



# Complicated Rehabilitation status post Total Knee Arthroplasty for a 26 year old Female presenting with Psychosocial Dysfunction: A Case Report

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## INTRODUCTION & PURPOSE:

- Total Knee Arthroplasty(TKA) a surgical intervention for knee osteoarthritis (OA) and post-traumatic osteoarthritis (PTOA).<sup>1</sup>
- PTOA affects the younger, more active population at risk for injury from sport or other activities that result in joint trauma.<sup>2</sup>
- A person with a knee injury is at a 4.2 times higher risk of developing OA.<sup>3</sup>
- Post-surgical TKA outcomes are influenced by physical impairments, psychosocial impairments, and preoperative expectations.<sup>4,5</sup>
- *The purpose of this case report is to look at the post-TKA surgical outcomes of a 26-year-old patient who had multiple variables that increases the risk for poor outcomes.*

## CASE DESCRIPTION:

26yo female 4 days status post L TKA  
Past surgical history: 2 anterior cruciate ligament reconstruction (ACLR)

### Primary Impairments

- Global Knee Pain
- ↓ HS length
- ↓ Balance
- ↓ quad activation

### Secondary Impairments

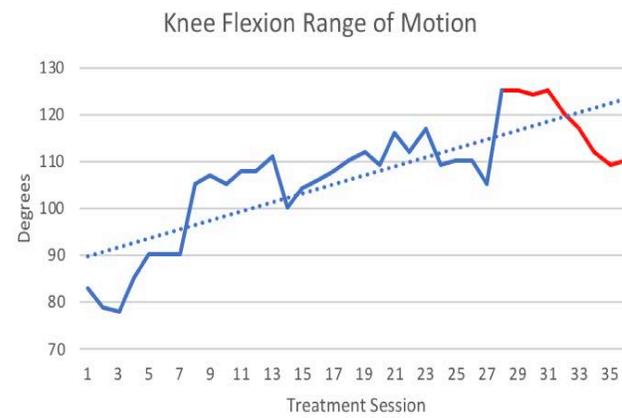
- ↓ ROM
- ↓ Strength
- Unable to exercise
- Unable to fulfill work related duties

## INTERVENTIONS:

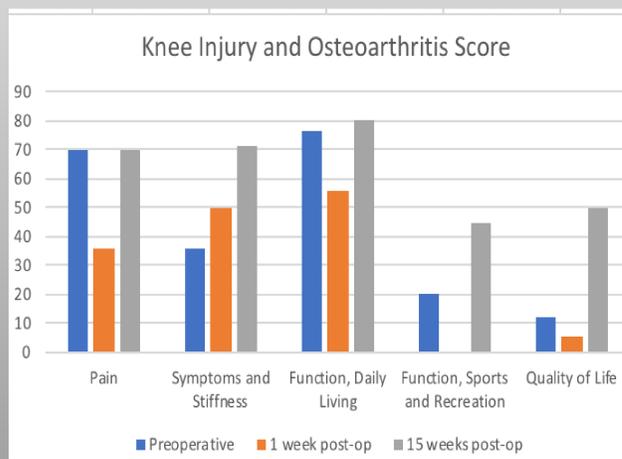
- Interventions were performed 2-3 times per week for 15wks.
- At 12wks, the patient had a manipulation under anesthesia (MUA)

Range of Motion	Quadriceps Strength	Functional Mobility
<ul style="list-style-type: none"> <li>• Stationary Bike</li> <li>• Passive Flexion/Extension</li> <li>• Heel Slides</li> <li>• Patella Mobilization</li> <li>• Scar Tissue Mobilization</li> </ul>	<ul style="list-style-type: none"> <li>• NMES</li> <li>• Quad Sets</li> <li>• Short/Long Arc Quad</li> <li>• Straight Leg Raise</li> </ul>	<ul style="list-style-type: none"> <li>• Heel/Toe Raises</li> <li>• Gait Training with/without AD</li> <li>• Mini Squats</li> <li>• Step Ups (4,6,8 in)</li> <li>• Single Leg Balance</li> <li>• Shuttle Leg Press</li> </ul>

## RESULTS:



PROM at each treatment session. The blue line is PROM prior to MUA, the red line is PROM after MUA.



At discharge, improvements were made in the 4 out of 5 subscales

## DISCUSSION:

- Predicted unsuccessful outcomes following a TKA: younger, female, high BMI, psychosocial dysfunction and previous knee surgery<sup>4</sup>
- At the end of 15 weeks of physical therapy and MUA, the patients flexion PROM at discharge was 110 degrees
- Kinesiophobia is an irrational fear of movement or physical activity that results from an expectation of pain.<sup>6</sup>
- The patient demonstrated kinesiophobia evidenced by the use of a walker for 2wks with TTWB gait pattern and emotional responses during interventions requiring end ranges of motion.
- Rehabilitation should go beyond the tissue of the body, but should also include the psychological aspect.

## REFERENCES

