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# Self-reported hip function and performance based measures in patients following hip arthroscopy compared to an asymptomatic control group – A cross sectional study

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# Background

Little is known about hip related function, mobility and performance that may be related to residual hip pain, impaired sport function, and low rates of return to performance in patients following hip arthroscopy (HA).

# Purpose

To compare measures of subjective and objective hip function in HA-patients 6-10 months after surgery and a healthy control group. Furthermore, we compared patients' objective function between the surgically treated hip and the contralateral hip.

## Methods

HA patients [N=33 (mean 8.1 months post-op)] and 33 gender-, age-, and activity level matched controls were compared regarding subjective [Copenhagen Hip and Groin Outcome Score (HAGOS)], and objective hip function [Flexion-, internal and external rotation ROM; isometric adduction-, abduction-, flexion-, internal and external rotation strength and performance based measures (Y-balance test (YBT), medial and lateral hop test, Illinois agility run test)].

## Results

HA-patients reported worse subjective hip function than controls (Figure 1). Objective measures of hip ROM, hip flexion strength and posterior-medial YBT reach were also reduced in HA patients, while only small effects were observed for other objective measures of hip function (Figure 2). In within-subject comparison, no clear effect size pattern favouring one hip over the other emerged and only passive hip flexion was reduced in the surgically treated hip (Figure 3).

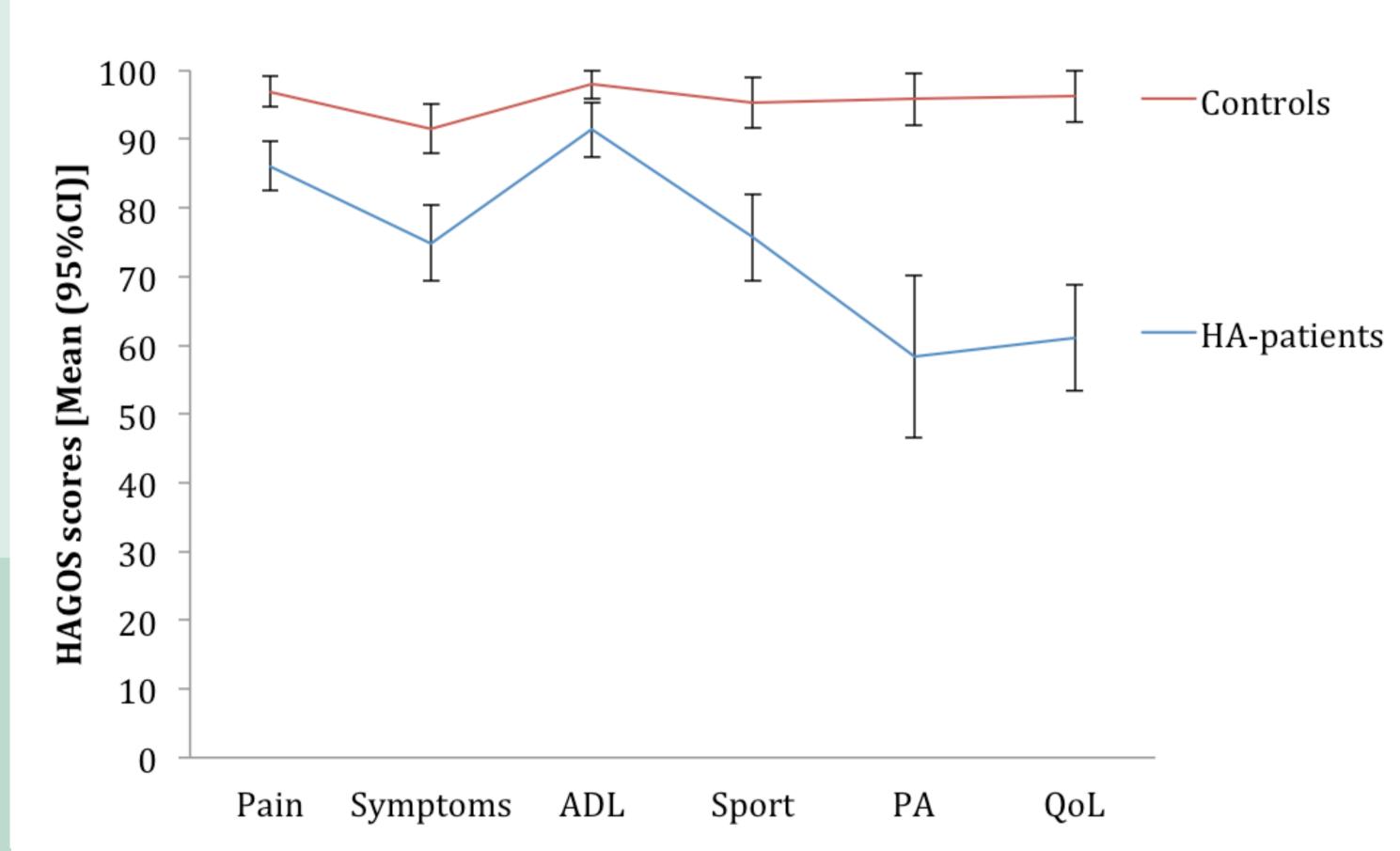
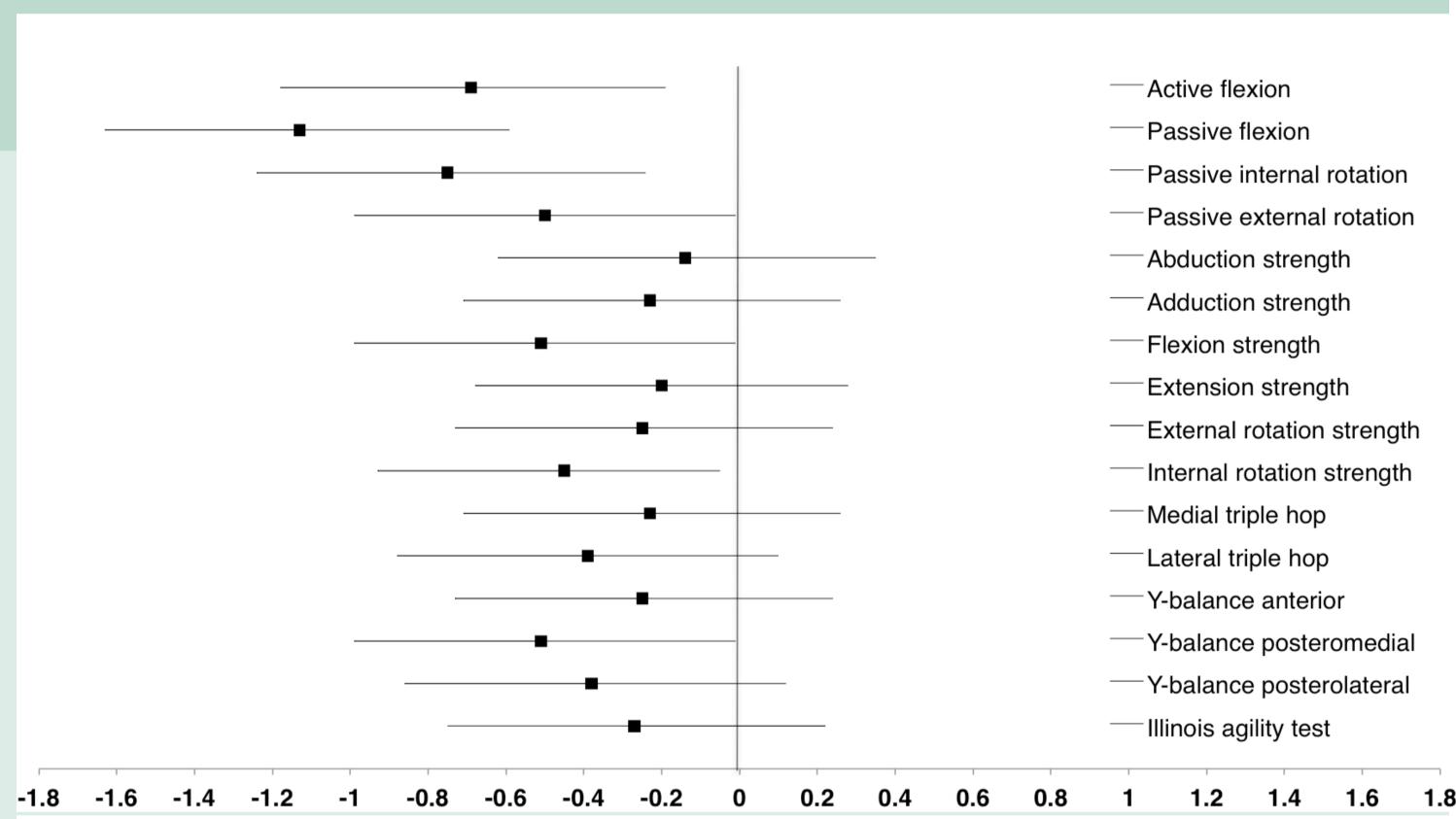
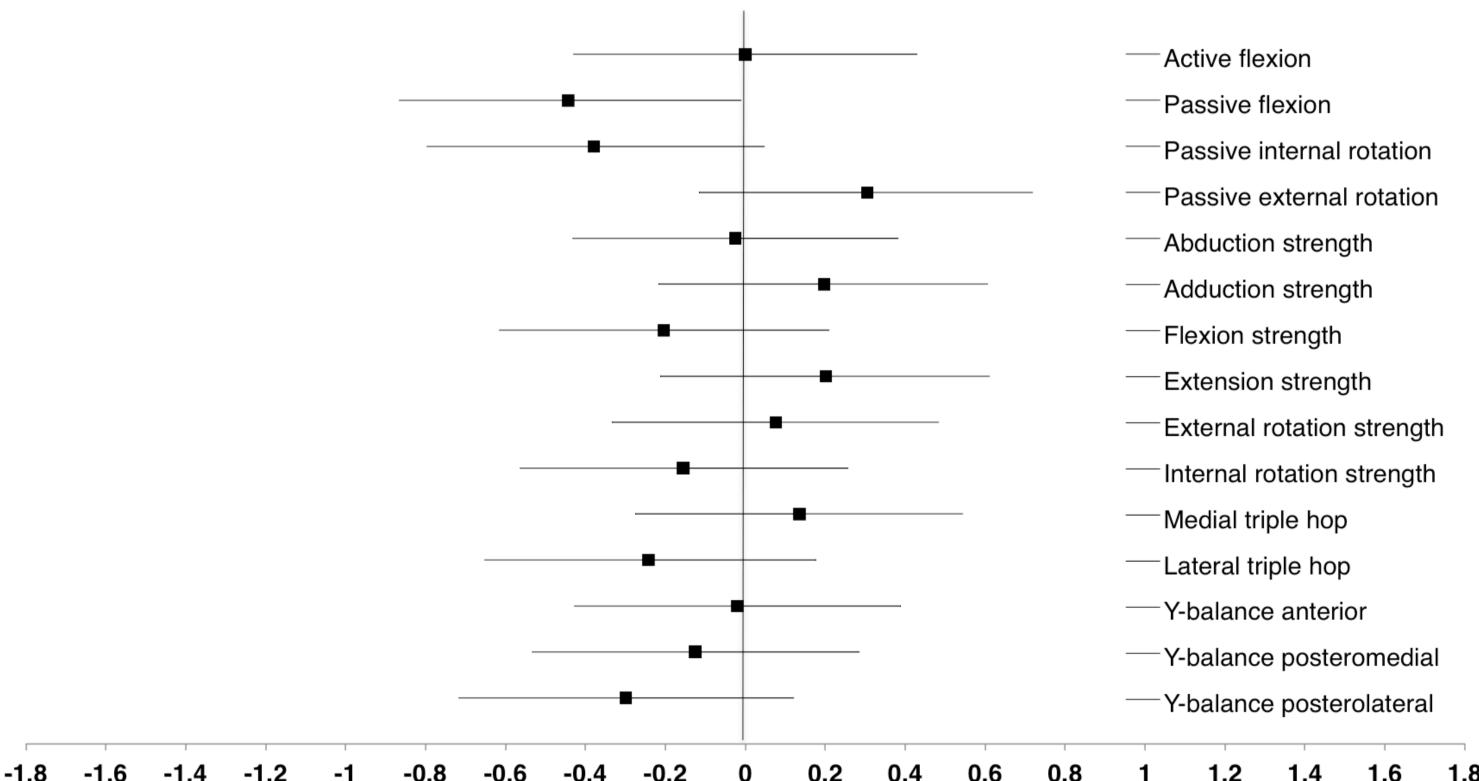


Figure 1: Group comparison of self-reported hip function (HAGOS)



**Figure 2:** Effect sizes (Cohen's d) for group comparisons of objective outcomes. Negative effect sizes indicate inferior outcomes in hip arthroscopy patients



**Figure 3:** Effect sizes (Cohen's d) for side-to-side comparison of objective outcomes. Negative effect sizes indicate inferior outcome of the surgically treated hip

## Conclusion

Subjective hip function is substantially impaired in patients 6-10 months following hip arthroscopy for FAIS compared to a healthy control group. HA-patients presented with comparable objective hip function for the majority of outcomes, with exception of hip range of motion and functional measures dependent on range of motion.

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