



Patient-Reported Gastrointestinal Symptoms and the Association With Quality of Life Following Kidney Transplantation¹

Samuel Chan, Christopher Cao, Elaine M. Pascoe, David W. Johnson, Ayesha Shah, Gerald A. Holtmann, Scott B. Campbell, Ross S. Francis, Nicole M. Isbel and Carmel M. Hawley

Introduction

- Kidney transplantation is ideal renal replacement therapy for most kidney failure patients
- Post-transplant often complicated by GI symptoms including reflux and diarrhoea^{2,3}
- Few studies examine the impact of GI symptoms on quality of life (QOL) in kidney transplant recipients

Research objectives

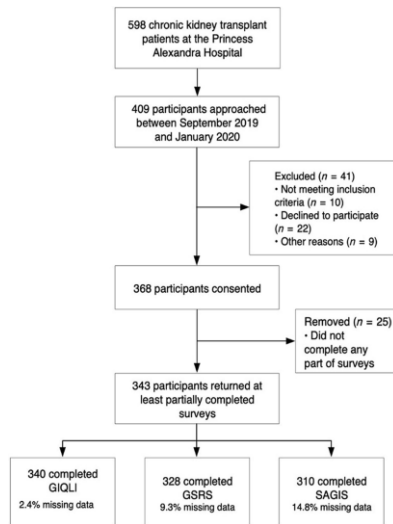
The aim of this study was to evaluate the prevalence and predictors of GI symptoms in kidney transplant recipients and the association of these symptoms with quality of life using 3 separate, validated instruments of GI symptoms and QOL.

Methods

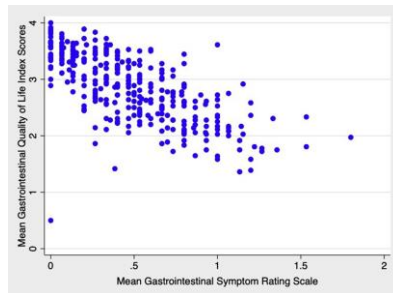
- Cross-sectional observational study between 09/19 and 01/20
- Kidney transplant recipients attending outpatient clinics at PA Hospital with transplanted kidney surviving at least 2 months
- Three questionnaires: GSRS, GIQLI and SAGIS
- Deidentified demographic and clinical data collected including age, sex ethnicity, primary kidney disease, time since transplant, CMV serology, PPI/H2 antagonist use and immunosuppression

Results

- 365 of 409 (89%) of eligible patients consented to study
- Median age 47 (36-55)
- 58% male
- Most common aetiology glomerulonephritis (39%)



- 88% reported at least one GI symptom
- Most common symptoms were indigestion (57%) and diarrhoea (54%)
- 42% mild QOL impairment, 38% moderate QOL impairment
- GI symptoms predicted by female sex and mycophenolate use
- GI symptoms associated with lower QOL



Discussion

- 88% of patients reporting at least 1 GI symptom similar to previous studies (88.3% and 92% reporting GI symptoms)^{3,4}
- GI symptoms inversely associated with QOL
- Immunosuppressive therapy may contribute to GI symptoms

Limitations

- Response bias cannot be excluded as response rate was 62%
- Only GI symptom surveys provided to patient- may bias reporting to GI symptoms and not other relevant symptoms

Conclusion

GI symptoms are highly prevalent in kidney transplant patients, particularly in women and those receiving mycophenolate, and significantly impair QOL.

Selected references

1. Chan S, Cao C, Pascoe EM, Johnson DW, Shah A, Holtmann GA, Campbell SB, Francis RS, Isbel NM, Hawley CM. Patient-Reported Gastrointestinal Symptoms and the Association With Quality of Life Following Kidney Transplantation. *Kidney Int Rep.* 2020 Oct 24;6(1):138-145. doi: 10.1016/j.ekir.2020.10.013. PMID: 33426399; PMCID: PMC7783552.
2. Gil-Vernet S, Amado A, Ortega F, et al. Gastrointestinal complications in renal transplant recipients: MITOS study. *Transplant Proc.* 2007;39:2190-2193.
3. Ponticelli C, Colombo D, Novara M, et al. Gastrointestinal symptoms impair quality of life in Italian renal transplant recipients but are under-recognized by physicians. *Transplant Int.* 2010;23:1126-1134.
4. Ekberg H, Källönen L, Madsen S, et al. Increased prevalence of gastrointestinal symptoms associated with impaired quality of life in renal transplant recipients. *Transplantation.* 2007;83:282-289.

