Background

- Tendinopathy is characterized by tendon thickening, localized pain and chronic degeneration reflective of failed healing. 1
- 38% of manual laborers who participate in daily moderate to heavy lifting will experience Rotator Cuff Tendinopathy (RCT). 2
- There is a lack of research investigating the PT management of manual laborers who have RCT, but must continue to participate in harmful activities to fulfill occupational responsibilities.

Purpose

- The purpose of this case report was to describe the PT management of a patient with rotator cuff tendinopathy who, due to work requirements continued to participate in activities detrimental to the health of the supraspinatus and function of the shoulder girdle.

Case Description

- 44 year old female manual laborer diagnosed with left rotator cuff syndrome by her primary care physician
- Chief complaints:
  - Inability to lift arm without increased pain
  - Continuous ache in shoulder
  - Inability to sleep on left side
- Works through painful repetitive overhead lifting and pulling of ≤ 75 pounds daily at work
- 7 months since onset
- No history of previous shoulder related injury
- Only previous treatment was prescription of ibuprofen written by PCP two weeks prior

Examination

<table>
<thead>
<tr>
<th></th>
<th>Initial Evaluation</th>
<th>Discharge</th>
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<tbody>
<tr>
<td>Left Shoulder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flexion</td>
<td>MMT 4-</td>
<td>AROM 145° Current</td>
</tr>
<tr>
<td>Extension</td>
<td>5</td>
<td>6/10</td>
</tr>
<tr>
<td>Abduction</td>
<td>4-</td>
<td>90° Best</td>
</tr>
<tr>
<td>Adduction</td>
<td>4</td>
<td>35° 4/10</td>
</tr>
<tr>
<td>Ext. Rotation</td>
<td>3+</td>
<td>35° Worst</td>
</tr>
<tr>
<td>Int. Rotation</td>
<td>4-</td>
<td>70° 8/10</td>
</tr>
</tbody>
</table>

Pain (VAS)

- Flexion 4- 145° Current
- Extension 5 6/10
- Abduction 4- 90° Best
- Adduction 4 35° 4/10
- Ext. Rotation 3+ 35° Worst
- Int. Rotation 4- 70° 8/10

Interventions

- Communication, Coordination, Documentation
  - Coordinated with PCP to provide the patient with lifting restrictions.

- Patient Education
  - Avoidance of painful activities
  - Factors involved with the healing process of tendinopathy

- Procedural Interventions
  - Scapular stabilization strengthening
  - Cross friction massage
  - Passive, active assist and active range of motion
  - Interferential Current E-Stim with Cryotherapy
  - Functional training involving use of contralateral upper extremity

Discussion

- As demonstrated by the UEFI the patient made little progress. The minimum level of detectable change is 9 points and the score increased by 2 points throughout the episode of care.
- The lack of ability to properly rest was hypothesized to be the main reason for the delayed recovery.
- Traditional interventions focused on strengthening, ROM and avoidance of painful activity were not enough to relieve symptoms.
- Further research investigating optimal balance of PT interventions and work modifications for manual laborers is warranted.

Outcomes

Upper Extremity Functional Index (UEFI)

- ROM

References