



## Seven-year Follow-up of India's First Sequential Hematopoietic Stem Cell and Kidney Transplant for Multiple Myeloma

Dear Editor,

Chronic kidney disease is not uncommon in multiple myeloma patients. However, hematopoietic stem cell transplant (HSCT) is not usually done in dialysis patients. Even rarer is subsequent renal transplantation in these patients. We had earlier reported in IJN the first such case in India.<sup>1</sup> The patient has now completed 90 months of follow-up posttransplant. Briefly, a 30-year-old female presented with rapidly progressive renal failure in Jan 2011. Renal biopsy revealed cast nephropathy. Bone marrow biopsy confirmed the diagnosis of kappa light chain plasma cell dyscrasia. After remission, autologous HSCT was done on 06.06.2014. Subsequently, renal transplantation was done on 04.01.2016 without induction therapy, the donor being her father. Immunosuppression consisted of prednisolone, tacrolimus, and mycophenolate. She achieved a nadir serum creatinine of 0.8 mg%. One year later, she had parvovirus B19 infection with graft dysfunction, which was successfully treated with intravenous immunoglobulin. Kidney biopsy showed features of calcineurin inhibitor toxicity. Tacrolimus was substituted by cyclosporine. Serum protein electrophoresis and free light chain assay were monitored initially at three-monthly intervals and, subsequently, at six-monthly intervals to date, which were always negative. Posttransplant, she also had two episodes of urinary tract infection. Two months back, she had an episode of lower respiratory tract infection with graft dysfunction. After resolution of infection, her renal functions recovered to the baseline

serum creatinine of 1.0 mg/dl. Currently, she continues to be on prednisolone, cyclosporine, and mycophenolate. The cyclosporine serum CO level is 72 ng/ml.

A study of 12 patients with a median follow-up of 40 months showed hematologic progression in 75% patients and a mortality of 45.5%.<sup>2</sup> In a recent review of 36 patients with a median follow-up of 48 months, 69% were alive and 36% had relapse of multiple myeloma.<sup>3</sup> After 90 months of post-renal transplant follow-up, our patient remains disease free with normal renal functions.

### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

### Conflicts of interest

There are no conflicts of interest.

### References

1. Bhowmik D, Yadav S, Kumar L, Agarwal S, Agarwal SK, Gupta S. Sequential, autologous hematopoietic stem cell transplant followed by renal transplant in multiple myeloma. *Indian J Nephrol* 2017;27:324-6.
2. Heybeli C, Bentatali AJ, Alexander MP, Amer H, Buadi FK, Dispenzieri A, *et al.* Kidney transplant outcomes of patients with multiple myeloma. *Kidney Int Rep* 2022;7:752-62.
3. Chitty DW, Harley-Brown MA, Abate M, Thakur R, Wanchoo R, Jhaveri KD, *et al.* Kidney transplantation in patients with multiple myeloma: Narrative analysis and review of the last two decades. *Nephrol Dial Transplant* 2022;37:1616-26.

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