

INTISARI

Pasien hemodialisis membutuhkan terapi dengan pengikat fosfat untuk menurunkan morbiditas dan mortalitas yang berkaitan dengan tingginya kadar fosfat dalam darah. Penelitian sebelumnya melaporkan adanya efek samping hiperkalsemia pada penggunaan pengikat fosfat berbasis kalsium dalam jangka panjang dan efek samping pada sistem gastrointestinal pada penggunaan sevelamer dan lanthanum karbonat. Penelitian ini bertujuan untuk mengetahui pola penggunaan, deskripsi keamanan penggunaan pengikat fosfat dan faktor resiko pada pasien penyakit ginjal kronik yang menjalani hemodialisis.

Penelitian ini merupakan penelitian observational analitik dengan rancangan *cross sectional* dan pelaksanaan pengambilan data secara prospektif. Subyek penelitian adalah pasien penyakit ginjal kronik yang menjalani hemodialisis di RS UGM yang memenuhi kriteria inklusi dan eksklusi. Kriteria inklusi meliputi pasien dengan berusia minimal 18 tahun, memperoleh terapi dengan pengikat fosfat, bersedia mengikuti penelitian dan menandatangani *informed consent*. Pengambilan data dilakukan dengan wawancara langsung. Pengamatan dilakukan selama 8 minggu. Pengkajian probabilitas efek samping menggunakan Kategori Kausalitas WHO. Analisis statistik yang digunakan untuk mengetahui hubungan antara faktor resiko dengan kejadian efek samping adalah *Fisher's Exact Test*.

Dari 79 pasien yang memenuhi kriteria inklusi, sebanyak 49 pasien (62,03%) menggunakan kalsium karbonat, 20 pasien (25,32%) menggunakan sevelamer, 8 pasien (10,13%) menggunakan kalsium asetat, dan 2 pasien (2,53%) menggunakan lanthanum karbonat. Sebanyak 7 pasien (8,86%) mengalami kemungkinan efek samping yang disebabkan karena sevelamer yaitu rasa tidak nyaman di perut, gatal, nyeri dada, flatulen, perasaan seperti ditusuk lidi di seluruh tubuh, demam, bibir kesemutan, sakit kepala, feces lembek, diare. Masing-masing 1 pasien (1,27%) mengalami kemungkinan efek samping kalsium karbonat dan kalsium asetat yaitu hiperkalsemia yang tergolong ringan. Tidak terdapat hubungan yang signifikan antara faktor resiko usia, jenis kelamin, kondisi patologi, jumlah obat dan durasi pemakaian pengikat fosfat dengan kejadian efek samping pengikat fosfat pada pasien PGK yang menjalani hemodialisis.

Kata kunci: kalsium, sevelamer, lanthanum, penyakit ginjal kronik, efek samping

ABSTRACT

Dialysis patients require therapy with phosphate binders to reduce morbidity and mortality associated with elevated serum phosphorus. Previous studies reported that long-term use of calcium-based phosphate binders may caused hypercalcemia. Sevelamer and lanthanum carbonate are non-calcium phosphate binders that are now being used but previous studies reported adverse effects on the gastrointestinal system. This study aimed to determine the pattern of phosphate binders use, assess the safety and the risk factors in chronic kidney disease patients undergoing hemodialysis.

This study was a cross sectional study with prospective data retrieval. The subjects of the study were chronic kidney disease patients undergoing hemodialysis at UGM hospital that met inclusion and exclusion criteria. The inclusion criteria included patients with a minimum age of 18 years, receiving therapy with a phosphate binder, willing to participate the study and signed the informed consent. Data collection was performed by direct interview. Observations were made for 8 weeks. Probability of adverse effects was assessed using WHO-UMC Causality Categories. Data analysis was performed with descriptive statistics. Statistical analysis of the relationship between risk factors and the adverse effects was done using Fisher's Exact Test.

A total of 79 patients completed the study. Calcium carbonate was the most commonly used phosphate binder (49 patients), followed by sevelamer (20 patients), calcium acetate (8 patients) and lanthanum carbonate (2 patients). There were 7 patients experienced possible adverse effects that might be related to the use of sevelamer, 1 patient experienced possible adverse effects of calcium carbonate, and 1 patient experienced possible adverse effects of calcium acetate. Possible adverse effects of sevelamer were abdominal discomfort, itching, chest pain, flatulent, feelings like "pierced by sticks" throughout the body, fever, lips tingling, headache, soft stool, and diarrhea. Possible adverse effect of calcium carbonate and calcium acetate was mild hypercalcemia. There was no significant relationship between age, sex, pathology condition, the number of medicines, and duration of phosphate binders use with the adverse effects occurred in chronic kidney disease patients undergoing hemodialysis.

Keywords: calcium, sevelamer, lanthanum, chronic kidney disease, ADR