

An Immunosuppression Tightrope: Successful Heart Transplant after Giant Cell Myocarditis in an HIV Patient Complicated by Recurrent Giant Cell Myocarditis and Kaposi Sarcoma

Laura Peters, DNP, FNP and Amrut Ambardekar, MD

University of Colorado

INTRODUCTION

- Giant Cell Myocarditis (GCM) can be fatal without cardiac transplant
- Due to risk of recurrent GCM, transplant patients are maintained on higher immunosuppression (IS)
- HIV patients are now considered for transplant given modern antiretrovirals
- Currently, there is little experience with treatment of GCM with transplant in HIV patients

OBJECTIVE

- Case study highlights the complex immunosuppression tightrope balance required to prevent recurrent GCM after transplant while avoiding HIV opportunistic infections

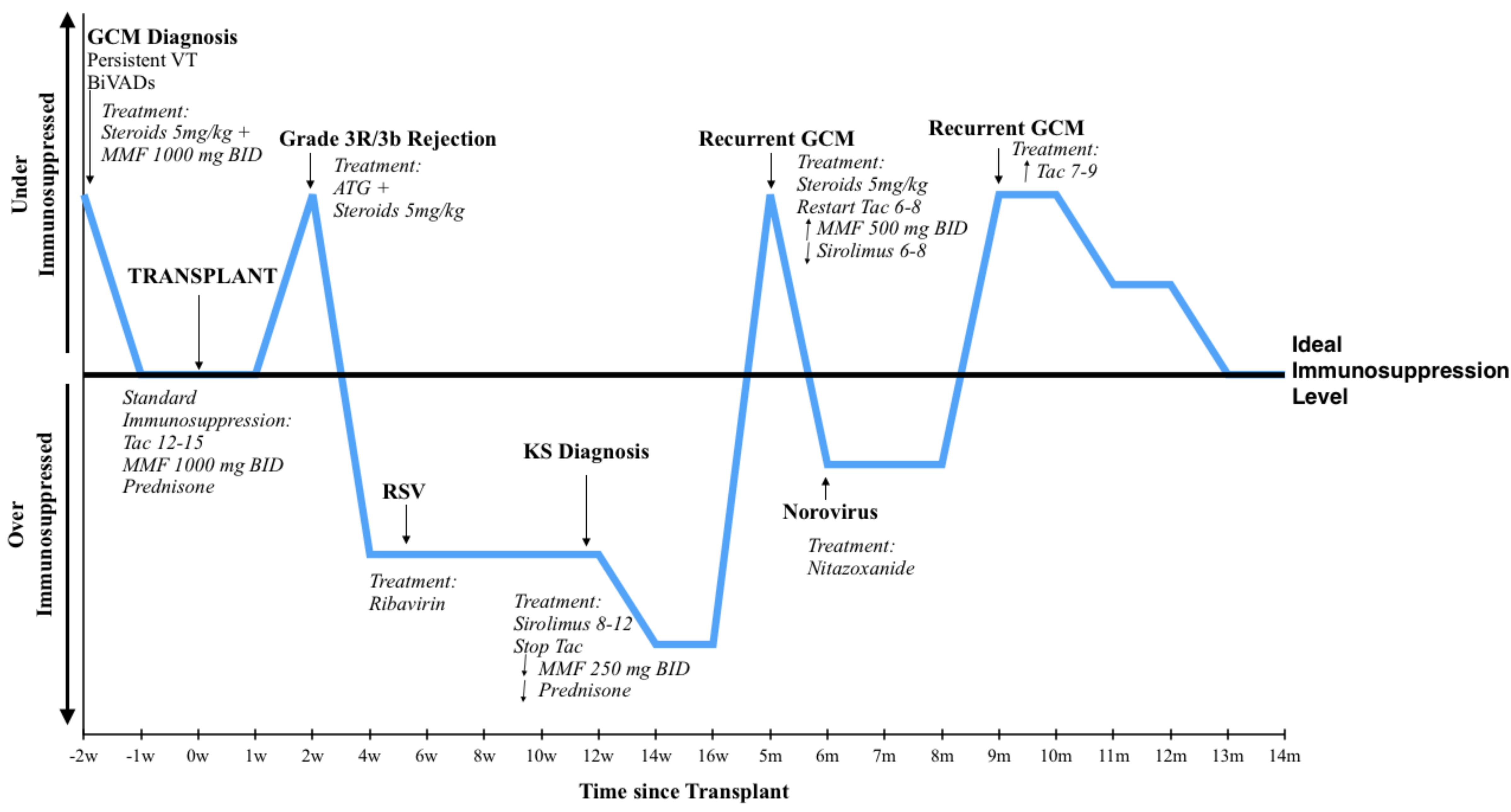
DISCLOSURES

- None

CASE REPORT

- 33 year old male presented with acute HF symptoms, recurrent VT, & cardiogenic shock. PMH of controlled HIV.
- Cardiac biopsy showed GCM
- Developed refractory VT and shock despite high-dose steroids and mycophenolate mofetil (MMF), placed on biventricular support
- Underwent cardiac transplant with unremarkable surgical course; Initial IS: steroids, MMF, tacrolimus
- Initial surveillance biopsy: severe rejection (grade 3R) requiring treatment with thymoglobulin + pulse steroids. Subsequent biopsies improved.
- 2 months later, hospitalized with RSV and new purple nodular rash; CD4 count decreased. Pathology of nodules + Kaposi Sarcoma (KS)
- IS reduced by decreasing steroids, MMF, and transitioning tacrolimus to sirolimus
- He developed leukopenia requiring reductions in MMF and G-CSF
- 2 months later, biopsy with recurrent GCM → tacrolimus restarted
- Subsequent biopsies with no evidence of GCM or rejection; KS resolved
- Doing well 2 years post-transplant**

Immunosuppression Tightrope after OHT for Giant Cell Myocarditis in a Patient with HIV



CONCLUSIONS

- Balancing IS in transplant recipients with concomitant immune related diseases is challenging.
- With individualized surveillance and IS titration, even those patients with potentially fatal recurrent GCM and KS with HIV can achieve the correct balance for successful outcomes.

