

## Safe return to play following arthroscopic ACL knee reconstruction, Bankart shoulder repair easier to determine with OTRF functional capacity tests

When is it safe for an athlete to return to sport if he or she had arthroscopic anterior cruciate ligament (ACL) knee or shoulder Bankart (labral) surgery? Those are questions orthopaedic surgeons face daily. Many use time, documented progress in physical therapy or strength measurements to determine when to release athletes back to sport. Others use functional testing measures such as comparative triple leg hops for an ACL test. A research review reported that out of 264 studies, 40 percent failed to provide any criteria for return to play (RTP) after surgery. Of those that utilized criteria for RTP, 13 percent used only objective responses, and only four percent used a functional test.



Literature suggests the risk for ACL injury can be reduced with exercises that teach athletes to run, cut, jump and land with proper form. Specifically, some learned patterns of movement can put athletes at significant risk and many athletes who have already suffered an ACL injury are at risk for recurrent injury or injury to the opposite knee.

Therefore, Dr. Chudik and the sports performance team with his nonprofit foundation, the Orthopaedic Surgery & Sports Medicine Teaching & Research Foundation (OTRF), designed a functional capacity exam (FCE) for determining return to play following ACL surgery. The test is designed to quantitatively and qualitatively assess the functional movement of the athlete, making sure he/she not only can jump as far on one leg as the other, but also that each movement is performed safely and with proper form. It also provides a simple “PASS” or “FAIL” grade and allows physicians to advise an athlete on what they need to continue to work on in order to pass.

Dr. Chudik has been evaluating athletes who performed an FCE during the past four years. “Our research to validate this test has revealed a decreased risk for re-injury if athletes return after receiving a passing grade,” explained Dr. Chudik. “Providing this test for athletes is an important step in completing the treatment of ACL-injured patients and reassuring for them that they are less likely to experience a re-injury upon returning to sports,” he added.

Building on the success of the ACL functional capacity exam, Dr. Chudik and the OTRF sports performance team recently developed a similar test for patients who suffered an anterior

*Continued on page 7*

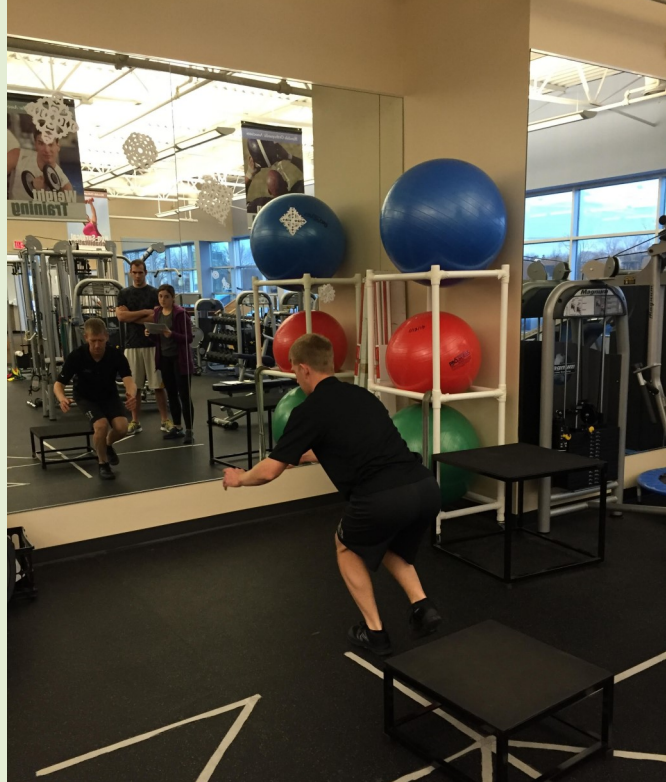
## FCE return to play tests

*Continued from page 4*

shoulder dislocation and had arthroscopic Bankart (labral) repair surgery.

According to Dr. Chudik, although there have been many technical advances in arthroscopic Bankart surgical repair and post-operative rehabilitation, there still remains a significant re-injury rate which most surgeons consider to be related to the strength of the repaired tissues. However, from personal observation and experience, Dr. Chudik has seen increased performance and possibly joint awareness following a more advanced, progressive balance and stability training program.

With this in mind, the OTRF team felt it was necessary to create an advanced shoulder dynamic stability training program and shoulder functional capacity evaluation (FCE). This would help ensure the athlete regained sufficient strength, stability and balance, and also has the best opportunity to pass the FCE.



“We’ve been using the training program and FCE since the spring of 2017 and it definitely helps us identify specific deficits or weaknesses that may remain,” Dr. Chudik explained. “It works like the ACL test in that it tells us when an athlete is ready to return to sport and provides us with simple “PASS” or “FAIL” grade.”

Similar to the ACL functional capacity evaluation, Dr. Chudik and the OTRF Sports Performance Team intend to present their findings at a future, annual orthopaedic conference and in peer-reviewed journal articles.