Vesicoureteric Reflux in a Grafted Kidney as a Cause of Massive Hematuria: A Case Report

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Dear Sir,

An adult male underwent a renal allo-transplantation for renal failure secondary to glomerulonephritis. An episode of acute rejection after 1 month was successfully treated. Subsequent maintenance therapy comprised prednisolone and azathioprine, plus nife-dipine for his hypertension. Eleven months after transplantation, the patient had painless profuse hematuria associated with clots lasting for 3 days which was followed by a similar episode after 1 month. Investigations showed blood urea 150 mg%, serum creatinine 6.0 mg% and 24-hour urinary protein 1,000 mg. USG showed dilatation of the graft pelvicalyceal system with shunt and increased cortical echogenicity. Cystoscopy showed blood and clots coming from the grafted kidney. Angio-graphy and retrograde pyelography were normal while micturition cystourethrogram showed grade IV/V vesicoureteric reflux. The hematuria cleared with indwelling catheter and antibiotics; serum creatinine stabilized at 3.6 mg%. At 6 months of follow-up, the patient was free of hematuria. However, since he had heavy proteinuria and steadily rising serum creatinine, he was informed about his graft failure and advised for a retransplantation.

The effect of VUR in a grafted kidney is controversial and the possible complications are persistent urinary tract infection [1], recurrent pyelonephritis [3] and deterioration of graft function [2]. Graft failure due to reflux is typically slow and associated with proteinuria, microscopic hematuria, hypertension and biopsy appearance of mesangiocapillary glomerular changes. Spontaneous massive hematuria due to graft reflux is almost unknown and can occur because of bleeding

from dilated mucosal vessels of the upper tract or from papillary necrosis.

Treatment consists of blood replacement, antibiotics, indwelling catheterization and if required, silver nitrate irrigation of the upper tract. Antireflux reimplantation if renal function is normal and graft nephrectomy with retransplantation if progressive renal failure occurs are the other modalities of management.

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0028-2766/93/
0643-0476\$2.75/0