PREVALENCE OF ANAEMIA IN CKD-u PATIENTS IN GIRANDURUKOTTE AND WILGAMUWA

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Abstract

Anaemia is a major complication of Chronic Kidney Disease (CKD) once the glomerular filtration rate (GFR) drops below 60 mL/min. Chronic kidney disease of uncertain etiology (CKD-u) has become a serious public health crisis in SriLanka. The goal of the study is to determine the prevalence of anaemia in CKD-u patients and detect proportion of CKD-u patients with IDA (Iron Deficiency Anaemia) in Girandurukotte and Wilgamuwa. Subjects were selected from above highly prevalent areas for CKD-u. Biopsy proven, non dialysis 119 CKD-u patients were selected for the study. For endemic control group, 119 age and sex matched, healthy subjects were selected. Detailed history was obtained at the first visit of patients using a questionnaire. Blood samples for creatinine, iron studies, Full blood count, ESR and blood pictures were taken.

The percentage of anaemia among CKD-u patients were 72.3%. In endemic control group, anaemia was detected in 34.5%. According to odds ratio, anaemia in CKD-u patients is five (5) times higher than the endemic control people. The percentage of patients with anaemia increases with the stage of the renal failure. According to Chi square test, there is no significant correlation between the progression of renal failure and the proportion of patients with anaemia (p=0.695). IDA is diagnosed in 40% of CKD-u patients who had Low transferrin saturation (< 20%).

Although percentage of anaemic patients increased with the progression of the disease, there was no significant correlation between stage and the proportion of patients with anaemia in CKD-u patients. Anaemia is five (5) times higher in CKD-u patients than the anaemia in endemic control group. IDA is one of the major causes of anaemia in CKD-u which can be treated with iron supplements to correct anaemia to improve the quality of life of CKD-u patients.

Key words: Chronic Kidney Disease, Chronic Kidney Disease of uncertain etiology, Anaemia, Glomerular Filtration Rate