Navigating the storm: A case of post-transplant survival amidst multiple complications

<u>Chene' Naicker</u>, Sarisha Rajoo, William Mhundwa, Meshack Motha, Zafar Khan, Sanju Sobnach, Nina Diana

University of the Witwatersrand, Johannesburg, South Africa

Abstract

Introduction: Renal transplantation provides patients with end stage kidney disease an opportunity for an enhanced quality of life. It does, however, impart risks to these patients. This case highlights the complexities associated with transplantation in a middle-income country.

Clinical Case: A 43-year-old male patient with hypertensive-related ESKD on haemodialysis for 7 years, via a right internal jugular permanent catheter, presented for a cadaveric renal transplant. He received an extended criterion allograft. His post transplantation course was complicated by sepsis (central line associated blood stream infection) with infective endocarditis and septic shock, hydronephrosis, allograft rejection and delayed graft function (DGF).

Blood cultures drawn from the permanent catheter cultured a methicillin-resistant *Staphylococcus epidermidis*. Subsequent blood and urine cultures revealed Ceftriaxone-sensitive *Escherichia coli*. Transesophageal echocardiogram showed severe aortic regurgitation secondary to a vegetation on the right coronary cusp of the aortic valve. His renal allograft biopsy reported extensive tubule-interstitial nephritis (TIN), and borderline acute T-cell mediated rejection. Radiological investigations confirmed grade 3 graft hydronephrosis due to a ureteric stricture.

The patient was treated with antimicrobials for a total of 53 days, initially with Linezolid and Ceftriaxone. After 16 days the Linezolid was changed to Vancomycin due to its possible aetiology of the TIN on allograft biopsy. On day 41 of admission, he underwent an aortic valve replacement and was initiated on warfarin. A DJ stent was inserted to relieve the ureteric obstruction. His rejection was treated with a 3-day methylprednisolone pulse and intensification of oral immunosuppression (tacrolimus, mycophenolate mofetil and prednisone). His creatinine steadily improved and he was discharged on day 65.

Conclusion: This case report highlights the potential challenges of managing ESKD patients undergoing transplantation. Prolonged use of intravenous dialysis catheters increases the risk of infection, especially in patients receiving immunosuppression. DGF may be related to a number of factors post transplantation.