

Hospital admissions before and after Renal Transplant

Introduction

Children with chronic kidney disease (CKD) suffer from a host of challenges. It affects many aspects of their life, from physical development to schooling and education. The best treatment for end stage renal failure (ESRF) is renal transplantation (RT). RT improves the the quality of life of children with ESRF. However, it is associated with risk of graft rejection and complications of long-term immunosuppression such as infection and malignancy. Registry data from North America in the last decade has shown that infection is now the predominant reason for hospitalisation in paediatric RT recipients rather than acute rejection.¹

Aims

- 1) To compare hospital admissions in the year before and 2 years after RT
- 2) To study the causes of hospitalisation

Methods

The data used was collected from the Royal Manchester Children Hospital (RMCH) computer system and patient database. All 35 patients who underwent RT at RMCH from June 2009 to May 2012 and had a minimum follow up period of 2 years were included in this retrospective study. Any hospital visit requiring overnight stay was defined as an admission. All patients at the time of the RT received our standard immunosuppressive protocol which is Basaliximab, Tacrolimus, MMF and early steroid withdrawal as per the TWIST study.²

References
1. Dharnidharka et al Ped Neph 2004 Ref 2. Twist study

Results

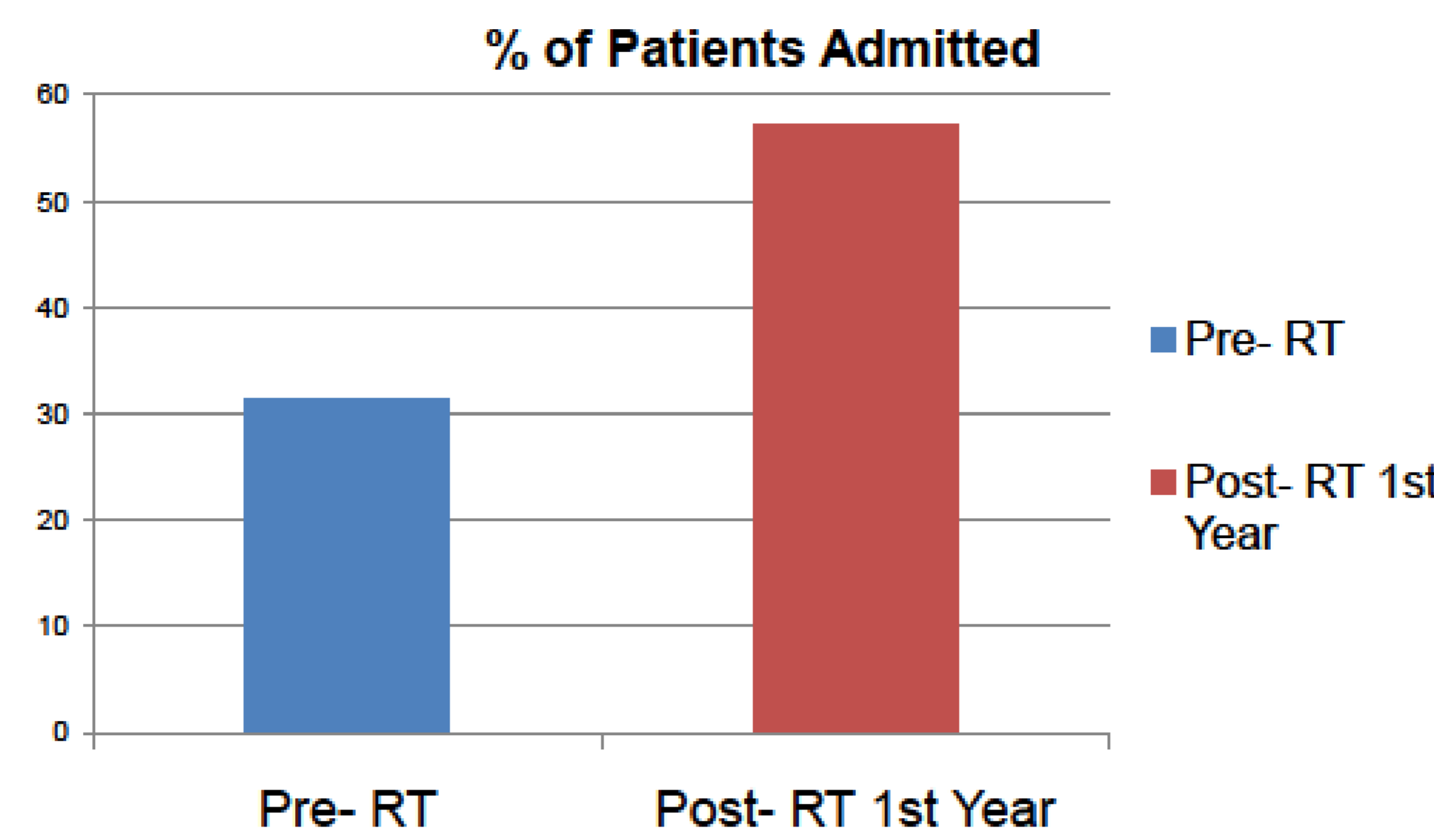


Figure 1. % of Patients in study group admitted to Hospital in the Year Pre- and the year Post -transplant

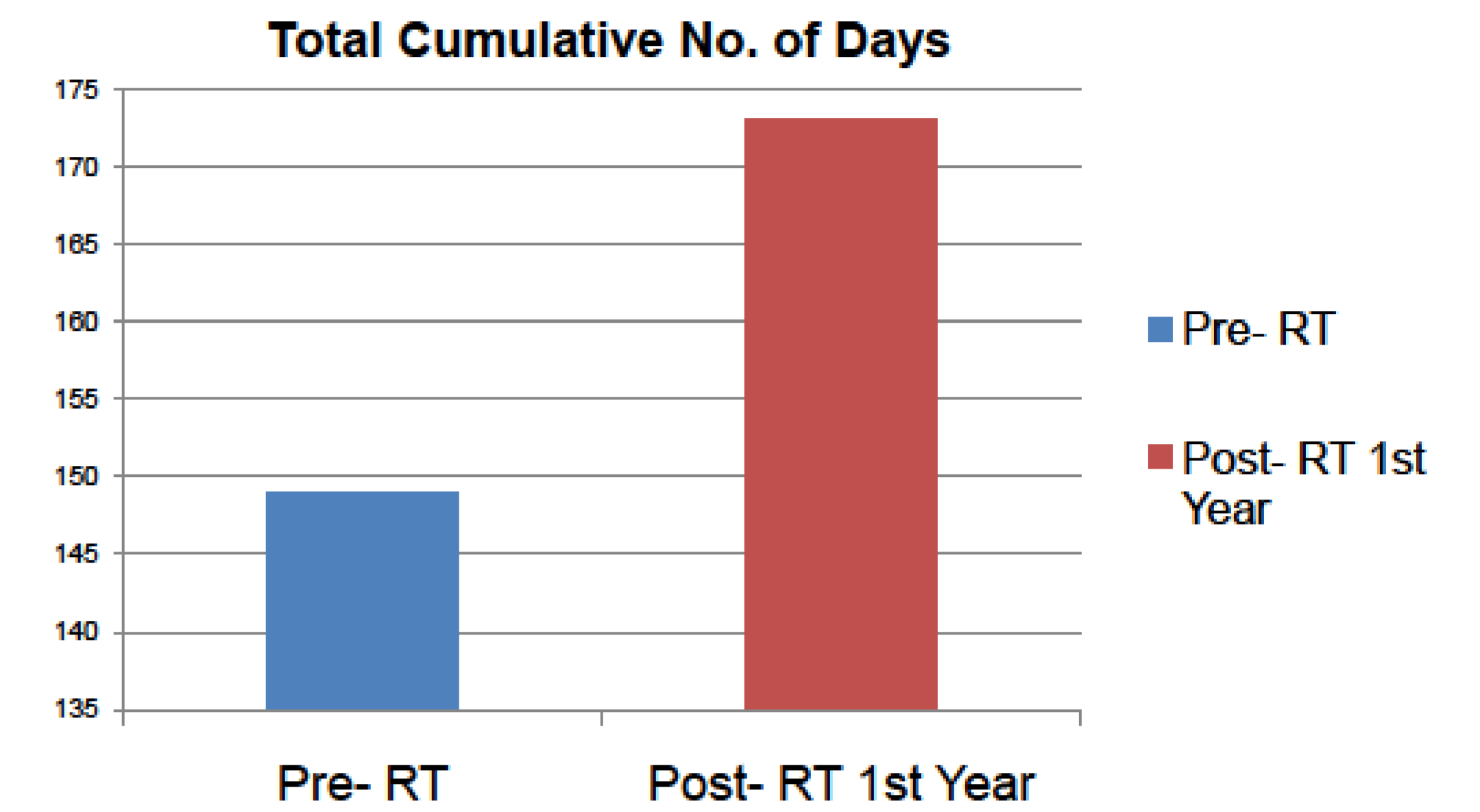


Figure 5. The total number of days spent by the 35 patients in study group when admitted to Hospital in the Year Pre- and the year Post -transplant

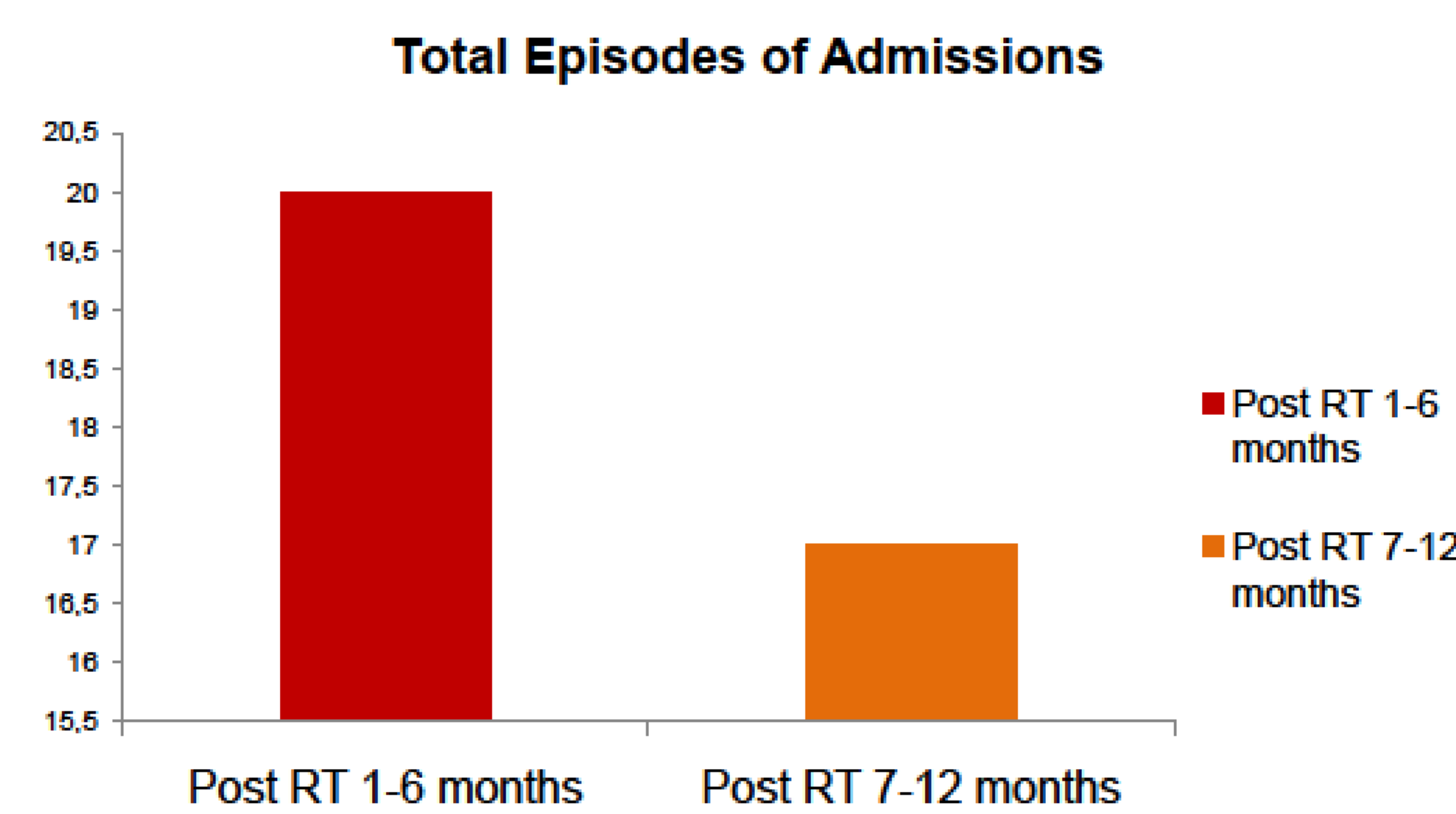


Fig 2 . Total Episodes of Admissions Post-RT

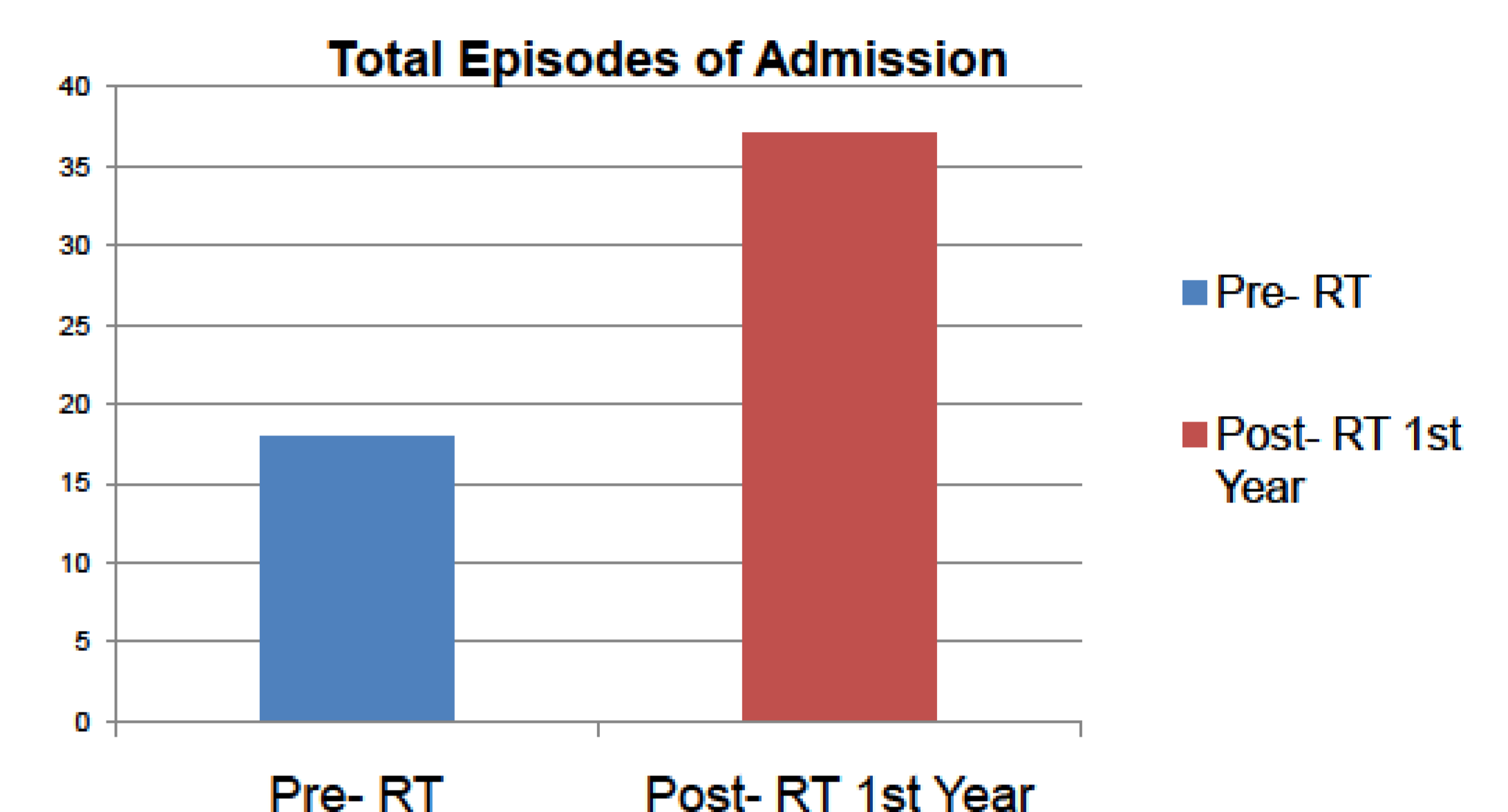


Fig 6. Total Episodes of Admissions Post-RT

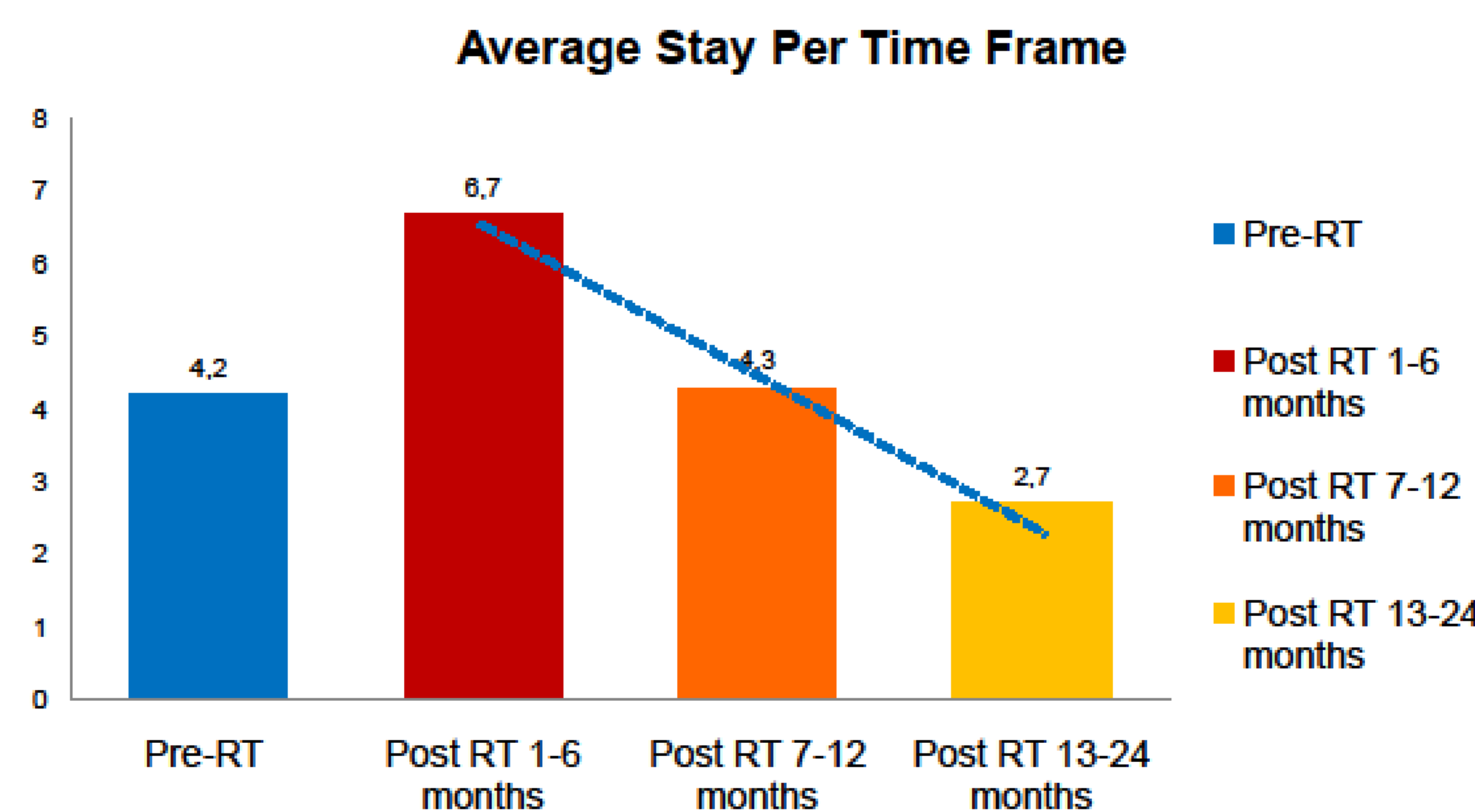


Figure 3. Average Stay Per Child in specific time frames Post transplant

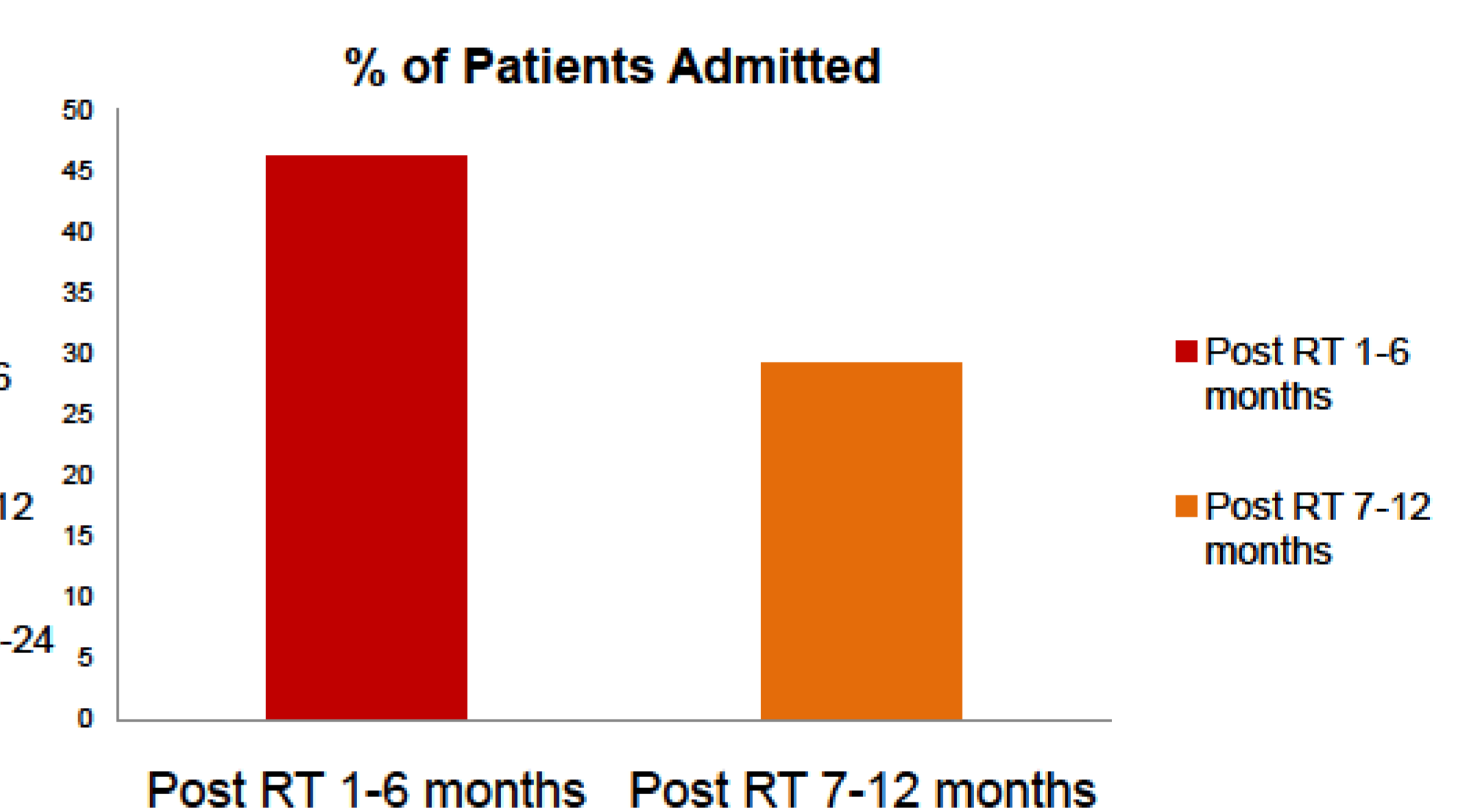


Figure 7. % of Patients admitted in 1st year Post transplant

Post Transplant Causes for Hospital stay

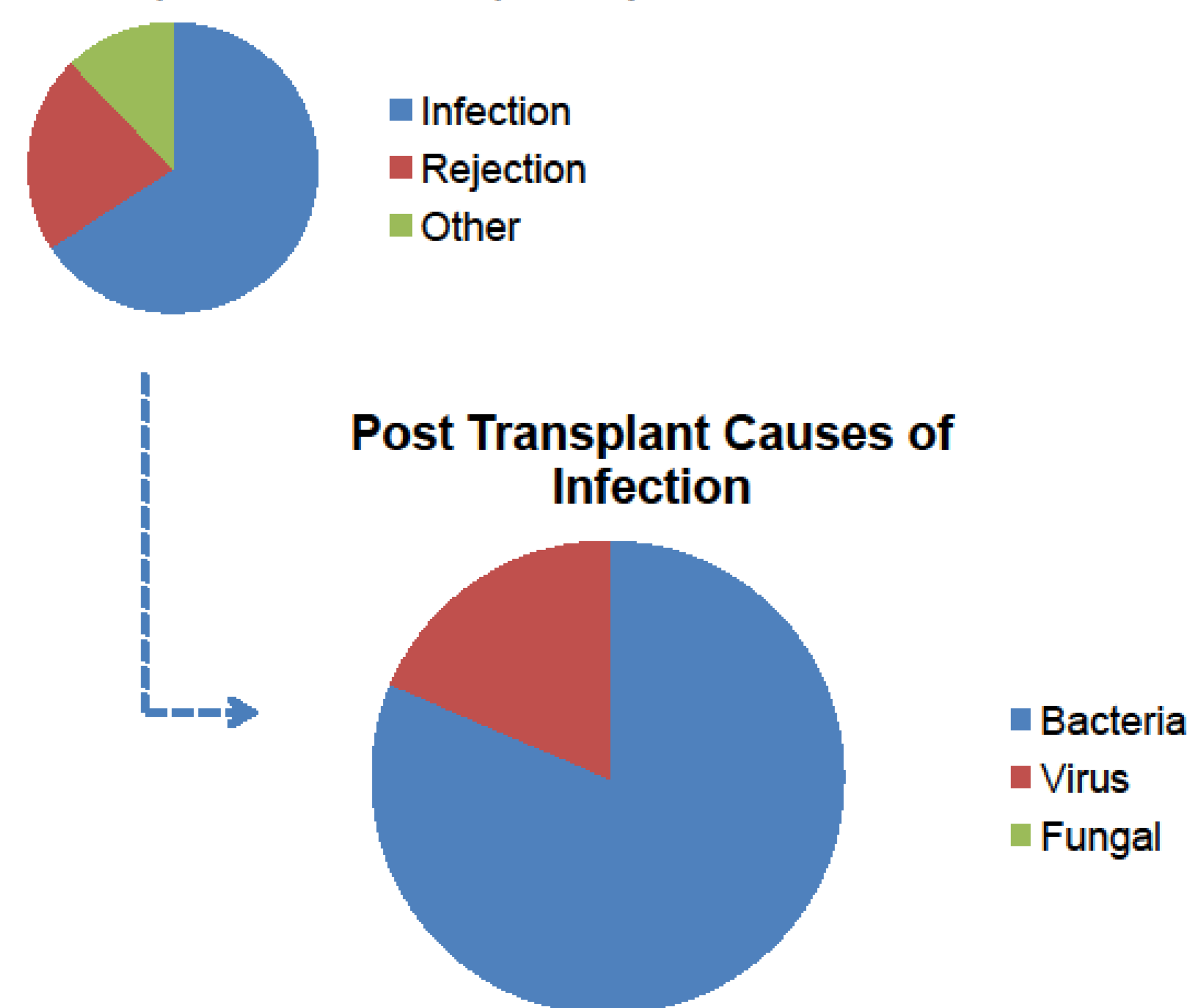


Figure 4. Demonstrating infection to be the largest cause of hospital stay post transplant with bacterial infections being the most common.

Conclusions

There is increased hospital admission in the year after RT when compared to the year before RT.

This is however, predominantly in the first 6 months. Hospital admissions in the second year after RT are less than the year before RT.

The main reason for admission is infection, predominantly bacterial, rather than acute rejection.

