#### The Outcomes Of Renal Transplantation During The Covid-19 Pandemic. Is It Worth Doing?

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#### Introduction

The COVID-19 pandemic had profound effects on all aspects of health care including transplantation.

Transplant activity across the world was halted during the initial phase of the pandemic and later started under strict scrutiny.

This had a huge impact on patients with end-organ disease such as end-stage renal disease.

We share our experience and outcomes of renal transplantation at Sindh Institute of renal transplantation during the pandemic.

#### **Situation in Pakistan**





### **Materials and Methods**

All patients who underwent renal transplantation during the pandemic were included in the study. The outcomes of surgery were studied Hospital stay, Postoperative renal functions, Complications, Early Graft rejection

#### **Results**

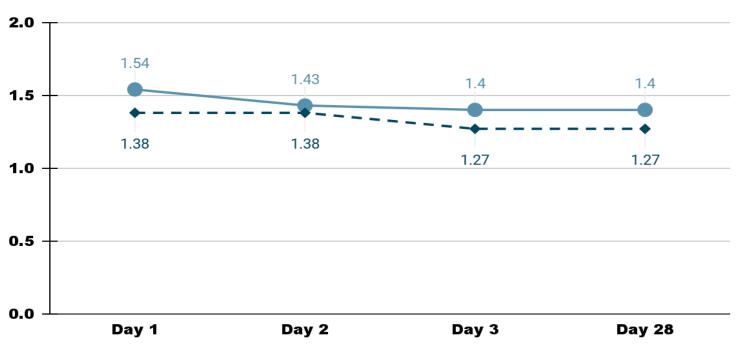
From September 2020 to March 2021, the hospital catered to more than 3000 covid positive patients including previously transplanted patients and 126 new living related renal transplantation surgeries were carried out. Patients were admitted 10 days prior to the surgery in a bioprotective bubble and 3 covid PCR tests were performed 72 hours apart before surgery. The mean age of newly performed cases was  $28.7 \pm 8.6$  years, with 100 males (79.4 %) and 26 females (20.6%). Among all patients, two patients had a history of COVID-19 infection and four more developed it during the post-operative period. The hospital stay and renal functions were comparable to the pre-pandemic data from the same unit (Table 1). While the case fatality rate for previously transplanted patients with covid infection was 7.1%, none of the newly transplanted patients died because of the infection.



## **Results**

#### **Before Pandemic and During Pandemic**

🛢 Before Pandemic 🛛 🔶 During Pandemic





# Comparison of renal transplants before & during the COVID-19 pandemic.

	Before pandemic	During pandemic
Numbers	332 (2019)	126
Ischemia time	$1.7 \pm 0.54$	$1.7 \pm 3.8$
Hospital stay	15.2 ± 2.3	17.7 ± 7.2
Early Graft rejection	3.25 %	3.1%
Surgical complications which required interventions	11 (3.31%)	4 (1.20%)
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## Conclusion

- The outcomes of renal transplantation during the covid pandemic are comparable to prepandemic statistics.
- In our resource deprived region, holding transplant surgery will further strain the already compromised Renal replacement therapy services.
- Considering the high cost and morbidity of hemodialysis, Renal transplantation is worth doing a procedure during the pandemic.

