

The Effect of Giving Black Garlic on the Lowering of Blood Pressure of Uncontrolled Hypertensive Patient

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Abstract

Hypertension as a silent killer is the most common cause of premature death. Most hypertensive patients are not aware that they have hypertension or are not aware of the treatment. Control efforts are needed, one of which is non-pharmacological therapy using black garlic. The aim is to determine the effect of giving black garlic on reducing blood pressure in uncontrolled hypertension patients. The research design was a pre-experimental one-group pretest and posttest design, a sample of 20 patients with undiagnosed or uncontrolled hypertension was taken by purposive sampling technique. Data collection was carried out by measuring blood pressure before and after the intervention by giving 2 pieces of black garlic, 2 times per day for 1 week, statistical tests using Paired sample t-test. The results showed that the average systolic and diastolic blood pressure before the intervention was 152.25 mmHg and 95.25 mmHg. After the intervention, the average systolic and diastolic blood pressure was 135.15 mmHg and 81.50 mmHg, and the p-value was 0.001, which means that there was an effect of giving black garlic on reducing blood pressure in uncontrolled hypertension patients. Giving black garlic inhibits the activity of angiotensin-converting enzymes, especially angiotensin II, thereby increasing the relaxation of blood vessels which can further reduce blood pressure.

Keywords: black garlic; blood pressure; uncontrolled hypertension

Pengaruh Pemberian Bawang Putih Hitam Terhadap Penurunan Tekanan Darah Yang Tidak Terkendali Pasien Hipertensi

ABSTRAK

Hipertensi sebagai silent killer merupakan penyebab paling umum kematian dini. Sebagian besar pasien hipertensi tidak sadar mengidap hipertensi atau tidak mengetahui pengobatannya. Diperlukan upaya pengendalian yang salah satunya adalah terapi non

farmakologi menggunakan black garlic. Tujuan untuk mengetahui pengaruh pemberian black garlic terhadap penurunan tekanan darah penderita hipertensi yang tidak terkontrol. Desain penelitian adalah pre-experimental one group pretest and posttest design, sampel 20 penderita hipertensi tidak terdiagnosis atau tidak terkontrol diambil dengan teknik purposive sampling. Pengumpulan data dilakukan dengan mengukur tekanan darah sebelum dan sesudah intervensi dengan pemberian 2 buah bawang hitam, 2 kali per hari selama 1 minggu, uji statistik menggunakan Paired sample t-test. Hasil menunjukkan rata-rata tekanan darah sistolik dan diastolik sebelum intervensi adalah 152,25 mmHg dan 95,25 mmHg. Setelah dilakukan intervensi rata-rata tekanan darah sistolik dan diastolik adalah 135,15 mmHg dan 81,50 mmHg, p-value 0,001 yang berarti ada pengaruh pemberian black garlic terhadap penurunan tekanan darah pada pasien hipertensi yang tidak terkontrol. Pemberian black garlic menghambat aktivitas angiotensin-converting enzymes, khususnya angiotensin II sehingga meningkatkan relaksasi pembuluh darah yang selanjutnya dapat menurunkan tekanan darah.

Kata kunci: bawang putih hitam; tekanan darah; hipertensi yang tidak terkontrol

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