

BACK *on* Course

Professional ski mountaineer Janelle Smiley breaks world record after complex hip surgery by Porter Adventist Hospital orthopedic surgeon Brian J. White, MD



Janelle Smiley is used to overcoming obstacles.

The 36-year-old is a six-time national champion in uphill skiing, also called ski mountaineering, a sport in which athletes climb a mountain with skins on their skis and then remove the skins before skiing back down.

But she completed her most impressive accomplishment — ski mountaineering the entire European Alps range in world record time — after having surgery by a Denver orthopedic surgeon to reconstruct the labrums in both her hips.

Earlier this year, Smiley and her team traversed 1,076 miles and 294,000 vertical feet across the entire European Alps range on skis in just 36 days. Not only did Smiley set the world record, she also became the first woman to have ever completed the grueling course.

“It’s one of the more challenging sports because you need the endurance to go up and the strength and power to come back down,” Smiley says. “There’s an incredibly rigorous training regimen. I would be in the gym lifting weights two to three

times a week and training six days a week out on the snow.”

While the sport is dangerous and can lead to serious injury, it was nagging hip pain that took Smiley off course.

“It was a very dull, aching pain at first,” she says. “The odd thing was, when I was out touring, it didn’t hurt. It would hurt when I came home and was sitting down. Nothing would alleviate it.”

Smiley knew she needed treatment, but she put it off. Eventually, the pain got so bad, she couldn’t ignore it. She saw a physician in her hometown of Jackson, Wyo., who told her that her hip labrums, the rings of cartilage along the hip bones that cushion the socket, were worn out beyond repair. Not wanting her to risk her livelihood, the doctor recommended she travel to Denver to see Porter Adventist Hospital orthopedic surgeon Brian J. White, MD, for a complex and unique procedure to reconstruct her labrums from donor tissue.

◆◆ A superior technique

Although previously thought to be a relatively uncommon injury, labral tears are being diagnosed more frequently due to advances in MRI and arthroscopic techniques. It’s now believed that one-quarter to half of all people with hip or groin pain have labral injuries.

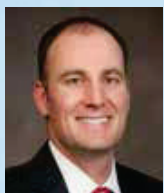


The fact that she's not just back to climbing a singular mountain but that she ski mountaineered the entire European Alps range after surgery is an incredible accomplishment."

— Dr. Brian J. White

Most orthopedic surgeons typically treat damaged labrums with surgical repair.

"A lot of people will repair the labrum. That means they'll simply put sutures around the labrum to try to get it to heal," White says. "The problem with that is the tissue is chronically compromised, and the repair technique can damage its blood supply. And as a result, many repairs fail."



Dr. Brian J. White

Failed repairs lead to a return of pain, often worse than before the surgery, and it can be quite common. That's why White has turned to labral reconstruction.

"Instead of repairing the damaged labrum, I make a new one for people," says White, an approach that he recently proved to be superior through his research (see box on Page 6).

White makes a new labrum from a donor graft to restore function. But the new labrum doesn't regrow nerves like a repaired labrum does, which is ideal.

"It doesn't have the capacity to feel pain in the same way as the native labrum does," White says. "That's why we see such tremendous results with it."

And it's not just a surgery for elite athletes.

"What makes labral reconstruction a powerful procedure is that it works for everyone," White says. "It doesn't matter if you're an elite athlete or a regular person who wants to play with their children. This procedure allows me to rebuild a new labrum so the joint can again function normally — and the graft should never feel pain like the native labral tissue did."



Back to breaking records

Smiley traveled to Colorado to have White reconstruct her left labrum in July 2014 and then again in September 2014 to have the right one done. Her only regret is not doing it sooner.

"I was so afraid to have surgery, because I was so active," she says.

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Janelle Smiley climbed the Cassin Ridge on Denali just nine months after surgery to reconstruct both hip labrums before setting a world record for ski mountaineering the European Alps.

Photos for this story and front cover shot during Smiley's European Alps mountaineering by Mark Smiley.

BACK ON COURSE (Con't)

"I put it off for three years, and I just kept pushing my athleticism through the pain. If I would have known that the surgery would have gone so well, I would have had it done much sooner."

In true professional athlete fashion, Smiley followed White's post-op instructions to a T, using crutches for four to six weeks and faithfully going to physical therapy for a few months. She was back to mountaineer training after about six months. Nine months after surgery, Smiley climbed the Cassin Ridge on Denali, a very technical peak in Alaska. And she hasn't stopped since.

That doesn't surprise White. "She's an incredible athlete, and all of that was ripped away from her when her hips were painful," White says. "The fact that she's not just back to climbing a singular mountain but that she ski mountaineered the entire European Alps range after surgery is an incredible accomplishment."

Experience Matters

If you're considering labral reconstruction, take care choosing a surgeon for this complex procedure. "It's an incredibly challenging operation, because the joint is so deep and difficult to access," says Brian J. White, MD, an orthopedic surgeon at Porter Adventist Hospital.

"Labral reconstruction needs to be done by someone who is massively experienced in it just because of the technical challenge it poses," says White, who's **completed more than 2,500 labral reconstructions to date and performs 440 per year — a volume that puts him well beyond anyone in the world with regard to his experience with this procedure.**

White suggests seeking out a surgeon who does only hip arthroscopy. "That gives you the best opportunity to see the most benefit from this procedure," he says.

Symptoms of hip labral tear

- ◆ Pain in the front hip or groin
- ◆ Difficulty sitting or rotating
- ◆ Clicking or locking of the joint
- ◆ Joint instability



Groundbreaking Research

To determine whether labral reconstruction is more effective than repair, Brian J. White, MD, an orthopedic surgeon at Porter Adventist Hospital, conducted a study comparing the two procedures, which was published in the February 2018 issue of the journal *Arthroscopy*.

Unlike typical research that compares groups of patients who get different treatments, White's study was unique in that he was able to perform both surgeries on the same patients.

White performed surgery on 29 participants who needed labral surgery on both hips between 2009 and 2014. On one side, he performed labral repair and on the other side, he reconstructed the labrum. This method allowed him to get truly comparative data as to which procedure was more successful.

"It's really hard to get a good, comparative study in orthopedics, because everyone is different. Even two 20-year-olds are completely different people and can have different outcomes," he says. "Performing both procedures on the same patient is by far the best way to compare the procedures because the only variable is the different labral treatment."

The study concluded that reconstruction is much more successful than repair. In fact, of the patients in the study, 31 percent failed their labral repair and elected to have another surgery to revise it to a reconstruction. None of the labral reconstructions failed.

"This paper is groundbreaking," White says. "It is changing the way people perform hip arthroscopy around the world."