

INTISARI

Penyakit ginjal kronik (PGK) merupakan problem kesehatan dunia. Penderita PGK memiliki risiko untuk mengalami gangguan metabolisme fosfat dan kalsium. Pada kondisi perlu diberikan terapi dengan agen pengikat fosfat. Sevelamer merupakan agen pengikat fosfat baru yang dapat digunakan sebagai alternatif selain kalsium karbonat (CaCO_3). Penelitian ini bertujuan untuk melihat pengaruh pemberian sevelamer karbonat terhadap kadar fosfat, kalsium dan produk $\text{Ca} \times \text{P}$ di RS UGM Yogyakarta.

Penelitian ini dilakukan secara prospektif dengan desain penelitian kuasi eksperimental “*one group pretest posttest design*” selama 8 minggu di RS UGM Yogyakarta pada bulan Oktober – November 2016. Pengukuran kadar fosfat, kalsium dan produk $\text{Ca} \times \text{P}$ dilakukan dengan pengambilan sampel darah pasien sebelum hemodialisis yang diukur sebelum dan sesudah perlakuan yaitu pemberian terapi sevelamer karbonat.

Jumlah subyek uji pada penelitian ini sebanyak 16 pasien. *Baseline* nilai kadar fosfat, kalsium dan produk $\text{Ca} \times \text{P}$ adalah $5,96 \pm 1,37$ mg/dL; $1,12 \pm 0,15$ mmol/dL; dan $26,63 \pm 5,66$ mg^2/dL^2 , sedangkan diakhir (*post*) penelitian terdapat perubahan nilai yaitu $5,85 \pm 1,15$ mg/dL; $1,02 \pm 0,101$ mmol/dL; dan $24,008 \pm 5,65$ mg^2/dL^2 . Hasil uji statistik menunjukkan bahwa terdapat perbedaan pada kadar kalsium ($p=0,01$) dan produk $\text{Ca} \times \text{P}$ ($p=0,043$), sedangkan pada kadar fosfat ($p=0,917$) menunjukkan hasil tidak berbeda bermakna antara sebelum dan sesudah pemberian sevelamer karbonat.

Kata Kunci: penyakit ginjal kronik, hemodialisis, sevelamer karbonat, hiperfosfatemia

ABSTRACT

Chronic kidney disease (CKD) is a world health issue. CKD patients have a risk for impaired phosphate and calcium. Under this circumstance, it is necessary to provide phosphate-binding agent therapy. Sevelamer is a new phosphate-binding agent which can be used as an alternative for calcium carbonate (CaCO_3). This study aims at examining the effect of sevelamer carbonate to the level of phosphate, calcium and CaxP products at UGM Hospital Yogyakarta.

This study was conducted prospectively using study one group pretest posttest design quasi experimental for 8 weeks at UGM Yogyakarta Hospital during October up to November 2016. The measurement of phosphate, calcium and CaxP level was done by sampling the patient's blood before the hemodialysis measured before and after treatment of dispensing sevelamer carbonate therapy.

The number of test subjects in this study were 16 patients. The baseline values of phosphate, calcium and Ca x P products were $5,96 \pm 1,37$ mg/dL; $1,12 \pm 0,15$ mmol/dL; and $26,63 \pm 5,66$ mg^2/dL^2 , while at the end there were changes in values of $5,85 \pm 1,15$ mg/dL; $1,02 \pm 0,101$ mmol/dL; and $24,008 \pm 5,65$ mg^2/dL^2 . Statistic test result showed that there were differences in calcium level ($p = 0,01$) and CaxP product ($p = 0,043$), while phosphate ($p = 0,917$) showed no significant difference between before and after sevelamer carbonate treatment.

Keywords: chronic kidney disease, hemodialysis, sevelamer carbonate, hyperphosphatemia