Modified Arthroscopic Bankart Repair Successfully Returns Contact Athletes to Sport: an 11 Year Follow-Up

The shoulder is a shallow ball and socket joint, which allows for great mobility but can easily become unstable if the structures holding the joint together become too loose. The "socket" of the joint, or the glenoid cavity, is circled by a ring of soft tissue called the labrum that serves to deepen the cavity of the glenoid. The labrum, in addition to other muscles, tendons, and ligaments, helps keep the "ball" (the head of the humerus or upper arm bone) in place. Repeated instances of shoulder dislocation or subluxation can result in stretching or tearing of the anterior or front side of the labrum (also called a Bankart lesion), increased shoulder instability, and an increased likelihood of additional dislocations in the future. The risk of dislocation recurrence is higher for athletes participating in contact sports compared to those participating in non-contact sports due to the increased risk of physical interaction during contact sports. Surgical repair of the labrum can prevent future episodes of shoulder instability and return athletes to their sports.

During a procedure called a Bankart repair, the damaged labrum is reattached to the glenoid, recreating the "bumper" that prevents the humeral head from slipping out. The Bankart procedure has been the surgery of choice in the United States for repair of anterior shoulder instability in non-contact athletes, but in contact athletes this procedure has produced recurrence rates as high as 25%. However, Dr. Plancher performs a modified Bankart repair which is capable of restoring shoulder stability in even contact athletes.

In order to provide the best care possible to our patients, we conducted a study to look at differences in functional outcomes after a modified arthroscopic Bankart repair in contact versus non-contact athletes with anterior shoulder instability. Our study included 20 contact athletes (16 men, 4 women; age range: 15-35 years) and 23 non-contact athletes (16 men, 7 women; age range: 30-46 years). Functional outcomes were assessed by restoration of shoulder range of motion and self-assessment questionnaires. Average time to follow-up was roughly 4.5 years (range: 2-11 years). While contact athletes were statistically significantly younger than non-contact athletes, we saw no other significant differences between groups; all athletes reported excellent functional outcomes and returned to sports with full range of motion. Three of 43 athletes experienced a recurrence in shoulder instability including one contact athlete who returned to baseball 3.5 months after surgery against the surgeon's advice, one contact athlete reinjured playing basketball after 7 months, and one non-contact athlete reinjured during a sailing accident over 5 years following surgery. Revision Bankart procedures returned all three of these athletes to pre-injury sports without further recurrence as of their last follow-up visits 5.5, 3.5 and 6.5 years following revision surgery. Based on these results, we recommend the modified arthroscopic Bankart repair as the primary procedure in all athletes with anterior shoulder instability.