



Back in the Saddle

Transradial amputee Barry Landry recently won his first roping competition since returning to the sport.

Louisiana native Barry Landry has been roping calves since he was 18 years old. So when he lost his left hand in a work-related accident, he didn't doubt that he would rope again. He just needed to find a prosthesis to help him do it.

"The accident happened on Jan. 7, about 3 years ago now," Landry told O&P Business News. "We were working on a machine, and a press was accidentally closed on my hand."



Barry Landry on his ranch in Louisiana

Landry's hand was crushed beyond repair, and his doctors decided to perform a transradial amputation immediately.

"When it first happened, it was explained to me that it would be like a death," Landry said. "I didn't understand that in the beginning, but after a couple of weeks, it hit home. You go through the emotions of anger and depression, but luckily that didn't last very long."

Landry's dominant hand, his left one, was amputated, so he had to teach himself to do everything with his right hand.

"I had to learn to write again, which was probably the hardest part," Landry said.

Most importantly, Landry had to teach himself to throw a rope with his right hand so he could return to his passion.

'You need to do what?'

When Landry was ready for his first prosthesis, he traveled to Advanced Arm Dynamics in Dallas after learning about them through his boss.

"It's always exciting when we have patients coming in from out of town," Rob Dodson, CPO, Landry's prosthetist at Advanced Arm Dynamics, said. "And the one thing that I remember specifically about Barry was that he wanted to rope again."

Dodson admits that despite being from Texas, he knew little about calf roping, a rodeo event involving a rider mounted on a horse. The rider must catch the calf by throwing a rope around its neck and then dismount the horse and bind the calf's legs in as little time as possible.

"He told me, 'I need to get on a horse and be able to control it, and I need to be able to lasso a calf as it is running,'" Dodson said. "I think I responded with, 'You need to do what?'"

Landry needed a prosthesis with a quick reaction time that he could easily control in order to release the rope at the right time.

“Barry’s limb presentation was pretty straightforward. It was an appropriate length, and he didn’t have any issues with pain. So for us, we were only limited by our own creativity,” Dodson said. “In order to properly let go of a rope that you are throwing to reach a running animal requires some ingenuity.”

Dodson fit him with the Ottobock SensorHand Speed, but despite the hand’s quick reaction time, it was evident that Landry would need to learn to handle the rope with his sound hand in order to properly throw it while holding the reins with the prosthetic hand.

“Even with the myoelectric prosthesis, we weren’t going to be able to provide him with something that released the rope at the perfect time,” Dodson said. “So he ultimately switched hands and learned to rope with his right hand.”

After Landry felt comfortable with his prosthesis, he tried roping calves, but tying them proved challenging.

“I roped calves a little bit after I got my first prosthesis, but it was really hard to tie them, so I really couldn’t be very competitive,” Landry said. “So that’s when I started team roping steers with a friend of mine.”

Team roping is a timed rodeo event that involves two riders, the header and heeler. After the steer is released, the header first traps it by throwing a rope around its head. The heeler, Landry’s role, then lassos the steer’s legs.

“The first guy ropes the horns and turn [the steer], and then the heeler comes in and ropes the two back feet,” Landry said. “It sounds simple, but it can be very challenging.”

Landry started team roping about a year ago and recently won his first competition.

“It took a while, but we were finally able to place and win something,” Landry said. “So hopefully that will keep going.”

The Michelangelo hand



Rob Dodson, CPO, visited Landry at his Louisiana ranch to see how he uses his prosthesis in an everyday setting.

In September 2012, Landry was fitted with the Ottobock Michelangelo hand, a myoelectric prosthesis that incorporates an electric opposable thumb, which more naturally mimics an able-bodied hand.

“When that component came out, we immediately thought of Barry. The thumb action of the hand is much more natural as it relates to where the rope is placed in the hand,” Dodson said. “That lateral key grasp is actually the motion that Barry was showing us that he wanted us to create out of the SensorHand Speed, which is impossible.”

The hand also has a flexible wrist and a quick and intuitive reaction time.

“Barry is able to control it easily,” Dodson said. “He was able to utilize it very quickly and fluidly, and jumping back and forth with the thumb position wasn’t a cumbersome thing.”

According to Landry, the Michelangelo hand has made everyday tasks easier to complete.

“I use it every day at work, and around the house. I can actually grab a plate and walk around with it or slide change off of the table,” Landry said. “This helps with a lot of different things that you take for granted in your daily usage.”

The Michelangelo hand also has added cosmetic benefits because it has a more natural resting position.

“Once you relax, the hand goes back into a more normal-looking position,” Landry said. “From the perspective of another person walking by, it looks weird to see a hand wide open, but with the Michelangelo, it goes back to a relaxed state after a second and a half and looks a lot more normal.”

Although Landry uses the Michelangelo hand for everyday tasks and work, he continues to use the SensorHand for roping.

“The Michelangelo hand is faster, but sometimes, if I move the wrong muscle, it wants to move unintentionally,” Landry said. “So I’m getting used to that, but I think it will help me hold my rope and reins a little better than what I am doing now. The way you move the thumb over closes the gap up so I can hold things a little tighter.”

In his environment

Dodson recently traveled to Louisiana to visit Landry on his ranch where he lives with his wife, Donna, and takes care of their horses.

“One thing that we really don’t get to do is see patients in their environment,” Dodson said. “We see them in our clinical environment, and they are coming into our protected office where we have everything in place. I call it the magic office where everything works well.”

While in Louisiana, Dodson was able to watch Landry work with his horses and examine how the hand handles the various tasks required for maintaining a horse.

“To work with Barry and see him using his prosthesis the way I hope all of my patients use their devices was really an eye-opening experience for me,” Dodson said. “As prosthetists, if that was our natural protocol for fitting our patients and we could do more of that, we would learn so much more about them.”

Landry is still working toward roping calves again, and he hopes that his new hand will help him achieve this goal.

“It’s really easy to give up, but I haven’t done that,” Landry said. “From the first day I walked into Advanced Arm, I told them I wanted to rope again. We haven’t gotten back to that point yet, but we’ll try that a little later on. And we are still having fun, and that’s the main thing.” — by Megan Gilbride