These factors can be applied to snowboarders, too.

Flexibility in critical, Proctor said, in helping to prevent injuries.

"A lot of people come in with knee pain and we work on hip flexibility," he said.

Strength, agility and attitude are also important to keeping knees away from the operating table.

Proctor admitted a bit of luck helps too, as a video of Olympian Daron Rahlves flying into the crowd with one ski still on played on the screen. The Tahoe skier walked away from that particular wipeout without needing surgery.

This was one of eight free lectures Barton has scheduled through Oct. 26. The next is Feb. 22. It's about bone health in the maturing athlete.