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**Penerapan *Ankle Pump Exercise* Dan Elevasi Kaki 30° Pada Pasien CKD
Dengan Masalah Hipervolemia Di Ruang CVCU RSUD Arifin Achmad
Provinsi Riau**

Xiii + 35 Halaman + 2 Tabel + 6 Lampiran

ABSTRAK

Penyakit Ginjal Kronis (CKD) dan Gagal Jantung Kongestif (CHF) sering kali bermanifestasi sebagai hipervolemia. Akumulasi cairan interstisial (edema) pada ekstremitas bawah merupakan masalah keperawatan utama yang dapat memperburuk kondisi kardiovaskular dan menurunkan kualitas hidup pasien. Manajemen non-farmakologis seperti *Ankle Pump Exercise* dan elevasi kaki 30° diusulkan sebagai intervensi pendamping untuk meningkatkan *venous return* dan mengurangi edema. Menerapkan intervensi berbasis bukti (*Evidence-Based Nursing*) untuk menurunkan derajat edema pada pasien dengan masalah hipervolemia di ruang CVCU RSUD Arifin Achmad Provinsi Riau. Desain studi menggunakan pendekatan deskriptif studi kasus pada dua responden (Tn. S, 28 tahun dan Tn. M, 40 tahun) dengan diagnosa medis gangguan kardiovaskular dan hipervolemia. Intervensi dilakukan berupa elevasi kaki 30° dikombinasikan dengan *Ankle Pump Exercise* (fleksi-ekstensi pergelangan kaki) sebanyak 8 repetisi selama 15–20 menit, dilakukan satu kali sehari selama tiga hari berturut-turut. Instrumen evaluasi menggunakan lembar observasi derajat *pitting edema*. Setelah tiga hari implementasi, Tn. S menunjukkan penurunan edema dari derajat +1 menjadi derajat 0 (edema hilang). Pada Tn. M, terjadi penurunan dari derajat +2 (kedalaman 4 mm) menjadi derajat +1 (kedalaman 2 mm). Kedua pasien melaporkan penurunan rasa tegang pada kulit dan kaki terasa lebih ringan. Tidak ditemukan adanya komplikasi atau perburukan status respirasi selama intervensi dilakukan. Penerapan *Ankle Pump Exercise* dan elevasi kaki 30° efektif dalam menurunkan derajat edema dan membantu manajemen hipervolemia pada pasien kritis kardiovaskular. Intervensi ini direkomendasikan sebagai prosedur operasional mandiri perawat yang aman dan ekonomis untuk mendukung terapi farmakologis di ruang perawatan intensif jantung.

Kata Kunci: *Ankle Pump Exercise*, CKD, Edema, Elevasi Kaki, Hipervolemia.

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**NURSING PROFESSION STUDY PROGRAM FACULTY OF NURSING PAYUNG
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Application of Ankle Pump Exercise and 30° Leg Elevation in CKD Patients with Hypervolemia Problems in the CVCU Room of Arifin Achmad General Hospital, Riau Province

Xiii + 35 Pages + 2 Tables + 6 Appendices

ABSTRACT

Chronic Kidney Disease (CKD) and Congestive Heart Failure (CHF) frequently manifest as hypervolemia. The accumulation of interstitial fluid (edema) in the lower extremities is a primary nursing problem that can exacerbate cardiovascular conditions and decrease patients' quality of life. Non-pharmacological management, such as Ankle Pump Exercise and 30° leg elevation, is proposed as a complementary intervention to increase venous return and reduce edema. To apply Evidence-Based Nursing (EBN) interventions to reduce the degree of edema in patients with hypervolemia problems in the CVCU ward of RSUD Arifin Achmad, Riau Province. This study used a descriptive case study approach with two respondents (Mr. S, 28 years old and Mr. M, 40 years old) diagnosed with cardiovascular disorders and hypervolemia. The intervention consisted of 30° leg elevation combined with Ankle Pump Exercise (ankle flexion-extension) for 8 repetitions over 15–20 minutes, performed once daily for three consecutive days. The evaluation instrument used a pitting edema observation sheet. After three days of implementation, Mr. S showed a decrease in edema from grade +1 to grade 0 (edema resolved). In Mr. M, there was a decrease from grade +2 (4 mm depth) to grade +1 (2 mm depth). Both patients reported a reduction in skin tension and felt their legs were lighter. No complications or respiratory status deterioration were found during the intervention. The application of Ankle Pump Exercise and 30° leg elevation is effective in reducing the degree of edema and assisting in hypervolemia management in critically ill cardiovascular patients. This intervention is recommended as a safe and economical independent nursing operational procedure to support pharmacological therapy in cardiac intensive care units.

Keywords: Ankle Pump Exercise, CKD, Edema, Leg Elevation, Hypervolemia

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