

35 **COMPARISON OF ISOKINETIC STRENGTH AND H:Q RATIO BETWEEN ACL RECONSTRUCTED ATHLETES AND NON-INJURED ATHLETES**

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Evaluation of muscle function can be helpful in rehabilitation programmes with knee injuries. The purpose of this study was to compare isokinetic strength and H:Q ratio between ACL reconstructed (injured group) and healthy (control group) athletes. Twelve elite athletes (6 handball, 6 soccer) with a unilateral ACL rupture who had received a hamstring tendon autografts ACL reconstruction (mean duration 21 months after ACL reconstruction) were matched by motor dominance (all ACL reconstructed knees were non-dominant limbs) and sport to 12 healthy elite athletes. Each subject was tested for concentric quadriceps and hamstring peak torque, the ratio of peak torque to body weight and reciprocal muscle group ratios on a Biodex System 3 Dynamometer at 60 and 180°/s. Analyses of variance were used for data analysis. There were no significant differences in peak torque to body weight ratios and H:Q ratios between the two groups and also between their legs in both speeds ($p < 0.05$). The ACL-reconstructed group had greater hamstring to quadriceps strength ratios in dominant and non-dominant limbs than those of the control group at both speeds but this difference was not significant. The reconstructed limbs of injured group had a significantly lower ($p < 0.05$) quadriceps peak torque than dominant limbs of non-injured group at 60°/s. There were no significant difference in peak torque between involved knee extensor and flexor and uninvolved knee of injured group at both speeds.