



ABSTRAK

Latar belakang Vitamin D merupakan prohormon penting pada homeostasis kalsium dan tulang. Salah satu efek samping penggunaan obat antiepilepsi adalah defisiensi vitamin D. Dampak vitamin D yang rendah pada pasien epilepsi anak adalah meningkatnya risiko fraktur pada tulang dan kejang yang tidak terkontrol. Insidens defisiensi dan insufisiensi vitamin D pada anak sehat di Yogyakarta cukup tinggi, yaitu 63,5% dan 36,1%. Belum ada penelitian vitamin D pada anak epilepsi di Yogyakarta.

Tujuan Untuk mengetahui profil kadar vitamin D pada anak epilepsi dan untuk mengetahui hubungan antara lama terapi dan jumlah terapi obat antiepilepsi terhadap kadar vitamin D (25-OHD).

Metode Penelitian potong lintang dilakukan pada bulan November-Desember 2018 di poliklinik neurologi anak RSUP Dr. Sardjito Yogyakarta. Subjek 25 anak epilepsi yang diperiksa kadar serum 25-OHD di ILK RSUP Dr. Sardjito. Data dianalisis menggunakan uji statistik *Chi square* dan kekuatan hubungan dinyatakan dengan rasio prevalensi (PR).

Hasil Rerata kadar vitamin D 26,64 ng/ml. Proporsi kejadian defisiensi dan insufisiensi vitamin D 28% dan 32%. Rerata kadar vitamin D anak epilepsi yang diberikan satu jenis OAE penginduksi enzim lebih tinggi dibandingkan pada anak yang diberikan dua jenis OAE tipe penginduksi, yaitu 28,23 ng/ml dan 21,95% dengan perbedaan rerata sekitar 6,2 ng/ml.

Kesimpulan Profil kadar vitamin D (25-OHD) yang rendah (defisiensi dan insufisiensi) banyak terjadi pada anak epilepsi yang mendapatkan obat antiepilepsi. Tidak ada hubungan yang bermakna antara lama terapi dan jumlah terapi OAE terhadap kadar vitamin D.

Kata kunci epilepsi, obat antiepilepsi, vitamin D, anak



ABSTRACT

Background Vitamin D is an important prohormone in calcium and bone homeostasis. One of the side effects of antiepileptic drugs is vitamin D deficiency. The low impact of vitamin D in pediatric epilepsy patients is the increased risk of fractures in the bones and uncontrolled seizures. The incidence of vitamin D deficiency and insufficiency in healthy children in Yogyakarta is quite high, 63,5% and 36,1%. There is still no vitamin D study in epilepsy children in Yogyakarta.

Objective To determine the profile of vitamin D levels in epilepsy children and to determine the relationship between duration of therapy and the number of antiepileptic drug therapies for vitamin D (25-OHD) levels.

Methods A cross-sectional study was carried out in November-December 2018 in the pediatric neurology clinic Dr. Sardjito General Hospital, Yogyakarta. Twenty five epilepsy children who examined serum 25-OHD levels at clinical laboratory instalasion Dr. Sardjito General Hospital. Data were analyzed using the Chi square statistical test and the strength of the relationship was expressed by the prevalence ratio (PR).

Results The mean vitamin D level is 26,64 ng/ml. The proportion of vitamin D deficiency and insufficiency was 28% and 32%. The mean vitamin D level of epilepsy children who were given one type of enzyme-inducing OAE was higher than in children given two types of induction-type OAE, which was 28,23 ng/ml and 21,95% with mean difference of 6,2 ng/ml.

Conclusions Low profile of vitamin D (25-OHD) levels (deficiency and insufficiency) occur in many epileptic children who get antiepileptic drugs. There was no significant relationship between duration of therapy and the amount of OAE therapy for vitamin D levels.

Keywords epilepsy, antiepileptic drug, vitamin D, children