PROSTHETIC TRAINING FOLLOWING TRANSFEMORAL AMPUTATION DUE TO TOTAL KNEE ARTHROPLASTY COMPLICATIONS: A CASE REPORT

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Patient gave written informed consent to participate in case report, allow his photo to be included.

BACKGROUND AND PURPOSE: Following total knee arthroplasty (TKA), a small percentage of patients develop periprosthetic joint infections (PJI) or sustain a lower extremity fracture that eventually warrants transfemoral amputation. Patients attend on average 16 sessions of physical therapy for prosthetic training that progresses from exercise to gait training. The purpose of this case report is to describe the outpatient rehabilitation of a patient with a transfemoral amputation and prosthesis prescription due to PJI and fracture following a TKA.

CASE DESCRIPTION: This case report outlines the initial evaluation, interventions and outcomes of an 85-year-old male with right transfemoral amputation. The patient elected amputation after four bouts of PJI, surgical revisions and a femoral fracture. The patient was primarily non-ambulatory throughout this period and presented with significant weakness and contractures. He was motivated to restore independence and attended 26 physical therapy sessions that concurrently included exercise, neuromuscular re-education and functional mobility training.

OUTCOMES: Outcomes were gathered throughout the 8 initial sessions with the author and at a 26th visit follow-up. At follow-up, the patient demonstrated improvements in ROM, dynamic balance, endurance and was able to ambulate limited community distances with the use of his prosthetic limb, a rolling walker and supervision. The patient met his goal of increased independence with mobility.

CONCLUSION(S): Many prosthetic training protocols stress a strict progression from pre-gait to gait activities with emphasis on restoring normal gait mechanics. For individuals who have had limited mobility for many years this approach may unnecessarily delay or halt a return to functional mobility. In this case a program that simultaneously addressed both impairments and the patient's desire for early functional mobility was effective. The patient required 10 more sessions of physical therapy than the average of 16 but was within an acceptable duration of visits as outlined in the research.