

Eight Patents, One Purpose: Helping Patients Move Better

Dr. Chudik's Innovations in Shoulder & Knee Surgery

When most people look at a shoulder or knee injury, they see a problem to fix. Dr. Steven Chudik sees an opportunity to improve how it's fixed. As a pioneer in arthroscopic shoulder and knee surgery, he constantly asks how to make procedures safer, less invasive, and more reliable for patients—an approach that has led to eight U.S. patents over the course of his career. That mindset has helped athletes and active patients recover with less pain, fewer complications, and a quicker return to the activities they love.

One of his newest advances is a minimally invasive, rotator cuff–sparing shoulder replacement that preserves vital shoulder muscles and avoids joint dislocation. By not dislocating the shoulder, surgical trauma is minimized, lowering risks of nerve injury, fractures, and other complications. Patients can move their arm immediately after surgery, avoiding up to 6 weeks in a sling and potentially shortening recovery from 6 months to as little as 6-12 weeks.

Another patented procedure focuses on acromioclavicular (AC) joint separations—the painful “shoulder separation” that often happens after a hard fall or collision. In this injury, the end of the collarbone is pushed out of place and the ligaments that hold it to the shoulder are torn. Dr. Chudik's AC joint reconstruction technique carefully puts the collarbone back where it belongs and rebuilds the torn ligaments using a tendon graft and strong fixation to hold everything steady while it heals. This approach is designed to restore normal shoulder alignment, lower the chance that the joint separates again, and help patients return to lifting, reaching overhead, and playing sports with less pain and better strength.

His innovation extends to growing athletes as well. With his arthroscopic, growth plate–sparing ACL reconstruction, Dr. Chudik developed a way to reconstruct a torn ACL in children without damaging the growth plates—critical structures that guide leg length and alignment. Instead of being told to wait until they are older and give up sports in the meantime, many young athletes can safely return to running, cutting, and pivoting with a stable knee and healthy future growth.

These examples highlight only a few of the ways that his innovations are reshaping shoulder and knee care. Across all of his innovations, the mindset is the same: protect what matters most in the joint, tailor treatment to the individual, and design surgery around how patients want to move years from now. For patients, that translates into more choices, safer procedures, and a more confident path back to everyday activities and the sports they enjoy.



AC Joint Reconstruction