

PENATALAKSANAAN FISIOTERAPI PADA ATLET SEPAK BOLA DENGAN CEDERA *STRAIN QUADRICEPS DEXTRA GRADE II* FASE 2

Natashya Yeruscha Debora .S.

Abstrak

Latar Belakang: *Strain quadriceps dextra grade II* ditandai dengan robekan parsial serabut otot akibat kontraksi eksentrik berlebihan yang menyebabkan nyeri, penurunan kekuatan otot, dan keterbatasan lingkup gerak sendi (LGS). Umumnya cedera ini terjadi disebabkan oleh kombinasi faktor mekanik dan fungsional seperti *overstretching* dan kontraksi eksentrik yang berlebih pada aktivitas olahraga dengan intensitas yang tinggi. Tujuan studi kasus ini untuk mengkaji penatalaksanaan fisioterapi pada Atlet Sepak Bola dengan cedera *strain quadriceps dextra grade II* terutama pada fase 2. **Metode Penelitian:** Metode penatalaksanaan ini menggunakan studi kasus dengan subyek seorang laki-laki berusia 19 tahun, dengan instrumen yang digunakan berupa *numeric rating scale*, goniometer, dan *dynamometer*. Berdasarkan hasil pemeriksaan terdapat nyeri gerak, keterbatasan LGS, dan penurunan kekuatan otot. Intervensi yang diberikan berupa *flexibility exercise* dan *strength exercise* sebanyak tiga kali evaluasi dengan dosis, frekuensi 4x seminggu, intensitas rendah dan sedang, tipe latihan *strength* dan *flexibility*, waktu total 24 menit, dan repetisi menggunakan *as many repetition as possible* (AMRAP). **Hasil:** Penatalaksanaan ini menunjukkan adanya penurunan pada nyeri gerak dari 3 menjadi 0, kemudian terdapat peningkatan pada LGS aktif pada ekstensi *knee* sebesar 10° dan fleksi *knee* sebesar 15°, serta peningkatan kekuatan otot *quadriceps* sebesar 32,7 kg dan *hamstring* sebesar 20,6 kg. **Kesimpulan:** Kombinasi dari *Strength exercise* dan *flexibility exercise* pada satu subyek didapatkan hasil menurunkan nyeri, meningkatkan LGS, dan memperbaiki kekuatan otot.

Kata Kunci: *Strain quadriceps dextra grade II, Strength exercise, Flexibility exercise, Fisioterapi, Atlet Sepak Bola*

PHYSIOTHERAPY MANAGEMENT IN FOOTBALL ATHLETES WITH GRADE II DEXTRA QUADRICEPS STRAIN INJURY PHASE 2

Natashya Yeruscha Debora .S.

Abstract

Background: Grade II dextra quadriceps strain is characterized by partial tearing of muscle fibers due to excessive eccentric contractions that cause pain, decreased muscle strength, and limited range of motion (LGS). Generally, these injuries occur due to a combination of mechanical and functional factors such as overstretching and excessive eccentric contractions in high-intensity sports activities. The purpose of this case study is to examine the management of physiotherapy in football athletes with grade II quadriceps strain injuries, especially in phase 2. **Research Method:** This management method uses a case study with a 19-year-old male subject, with instruments used in the form of numeric rating scale, goniometer, and dynamometer. Based on the results of the examination, there was movement pain, limitation of LGS, and decreased muscle strength. The interventions provided were in the form of flexibility exercise and strength exercise as many therapy sessions with doses, frequency 4x a week, low intensity, type of strength and flexibility exercises, total time of 24 minutes, and reps using as many repetition as possible (AMRAP). **Result:** The results showed a decrease in motion pain from 3 to 0, then there was an increase in active LGS in knee extension by 10° and knee flexion by 15°, as well as an increase in quadriceps muscle strength by 32.7 kg and hamstring by 20.6 kg. **Conclusion:** The combination of Strength exercise and Flexibility exercise in one subject obtained results in reducing pain, increasing LGS, and improving muscle strength.

Keywords: Quadriceps Strain Grade II, Strength exercise, Flexibility exercise, Physiotherapy, Football Athletes