Inpatient Physical Therapy for a Patient with Dementia after Right Above Knee Amputation: A Case Report

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Background
Lower limb amputation is a traumatic event that is most commonly performed on individuals who are diabetic or have peripheral vascular disease. Other causes of amputation include infection, trauma or cancer. A sarcoma is a cancer in tissues such as muscle, fat, cartilage, or bone. The treatment goal is to excise and prevent growth or metastasis of the sarcoma.

Patient Description
MC was a pleasant 82 year old female status post right above knee amputation at approximately 12cm below the greater trochanter. Prior to amputation MC resided in an elderly living facility. She was widowed but had three very supportive daughters who lived in the area. Her general health was good, she did not drink or smoke. MC was referred to a skilled nursing facility after a brief stay at an acute rehabilitation facility. Her main complaint was decreased functional mobility.

Figure 2.
X-ray image representing MC after above the knee amputation. Her amputation was 12cm below the greater trochanter which will cause prosthesis fit and control difficulties Image available at http://images.radiopaedia.org/images/4075963/3a3223e96038bad013605964a2339c7_big_galler.jpg. Accessed November 19, 2014.

Systems Review
Heart Rate 84
Blood Pressure 124/79
Respiratory Rate 16
System Findings
Integumentary impaired
Neuromuscular impaired
Musculoskeletal impaired
Communication, affect Not impaired

Examination
Initial Examination (Day 1)
Right residual limb is 4/5
Limb amputation is a traumatic event that is most commonly performed on individuals who are diabetic or have peripheral vascular disease. Other causes of amputation include infection, trauma or cancer. A sarcoma is a cancer in tissues such as muscle, fat, cartilage, or bone. The treatment goal is to excise and prevent growth or metastasis of the sarcoma.

Purpose
The purpose of this case report is to describe the inpatient physical therapy management of a patient following right above knee amputation with motor planning deficits.

Therapeutic Exercise:
Figure 3. Exercises pictured include wheelchair pushups, latissimus dorsi pull downs, pelvic tilts, crunches, lower abdominal bike, oblique crunches, heel slides, quad sets, straight leg raises. Images available respectively as follows. All images accessed October 20, 2014.

Outcome
• Discharged to an assisted living facility
• Modified independent with slide board transfers
• Unable to perform sit<>stand without assistance
• Will receive PT at new location

Discussion
MC was able to make good progress during inpatient rehabilitation. She was able to improve her functional mobility from requiring assistance with all mobility to a modified independent level with a slide board. It seems that combining strengthening exercises and functional mobility training results in improvement in a patient with dementia involving motor planning deficits. Research should be conducted to further examine interventions used for this population.