Rehabilitation Following Hip Arthroscopy – A Qualitative and Quantitative Assessment of the Effect of Physical Therapy Characteristics On Treatment Success

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Disclosures

I have no financial conflicts to disclose.
INTRODUCTION

• Little has been reported in the literature regarding specific rehabilitation parameters as well as their influence on the outcome (Wahoff et al, 2008).

• High diversity of recommendations regarding the same procedure (Grzybowski et al, 2015).

• Physical therapy parameters may differ substantially among studies. This inconsistency may result from:
  • Protocol variation regarding intensity, duration
  • Surgical treatment variations
  • Lack of evidence-based guidelines specific to the hip joint
  • Disregard to patient characteristics
AIM

To evaluate the effect on mid-term outcomes of various physical therapy parameters following hip arthroscopy treating FAI.
METHODS

• Inclusion criteria:
  • Age ≥ 18
  • Patients treated for FAI or labral tears
  • Minimum follow-up period – 2 years
  • Adequate follow-up data including pre and post-operative scores

• Exclusion criteria:
  • Other hip pathologies (e.g. osteoarthritis, heterotopic ossification, developmental dysplasia, residual deformation due to Perthes disease and slipped capital femoral epiphysis)
  • Labral reconstruction
  • Microfractures
  • Past surgery
METHODS

• 133 patients who underwent hip arthroscopy treating FAI and labral repair with 2-year follow-up between January 2011-May 2016, were reviewed.

• Patient reported outcome measures included the Modified Harris Hip Score (MHHS) and Hip Outcome Score (HOS).

• Rates of satisfaction were recorded by asking patients whether, considering the outcome, they would undergo the surgery again.

• PT protocols were assessed for:
  • time to first session (2 days – 1 month)
  • training frequency and duration (2 – 5 times per week, more than 45 minutes per day)
  • committed self-practice (in addition to the formal PT sessions)
  • adherence to rehabilitation protocol (3 – 12 months)
  • physical therapy provider (public or private)
Results

• Statistical analysis for PT variables did not differ significantly for gender (P = 0.288) or age (P = 0.532).

• Improvement did not differ significantly for patients that:
  • Started rehabilitation later than one week (P = 0.235)
  • Practiced up to 2 vs at least 3 times per week (P = 0.114)
  • Practiced for more than 45 minutes (P = 0.109)
  • Practiced for more than 3 months (P = 0.093)
  • Committed to self-practice (P = 0.07)
Results

- Outcome scores for patients did not differ regarding physical therapy provider (P = 0.077) or satisfaction rates (P = 0.200).

- Of note, time to first PT session correlated closely with PT frequency (P = 0.03).
Most studies so far represent Level 5 evidence

Studies so far have been focused on proving the advantages of:

- Specific rehabilitation program parameters
- Preoperative physical therapy (prehabilitation)
- “Fast-track” to early discharge
- Outpatient vs home physical therapy vs telerehabilitation
- Assistive devices: braces, CPM, muscle stimulators

Compliance continues to be “systematically” overlooked

Satisfaction and compliance are intertwined
Conclusion

Physical therapy parameters following hip arthroscopy do not influence mid-term PROMS or satisfaction rates significantly regardless of gender, baseline scores, program intensity, timing of initiation or total duration.

Further research is required to assess the long-term influence of these parameters following hip arthroscopy treating FAI.


