Background

• ACL tears make up ~50% of all knee injuries.\(^1\)
• Meniscal tears are second to ACL injuries in regards to prevalence.\(^2\)
• Following an ACL reconstruction, high-load resistance training is often used to increase muscle strength.\(^2\)
• However, rehabilitation after a meniscal repair calls for a longer period of immobilization in order to prevent early loading of the meniscus.\(^3\)
• Blood Flow Restriction Therapy (BFRT) used in conjunction with low intensity resistance training can produce increased muscle mass of the quadriceps muscles without adding load and stress to the meniscus.\(^4\)
• While evidence has shown positive results with the use of BFRT after an ACLR, there is limited evidence for using BFRT after a meniscal repair and after both surgeries concomitantly.

Purpose

• The purpose of this case report was to investigate the use of BFRT in a comprehensive PT rehabilitation plan for a patient following an ACLR and meniscal repair.

Case Description

• 50-year-old male who tore his left ACL and medial meniscus while downhill skiing.
• Had an ACLR and meniscal repair, and was referred to outpatient physical therapy eight days after surgery.
• No comorbidities or significant PMH.
• Main goals:
  • Reduction of pain in the knee
  • Improving knee ROM and strength
  • To return to his previous high level of function and adventurous lifestyle

Discussion & Conclusion

• The patient appeared to have benefited from the use of BFRT with resultant strength gains in his left LE, gain of normal knee flexion and extension ROM, and decreased pain.
• The outcomes of this case report suggest that a POC involving early resistance training with the use of BFRT in the PT rehabilitation of a patient with an ACLR and a meniscal repair was effective.
• Future research may want to consider the most effective BFRT protocol in patients with both an ACLR and a medial meniscal repair.

Acknowledgements & References

The author acknowledges DPT faculty member Kenneth Buchanan PhD, PT, ATC for his mentorship, clinical instructor Ryan Brown PT for his supervision, assistance and guidance, and the patient for his participation.


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