

Endoscopic Repair of Chronic Proximal Hamstring Tears Results in 80% Return to Running Rate

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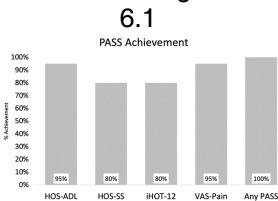
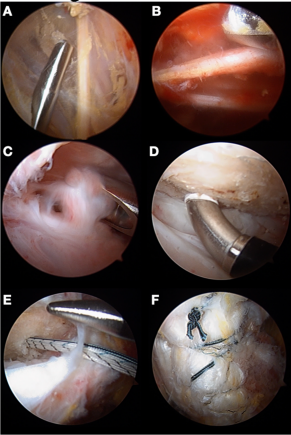
INTRODUCTION:

Few studies have examined return to running (RTR) rates in patients who have undergone endoscopic repair of the proximal hamstrings. The purpose of this study was to 1) report outcomes and reoperations and 2) determine RTR rate and changes in miles ran per week after surgery.

METHODS: Patients who underwent endoscopic repair of the hamstrings from 4/2017-11/2022 were reviewed and those with a history of running were identified. Baseline demographics and tear characteristics were collected. Runners were administered an RTR survey at minimum 1-year postoperatively. Patient-reported outcomes (PROs) were collected and Patient Acceptable Symptom State (PASS) achievement for the PROs was evaluated.

RESULTS: Twenty patients who underwent endoscopic repair of the hamstrings completed the RTR survey. These patients had an average age of 40.8 ± 12.8 years, body mass index of 24.7 ± 4.9 kg/m², and were 65% female. At last follow-up, significant improvement across all PROs measured was noted (p ≤ 0.007, for all) and PASS achievement was 100% for ≥ 1 PRO measured. One patient required a reoperation due to a traumatic retear, otherwise, there were no complications. Pre-injury, patients averaged 14.5 miles/week, which significantly decreased post-injury (p < 0.001). Post-operatively, 16 (80%) patients were able to RTR at a mean time of 6.1 months, with an increase in the miles/week ran compared to the post-injury level (p < 0.001).

DISCUSSION AND CONCLUSION: Runners who have undergone endoscopic repair of the hamstrings demonstrate significant improvement in PROs with high rates of PASS achievement. Amongst the cohort, RTR rate was 80% at average



| Table 1. Patient Demographics and Preoperative MRI Tear Grade | |
|---|-------------|
| n = 20 | |
| Average Follow-up (years) | 2.9 ± 2.1 |
| Age (years) | 40.8 ± 12.8 |
| Gender (% female) | 13 (65.0%) |
| BMI | 24.7 ± 4.9 |
| Smoking (%) | 0% |
| Running | 20 (100%) |
| Chronic Injury (>4 weeks) | 20 (100%) |
| MRI Tear Grade | |
| 1 | 16 (80.0%) |
| 2 | 2 (10.0%) |
| 3 | 2 (10.0%) |

BMI, body mass index; MRI, magnetic resonance imaging

| Table 2. Return to running rate, preinjury mileage, preoperative mileage, and postoperative mileage | |
|---|-------------|
| Return to Running | |
| Length of Time to Return to Running (months) | 6.1 ± 2.1 |
| Preinjury Mileage (miles/week) | 14.5 ± 7.8 |
| Postinjury Preoperative Mileage (miles/week) | 5.4 ± 6.6* |
| Postoperative Mileage (miles/week) | 17.9 ± 9.7† |
| Increased Mileage Preinjury to Postoperative | 7 (35%) |
| Increased Mileage Preoperative to Postoperative | 19 (95%) |
| Reasons for Not Returning to Running | |
| Hamstring Pain | 3 (15.0%) |
| Pain in Other Joint | 1 (5.0%) |
| Lifestyle Changes | 0 (0.0%) |

*Indicates a significant difference between preinjury and preoperative mileage. †Indicates a significant difference between post-injury/preoperative and postoperative mileage