

**HUBUNGAN ANTARA LAMA PENGGUNAAN ASAM VALPROAT
JANGKA PANJANG DENGAN KADAR LEPTIN SERUM PADA PASIEN
DEWASA**

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ABSTRAK

Latar Belakang dan Tujuan: Asam Valproat (*2-propylvaleric acid, 2-propylpentanoic acid or n-dipropylacetic acid*) memiliki kegunaan sebagai obat antikonvulsan dan *mood stabilizer*. Leptin adalah hormon peptida yang di produksi oleh jaringan adiposa. Tidak hanya di jaringan adiposa, leptin juga di produksi oleh jaringan perifer lainnya. Leptin memengaruhi berbagai proses biologis termasuk kontrol intake makanan, homeostasis glukosa, dan penggunaan energi. Penelitian ini bertujuan untuk mengetahui hubungan antara penggunaan asam valproat jangka panjang dengan kadar leptin serum pada pasien dewasa.

Metode: Tiga puluh tujuh orang pengguna asam valproat yang memenuhi kriteria dimasukkan dalam penelitian secara konsekutif. Sampel darah vena lengan diambil untuk pemeriksaan kadar leptin serum. Nilai kadar leptin serum didapatkan melalui teknik pemeriksaan *enzyme-linked immunosorbent assay* (ELISA).

Hasil: Rerata lama penggunaan asam valproat jangka panjang pada penelitian ini adalah $55,57 \pm 49,83$ bulan, dan kadar leptin serum $6536,89 \pm 4,29$ pg/ml. Dengan uji statistik Spearman didapatkan korelasi negatif yang signifikan secara statistik antara lama penggunaan asam valproat jangka panjang dengan kadar leptin serum pada pasien dewasa ($r=-0,514$; $p=0,001$).

Kesimpulan: Terdapat hubungan antara lama penggunaan asam valproat jangka panjang dengan kadar leptin serum pada pasien dewasa.

Kata kunci: asam valproat, kadar leptin serum, leptin, dewasa

**CORELLATION BETWEEN LONG TERM USE OF VALPROIC ACID
WITH SERUM LEPTIN LEVEL IN ADULT PATIENTS**

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ABSTRACT

Background and Purpose: Valproic acid (2-propylvaleric acid, 2-propylpentanoic acid or n-dipropylacetic acid) has been used as an anticonvulsant drug and mood stabilizer. Leptin is a peptide hormone produced by adipose tissue. Not only in adipose tissue, leptin is also produced by other peripheral tissues. Leptin affects various biological processes including control of food intake, glucose homeostasis, and energy use. This study aims to determine the correlation between long-term use of valproic acid with serum leptin level in adult patients.

Method: Thirty seven valproic acid users who met the criteria were included in the study consecutively. Blood samples were taken for examination of serum leptin levels. The value of serum leptin levels is obtained through an enzyme-linked immunosorbent assay (ELISA) examination technique.

Result: The mean long-term use of valproic acid in this study is 55.57 ± 49.83 months, and the mean serum leptin level is 6536.89 ± 4.29 pg /ml. Using Spearman statistical test, a statistically significant negative correlation was obtained between the long-term use of valproic acid and serum leptin levels in adult patients ($r = -0.514$; $p = 0.001$).

Conclusion: There is a significant negative correlation between long-term use of valproat acid and serum leptin levels in adult patients.

Keywords: valproic acid, serum leptin level, leptin, adult