INDUSTRIAL TRAINING REPORT

AT

PUSAT PENYELIDIKAN KLINIKAL

(CLINICAL RESEARCH CENTRE, CRC)

ARAS 2 HOSPITAL SERDANG

JALAN PUCHONG

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REPORT

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ABSTRACT

Hyperphosphatemia (HyperPO4) and chronic kidney disease are metabolic bone disease that is common in end stage renal disease. Untreated hyperphosphatemia can lead to cardiovascular disease and calciphylaxis. It is a risk factor for cardiovascular disease and independently associated with mortality. Calcium based phosphate binders can cause progression in vascular calcification, which is a recognised risk factor for cardiovascular disease in chronic kidney disease patients. Sevelamer is a non calcium-based phosphate binder which has been showed to be effective on controlling hyperphosphatemia and reducing serum phosphorus in patients with chronic kidney disease. 310 patients from Hospital Serdang were screened for eligibility. 114 patients were eligible, 62 patients declined to give informed consent and 5 patients withdrawn consent before randomisation. Approximately fifty two (52) patients were enrolled in this prospective open-labelled crossover trial. This study used a randomized, open-label, crossover design study which compares the efficacy of Sevelamer Carbonate versus Calcium Carbonate in the treatment of hypherphosphatemia in patients with chronic kidney disease on dialysis. Based on the findings, it was found that sevelamer carbonate gives equally significant effective in comparing with calcium carbonate as the treatment of hyperphosphatemia in chronic kidney disease. Sevelamer carbonate can be used in the treatment of hyperphosphatemia in patients with chronic kidney disease on dialysis.

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