Return to Sport with an ACL-Deficient Knee in a Collegiate Women’s Soccer Player

Brown V, Gray C: Ithaca College, Ithaca, NY

Background: The current trend in the standard of care for soccer players who suffer an ACL tear is to opt for a surgical reconstruction with the pursuit of returning to full sport participation. Recent research has not presented any significant differences in outcomes for those who undergo surgical reconstruction and those who are screened and return to sport without a surgical intervention.

Patient: A women’s soccer player landed awkwardly in a game and reported feeling a pop in right her knee. Her chief complaint upon injury was pain and tightness in the back of her knee. She was assisted off the field by the athletic trainer and upon examination she had pain on palpation over the lateral femoral condyle and fibular head. Further exam revealed pain and limitation in end range extension, a positive varus test, and an absence of instability was acknowledged on her Lachman’s test, however, guarding was present. She was referred to the team physician where a MRI was ordered that demonstrated an ACL tear, partial LCL tear, and a non-repairable lateral meniscal tear.

Intervention or Treatment: The patient was in her final year of collegiate soccer and expressed an interest in trying to return to play without a surgical reconstruction so she would not have to end her season. After discussing the necessary outcomes in order to be cleared for participation by the physician, as well as discussing the possible risks involved, the patient began rehabilitation. The initial short term goals focused on decreasing pain and effusion and restoring full range of motion. The patient was progressed to strengthening and neuromuscular activities that focused on stabilization and minimizing at risk positions. Once she demonstrated full strength on isokinetetic testing, she was screened for a potential return to sport. The athletic trainer utilized patient-reported outcome screening tools, as well as the Star excursion reach tests, and single-leg hop tests. In addition to attaining the required outcome screening measurements, the patient also had to report a lack of giving-way episodes. The Knee Outcome Survey Scale was used and the patient scored herself a 96% on Activities of Daily Living and 93% on the Sports Activity Scale. On the Star Excursion and single leg hop tests there were no asymmetries noted, and the patient was able to maintain good control and maintain her stance and landing position without difficulty.

Outcomes or other Comparisons: The patient was cleared for participation wearing a functional ACL brace and was slowly integrated back into non-contact practice as tolerated. As she became comfortable during practice contact was allowed, and she was eventually she was introduced to limited game activity. She experienced mild complaints of lateral soreness, but effusion was not present. She then began to practice without limitation and participated in games as tolerated.

Conclusions: The absence of significant differences in outcomes of surgical versus non-surgical intervention for ACL patients does not identify a superior standard of care. Patients that are able to meet screening criteria could make the decision to opt for a nonsurgical intervention for return to sport. Screening criteria should include patient and clinician reported outcome measurements, as well as reports of instability or giving way. Those that are that have a repairable meniscus or cannot satisfactorily pass testing, should be referred for surgery to preserve overall joint health.

Clinical Bottom Line: Decisions after ACL injury can be based on individual patient values, and if time permits a return to sport with an ACL-deficient knee can be considered. Patients should be carefully screened and educated on the necessary outcome bench marks to achieve for a potential return to be considered.

Word Count: 599 words.