

## Results Following Anterior Cruciate Ligament Reconstruction in Patients Over The Age of Forty: How Do They Compare to Younger Patients?

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### Summary:

Using studies with a minimum of 2 year follow-up, the data confirms that ACL reconstruction should be recommended to patients over the age of 40 who wish to maintain an active lifestyle or have symptomatic instability with daily activities as there are no increased risks of complications in this population, and the outcomes are similar to those in younger patients.

### Abstract:

#### Background:

The anterior cruciate ligament (ACL) prevents anterior translation of the tibia on the femur and provides rotational stability to the knee. Most surgeons would agree that younger patients should have their ACL reconstructed; however, there is still controversy as to the risks and benefits of ACL reconstruction in an older population.

#### Methods:

A systematic review of the literature from 1970 to 2012 was performed. A broad literature search using "ACL reconstruction, elderly, over 40, middle aged, conservative, knee, anterior cruciate ligament, ACL" as search terms was conducted utilizing Medline, PubMed, CINAHL, and the Cochrane Central Register databases. Inclusion criteria were studies with greater than two-year follow-up and documented minimum age of patients over than 40 years. Graft source was not an inclusion or exclusion criteria. After studies were deemed appropriate for inclusion, two independent reviewers collected demographic, preoperative, intraoperative, and postoperative data.

#### Results:

Twelve studies with a total of 452 patients were included in this review. The average patient age was 47.8 years with an average follow-up of 53.3 months (minimum 24 months). Skiing was the most common injury mechanism (41%). Lysholm scores improved from 53.9 to 90.5 in the 11 operative studies. The only non-operative study reported an average post-operative Lysholm score of 82 following rehabilitation. IKDC scores of A or B were found in 81%. Tegner activity scores averaged 4.7 pre-injury, fell to 2.9 pre-operatively, and returned to 4.7 post-operatively. The overall reported failure rate was 2.3%. Thirteen studies evaluating the outcomes of ACL reconstruction were gathered and the results were comparable to the results of this review with the exception of a higher Tegner score of 6.3. There were few complications and failure rate was similar to reports in younger patients.

#### Conclusion:

The results of ACL reconstruction in the over 40 year old population are similar to those of ACL reconstructions performed in a younger population. ACL reconstruction should be recommended to patients wishing to return to an active lifestyle or those with symptomatic instability. Delay in reconstruction was reported as a risk factor for worse outcomes in one study.