

## ABSTRACT

*APPLICATION OF BUERGER ALLEN EXERCISE IN NURSING PROBLEMS  
OF INEFFECTIVE PERIPHERAL PERFUSION IN PATIENTS WITH  
TYPE 2 DIABETES MELLITUS IN MELATI ROOM 2  
RSUP dr. SOERADJI TIRTONEGORO*

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**Background:** *Ineffective management of diabetes mellitus can cause complications, one of which is peripheral arterial disease (PAD) which usually affects the lower extremities. The risk of peripheral perfusion disorders can be prevented through physical exercises involving the feet, one of which is Buerger Allen Exercise. Buerger Allen exercise is a form of exercise that involves lower extremity joint movements that can improve vascularity.* **Objective:** *It is known that the application of Buerger Allen Exercise in nursing problems of Ineffective Peripheral Perfusion in Type 2 Diabetes Mellitus Patients in Melati Room 2 RSUP dr. Soeradji Tirtonegoro.* **Methods:** *This type of research is a case study by applying Evidence Based Practice Nursing Buerger Allen Exercise to two managed cases in the Melati 2 room of RSUP dr. Soeradji Tirtonegoro.* **Research Results:** *After the intervention of Buerger Allen Exercise for 3 days, Mrs. S's initial right Ankle Brachial Index (ABI) value: 0.80 (moderate PAD), left ABI value: 0.78 (moderate PAD) increased to right ABI value: 0.85 (mild PAD), left ABI value: 0.83 (mild PAD). After the Buerger Allen Exercise intervention for 3 days, Mrs. D's initial right Ankle Brachial Index (ABI) value: 0.79 (moderate PAD), left ABI value: 0.77 (moderate PAD) increased to right ABI value: 0.84 (mild PAD), left ABI value: 0.81 (mild PAD).* **Conclusion:** *The application of Buerger Allen Exercise intervention in patients with type 2 diabetes mellitus can improve peripheral perfusion in the lower extremities characterized by an increase in the Ankle Brachial Index (ABI) value.*

**Keywords:** *Buerger Allen Exercise, Ineffective Peripheral Perfusion, Diabetes Melitus.*

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## ABSTRAK

### PENERAPAN *BUERGER ALLEN EXERCISE* DALAM MASALAH KEPERAWATAN PERFUSI PERIFER TIDAK EFEKTIF PADA PASIEN DIABETES MELITUS TIPE 2 DI RUANG MELATI 2 RSUP dr. SOERADJI TIRTONEGORO

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**Latar Belakang:** penatalaksanaan yang tidak efektif dalam menangani diabetes melitus dapat menyebabkan komplikasi salah satunya penyakit arteri perifer (PAD) yang biasanya menyerang ekstremitas bawah. Resiko gangguan perfusi perifer dapat dicegah melalui latihan fisik yang melibatkan kaki salah satunya dengan *Buerger Allen Exercise*. *Buerger Allen Exercise* adalah bentuk latihan yang melibatkan gerakan sendi ekstremitas bawah yang dapat meningkatkan vaskularisasi pembuluh darah. **Tujuan:** diketahuinya Penerapan *Buerger Allen Exercise* dalam Masalah Keperawatan Perfusi Perifer Tidak Efektif pada Pasien Diabetes Melitus Tipe 2 di Ruang Melati 2 RSUP dr. Soeradji Tirtonegoro. **Metode:** jenis penelitian ini adalah studi kasus dengan mengaplikasikan *Evidence Based Practice Nursing Buerger Allen Exercise* pada dua kasus kelolaan di ruang Melati 2 RSUP dr. Soeradji Tirtonegoro. **Hasil Penelitian:** setelah dilakukan intervensi *Buerger Allen Exercise* selama 3 hari, nilai *Ankle Brachial Index* (ABI) Ny. S yang awal kanan: 0.80 (PAD sedang), nilai ABI kiri: 0.78 (PAD sedang) meningkat menjadi nilai ABI kanan: 0.85 (PAD ringan), nilai ABI kiri: 0.83 (PAD ringan). Setelah dilakukan intervensi *Buerger Allen Exercise* selama 3 hari, nilai *Ankle Brachial Index* (ABI) Ny. D yang awal kanan : 0.79 (PAD sedang), nilai ABI kiri : 0.77 (PAD sedang) meningkat menjadi nilai ABI kanan : 0.84 (PAD ringan), nilai ABI kiri : 0.81 (PAD ringan). **Kesimpulan:** penerapan intervensi *Buerger Allen Exercise* pada pasien diabetes melitus tipe 2 dapat meningkatkan perfusi perifer pada ekstremitas bawah ditandai dengan peningkatan nilai *Ankle Brachial Index* (ABI).

**Kata Kunci:** *Buerger Allen Exercise*, Perfusi Perifer Tidak Efektif, Diabetes Melitus.

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