

# Pengaruh kombinasi latihan range of motion ankle dorsofleksi dan foot massage terhadap nilai ankle brachial index pada pasien diabetes melitus tipe 2 di kota Makassar = The effect of combination range of motion ankle dorsiflexion and foot massage on ankle brachial index value in patients with type 2 diabetes mellitus in Makassar

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## Abstrak

[<b>ABSTRAK</b><br>

Diabetes melitus (DM) yang telah diderita selama bertahun-tahun dapat mengarah ke berbagai komplikasi, diantaranya yaitu terjadinya peripheral arterial disease (PAD). Salah satu indikator terjadinya PAD pada pasien DM tipe 2 yaitu adanya penurunan nilai ankle brachial index (ABI) pada ekstremitas bawah pasien. Jika hal ini terus dibiarkan, maka bisa terjadi neuropati yang dapat memicu munculnya ulkus kaki diabetik. Intervensi yang dapat diberikan untuk meningkatkan nilai ABI yaitu dengan melakukan foot massage atau latihan ROM ankle dorsofleksi. Tujuan penelitian ini adalah untuk mengetahui efektivitas pemberian kombinasi foot massage dan latihan ROM ankle dorsofleksi terhadap nilai ABI pada pasien DM tipe 2. Penelitian ini merupakan penelitian quasi experiment dengan metode pre and post test without control yang terdiri dari 2 kelompok intervensi dengan besar sampel 20 responden. Hasil penelitian ini menunjukkan bahwa terdapat hubungan yang signifikan antara pemberian kombinasi latihan ROM ankle dorsofleksi dan foot massage terhadap peningkatan nilai ABI (p value = 0,033 untuk ekstremitas kanan dan p value = 0,001 untuk ekstremitas kiri). Rekomendasi penelitian ini yaitu agar para perawat dapat memberikan intervensi kombinasi latihan ROM ankle dorsofleksi dan foot massage dalam rangka mencegah terjadinya PAD pada pasien DM tipe 2.

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<b>ABSTRACT</b><br>

The chronic diabetes mellitus has the potential to cause several complications including peripheral arterial disease (PAD). A parameter indicating PAD amongst Type 2 diabetes mellitus patients is the decline in the ankle brachial index (ABI) on their lower extremity. Once this condition persists, it can cause neuropathy leading to the occurrence of leg diabetic ulcer. An intervention believed to overcome this problem is conducting foot massage or ankle dorsiflexion range of motion (ROM) exercises. This research aimed at investigating the effectiveness of exercise combination of foot massage and ankle dorsiflexion ROM on ABI scores among type 2 diabetes mellitus patients. This study used quasi-experiment method with pre and post-test without control design, and consisted two intervention groups involving 20 participants. The study revealed that there was distinctive correlation

between the exercise combination of foot massage and ankle dorsiflexion ROM and the increase of ABI scores of the patients (p value = 0.033 for the right extremities and p value = 0.001 for the left extremities). The findings suggest that such intervention can be considered or even be provided by nurses taking care of type 2 diabetes mellitus patients to prevent them from the possible deteriorating complication, the peripheral artery disease. The chronic diabetes mellitus has the potential to cause several complications

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