

PELAKSANAAN FISIOTERAPI DENGAN MENGGUNAKAN *INFRARED* DAN TERAPI LATIHAN *ACTIVE RESISTED* DAN *FREE ACTIVE* DALAM MENINGKATKAN LINGKUP GERAK SENDI PADA KONDISI *POST TOTAL HIP REPLACEMENT*

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Abstrak

Latar Belakang : *Post Total Hip Replacement* (THR) adalah teknik pembedahan mengganti bagian sendi panggul. Artinya bagian sambungan yang bulat diganti, dipangkas dengan cangkang setengah lingkaran. Prevalensi THR bertambah dengan angka 150–200/100.000 penduduk pertahun. Indonesia, prevalensi THR mencapai 118,8/100.000 penduduk pertahun. Masalah yang timbul meliputi nyeri, penurunan kekuatan otot, penurunan lingkup gerak sendi, dan gangguan fungsional. Fisioterapi penting dalam proses rehabilitasi *post* THR dengan program rehabilitasi dirancang untuk meningkatkan lingkup gerak sendi, memperkuat otot sekitar pinggul demi mengoptimalkan aktifitas fungsional. **Tujuan :** Penelitian ini bertujuan untuk mengetahui pelaksanaan fisioterapi dalam meningkatkan lingkup gerak sendi pada kondisi *Post* THR dengan menggunakan modalitas *infrared* dan terapi latihan. **Metode Penelitian :** Penelitian yang digunakan dalam penulisan ini adalah laporan kasus pada pasien perempuan, mengalami nyeri, penurunan lingkup gerak sendi, kekuatan otot, dan aktivitas sehari-hari. Setelah dilakukan enam kali terapi, terdapat penurunan skala nyeri, peningkatan lingkup gerak sendi, peningkatan kekuatan otot, dan peningkatan skor *Harris Hip Score*. **Hasil :** Hasil dari penelitian ini menunjukkan bahwa setelah pemberian *infrared* dan terapi latihan ; *Active Resisted* dan *Free Active* pada kasus *Post* THR penurunan nyeri sebanyak 3 tingkat pada nyeri diam, 4 tingkat pada nyeri gerak, dan 4 tingkat pada nyeri tekan, peningkatan kekuatan otot sebanyak 2 tingkat, peningkatan lingkup gerak sendi sebanyak 15°, ekstensi 2°, abduksi 20°, adduksi tidak dilakukan, eksternal rotasi 10°, dan internal rotasi 5° dan peningkatan skor HHS sebanyak 47.45%. **Kesimpulan :** Setelah dilakukan pelaksanaan fisioterapi dengan intervensi fisioterapi berupa *infrared*, terapi latihan *active resisted*, dan *free active* pada kondisi *Post* THR dapat meningkatkan Lingkup Gerak Sendi sebanyak 15°, ekstensi 2°, abduksi 20°, adduksi tidak dilakukan, eksternal rotasi 10°, dan internal rotasi 5°.

Kata Kunci : *Post Total Hip Replacement, Infrared, Active Resisted exercise, Free active exercise.*

IMPLEMENTATION OF PHYSIOTHERAPY USING *INFRARED AND ACTIVE RESISTED AND FREE ACTIVE* IN IMPROVING RANGE OF MOTION IN *POST TOTAL HIP REPLACEMENT*

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Abstract

Background : Post Total Hip Replacement (THR) is a surgical procedure to replace part of the hip joint. The spherical joint component is removed or trimmed and replaced with a hemispherical prosthetic component. THR is commonly performed in cases of osteoarthritis, rheumatoid arthritis, trauma, ankylosing spondylitis, and osteonecrosis. The prevalence of THR continues to increase, with an incidence of approximately 150–200 per 100,000 population annually and around 1 million procedures performed each year worldwide. In Indonesia, the prevalence reaches 118.8 per 100,000 population per year. Common post-operative problems include pain, decreased muscle strength, reduced range of motion, and functional limitations. Physiotherapy plays an important role in post-THR rehabilitation. Rehabilitation programs are designed to improve joint range of motion and strengthen muscles around the hip to optimize functional activities. **Objective :** This study aims to determine the implementation of physiotherapy in maintaining joint range of motion in post-THR conditions using *infrared* and exercise. **Research Method :** The method used is a case report of a 70-year-old female patient experiencing pain, decreased range of motion, muscle weakness, and reduced daily activities. **Results:** The results of this study showed that after the administration of *Infrared* and exercise therapy, including Active Resisted and Free Active in a Post THR case, there was a reduction in pain by 3 levels in resting pain, 4 levels in movement pain, and 4 levels in tenderness. Muscle strength increased by 2 grades, while range of motion improved by 15° in flexion, 2° in extension, 20° in abduction, adduction was not performed, 10° in external rotation, and 5° in internal rotation. In addition, the Harris Hip Score (HHS) increased by 47.45%. **Conclusion:** After physiotherapy management using *Infrared*, *Active Resisted exercise*, and *Free active exercise* in Post THR conditions, there was an improvement in joint range of motion by 15° in flexion, 2° in extension, 20° in abduction, adduction was not performed, 10° in external rotation, and 5° in internal rotation.

Keywords : Post Total Hip Replacement, *Infrared*, *Active Resisted exercise*, *Free active exercise*.