

PROGRESSIVE REHABILITATION PROGRAM FOR EXTERNAL OBLIQUE MUSCLE STRAIN IN A FAST BOWLER - A SINGLE CASE STUDY

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Introduction

The external oblique muscle plays a vital role in trunk rotation lateral flexion, and compression of abdominal contents. In fast bowlers, repetitive high- velocity bowling actions place excessive eccentric load on the abdominal muscles, particularly the non-bowling side, leading to side strain injuries. The incidence of external oblique strain increases proportionally with bowling speed. Effective and structured rehabilitation is essential to restore muscle strength, flexibility, and functional performance while preventing re-injury and ensuring safe return to spot

Objective

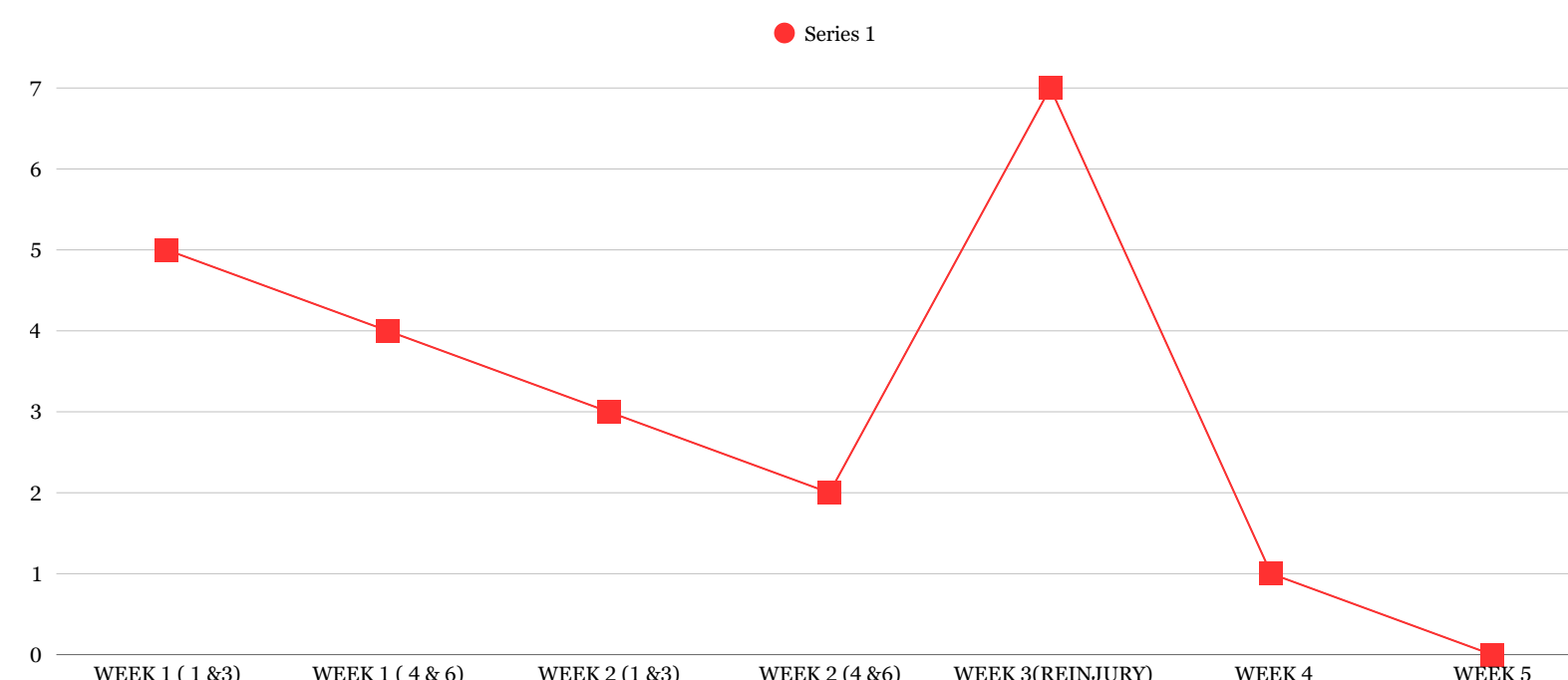
To evaluate the effectiveness of a progressive rehabilitation program in managing an external oblique muscle strain in a fast bowler

Materials

- . Subjective : 18 years-old male fast bowler
- . Outcome measure : Visual Analogue Scale(VAS)
- . Therapeutic exercise : Core stabilization ,stretching, strengthening exercise
- . Modalities : Cryotherapy

Methodology

- 01** An 18-year male fast bowler presented with pain over the left anterolateral abdominal region for 5days, aggravated during ball release while bowling
- 02** There was no injury no trauma or previous medical illness whereas pain was dull aching, intermittent, and graded 5/10 on VAS, occurring only during bowling action
- 03** **Clinical Findings**
 - . Observation: Warmth present, redness and swelling absent
 - . Palpation: Tenderness over the 11th & 12th rib and external oblique
 - . Differential diagnosis : External oblique strain, quadratus lumborum strain
- 04** A structured, week - wise progressive rehabilitation protocol focusing on pain reduction, muscle unloading, strengthening and flexibility was implemented over five weeks



- Dead bug
- External oblique stretch
- Hip Mobility Training
- Gluteus Maximus strengthening
- Quadratus Lumborum stretch
- Latissimus dorsi stretch
- Cryotherapy lateral aspect of abdomen area



Results & Discussion

The rehabilitation program resulted in a gradual reduction of pain from VAS 5/10 at baseline 1/10 by the end of week 5. Functional improvement and increased core muscle strength were observed however, premature return to competitive bowling during week 3 led to pain aggravating (VAS 7/10) , emphasizing the importance of adhrersion to rehabilitation timelines, Continued intervention helped in symptom control and progression towards safe return to sport.

Conclusion

The conclusion summarizes rehabilitation program effectively reduced pain and improved functional performance in a fast bowler with external oblique strain. This case emphasizes the critical importance of strict adherence to a well-monitored rehabilitation protocol and avoiding premature return to sport to prevent symptoms and re-injury . A progressive rehabilitation approach is essential for safe return to play and recovery for an competative sports