Evaluation the Cause of End-Stage Renal Disease (ESRD) in Kidney Transplant Patients-A Single Center Study

Dear Editor,

Some of the most common cause of ESRD is preventable but unfortunately there were no any study about etiology of ESRD. Etiology of ESRD may differ in different part of the world and diabetic nephropathy by glomerulonephritis seems to be the most common cause of ESRD.^{1, 2}

Six hundred kidney transplant recipients in a 10 years period were evaluated. All clinical and Para clinical records including lab data, radiology, sonography and pathologic findings are used to determine etiology of ESRD in the patients. Also patient history and family history were considered for this study. General information like age and sex were collected from hospital records. Six hundred kidney transplant recipients were studied with mean age of 33.9±12.34 (range 2.5-65 y/o) and male/ female ratio 1.84 (389 male and 211 female). Mean duration of dialysis was 22 months (range 0-72 months). Preemptive transplant were done in three pediatric patients. Fourteen patients were excluded from our study due to inadequate information to determine the cause of ESRD.

Unfortunately in most of developing countries like IRAN people were not aware of signs and symptoms of renal disease, thus they diagnosed very late. We can follow these patients only in dialysis or transplant centres or in kidney transplant waiting list registry and at this time determining the primary renal disease lead to ESRD is not possible. Because of better health system which is established in our country during past decade ESRD with unknown etiology in pediatric group is less than in adult group (7/38 Vs 187/548) [p<0.05].

In pediatric group pyelonephritis reflux and obstructive diseases were most common causes. This is similar to other reports from developing countries.³ In our study the causes of ESRD in adult group were glomerulonephritis and hypertension followed by reflux-obstruction and polycystic kidney disease which is comparable with other studies,⁴ but the prevalence of diabetic nephropathy is less than other report of nearby countries.⁴ However the incidence of diabetic nephropathy increases during last years. Disregarding of unknown etiology, the prevalence of glomerulonephritis and hypertension is similar to Naicker and Chugh's report.^{4, 5}

In conclusion, we believe that hypertensive nephropathy could be prevented by better blood pressure control. Establishment of an organization for ESRD patients may help these patients and researchers to understand better about ESRD.

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