Nephrotic-Range Proteinuria with Renal Artery Stenosis: Its Reversal after Transluminal Angioplasty

S.		Hariharan
A.P.		Pandey
C.K.		Jacob
J.C.M.		Shastri
M.G.		Kirubakaran

Departments of Nephrology and Urology, Christian Medical College and Hospital, Vellore, India

Dr. S. Hariharan, Department of Nephrology, CMC Hospital, Vellore 632004 (India)

Dear Sir,

Nephrotic-range proteinuria secondary to renal artery stenosis is known [1, 2]. Decrease in the proteinuria has been reported after nephrectomy [2, 3]. Its reversal after transluminal angioplasty is documented below:

A 14-year-old girl presented for evaluation of hypertension and albuminuria. Her blood pressure was 200/120 mm Hg in the supine position and 170/110 mm Hg when erect. There was no pedal edema and no flank or abdominal bruit; laboratory tests showed qualitative urine protein 4 + , blood urea 25 mg/dl, serum creatinine 1.2 mg/dl, urine protein excretion 3.4 g in 24 h, total serum protein 6.7 g/dl, serum albumin 4.1 g/dl, serum sodium 139 mEq/l, potassium 3.3 mEq/l, bicarbonate 20 mEq/l and chloride 102 mEq/l. There was no serological evidence of systemic lupus erythematosus. Renal histology was normal on light-microscopy and immunofluorescence study. A renal angiogram revealed bilateral renal artery stenosis. Blood pressure was controlled with a combination of α -methyl-dopa 500 mg, hydralazine 50 mg, clonidine 0.1 mg and nifedipine 10 mg given 8-hourly together with frusemide 40 mg once a day.

Following transluminal angioplasty, blood pressure was controlled by hydralazine 50 mg three times daily alone. The excretory function of both kidneys, as shown by intravenous urogram, had improved after angioplasty, and 24-hour urine protein excretion was only 975 mg 7 days after the procedure and the qualitative proteinuria was 1 + , 7 months after the procedure.

References

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