Driving After Gastrocnemius Recession Surgery: When Is It Safe To Return?

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Disclosures

All authors have no financial disclosures or conflicts of interest
• Gastrocnemius recession is the most common procedure in foot and ankle surgery

• After orthopaedic procedures that affect the upper or lower extremities, patients usually ask when they can safely return to driving

• Typical recommendations are based on surgeon estimation or patient comfort level
Introduction – Slide 2

2 weeks after ankle arthroscopy

6 weeks after metatarsal osteotomy

9 weeks after ankle fracture fixation

This study’s question
Materials and Methods – Slide 1

- Institutional Review Board approval was obtained for this study
- Aimed for total enrollment of 20 participants
  - Required 16 participants to obtain 80% power at an alpha level of 5%.
- Inclusion criteria: first time gastrocnemius recession, isolated gastrocnemius recession, age 18-65, and licensed driver status
- Exclusion criteria: inability to return for follow up, nonactive driver status, medical contra-indication to driving such as seizure disorder, history of foot and ankle surgery in the past 5 years, occurrence of any concurrent foot and ankle procedures
Materials and Methods – Slide 2

• Participants were recruited from the foot and ankle clinics at our institution

• Driving performance was assessed using a standardized and validated driving simulator system that measured the time to complete an emergency stop as well as number of traffic accidents and violations
Materials and Methods – Slide 3

• Driving Simulation performed: pre-surgery, 1 week post-surgery, 2 weeks post-surgery, and 4 weeks post-surgery

• Compare baseline driving performance (pre-surgery) to post-surgery driving performance (1, 2 and 4 weeks post-op) using a repeated measures student’s $t$ test

• Compare driving performance at all time points to that of a healthy matched control dataset using the student’s $t$ test
Results & Conclusion

• No simulation data to report at this time
• 2 patients (1 male, 1 female) were enrolled
  • One withdrew participation on day of pre-surgery simulation
  • Other scheduled for pre-surgery simulation
• No conclusions can be drawn from this study at this point
• This is the first study examining a safe time frame for return to driving after gastrocnemius recession surgery
References


