

Enteric Conversion after Bladder-drained Kidney-Pancreas Transplantation

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Introduction

In simultaneous kidney-pancreas transplantation (SPK), bladder (BD) and enteric (ED) are both options for pancreaticoduodenal exocrine drainage. While BD provides good early and long term SPK survival, it is associated with metabolic, urological and pancreatic complications leading to need for enteric conversion (EC). We report our single center experience in SPK patients (pts) who underwent EC after initial BD.

Methods

Between 1990 and 2019, we performed 541 SPK, of which 474 were BD and 67 were ED. We retrospectively studied pts who underwent EC. Indications for EC, time from SPK to EC, resolution of symptoms, complications and pancreas graft survival were analyzed.

Results

56/474 pts underwent EC (11.8%). The mean time to EC was 4.5 years (yrs) with intervals <1 yr = 19(33.9%), 1-5 yrs =20(35.7%), 5-10yrs=7(12.5%), 10-20 yrs =10 (17.8%) . 6 (10.7%) pts had surgical complications post EC and 4 required re-exploration with ileoduodenostomy (bailout) operation for duodenal leak. Graft rejection was observed in 3 pts (5.3%) after EC and all were done 6-12 months post-transplant, time from EC to rejection was 3weeks-39months. The mean follow-up after EC was 5.7 yrs (median 4.25 yrs). The mean interval between EC and GL was 4.1 yrs.

Patient distribution in cohort

Indications	Total:56 N (%)	Time to EC f r o m Transplant Mean (yrs)	Resolution of symptoms	Pancreas GL N (%) 7/56(12.5%)
Urological				
P e l v i c Congestion syndrome	3 (5.3%)	15.1	100%	0
Recurrent UTI	11 (19.6%)	4.3	63.6%	0
Hematuria	6 (10.7%)	8.56	100%	1/6 (16.6%)
Pancreatitis	9 (16%)	4.29	100%	1/9(11%)
Metabolic				
Dehydration	14 (25%)	2	100%	4/14 (28.5%)
Acidosis	7 (12.5%)	2.6	100%	0
Leak	3 (5.3%)	0.33	100%	1/3 (33.3%)
Other	3 (5.3%)	17.3	#	0

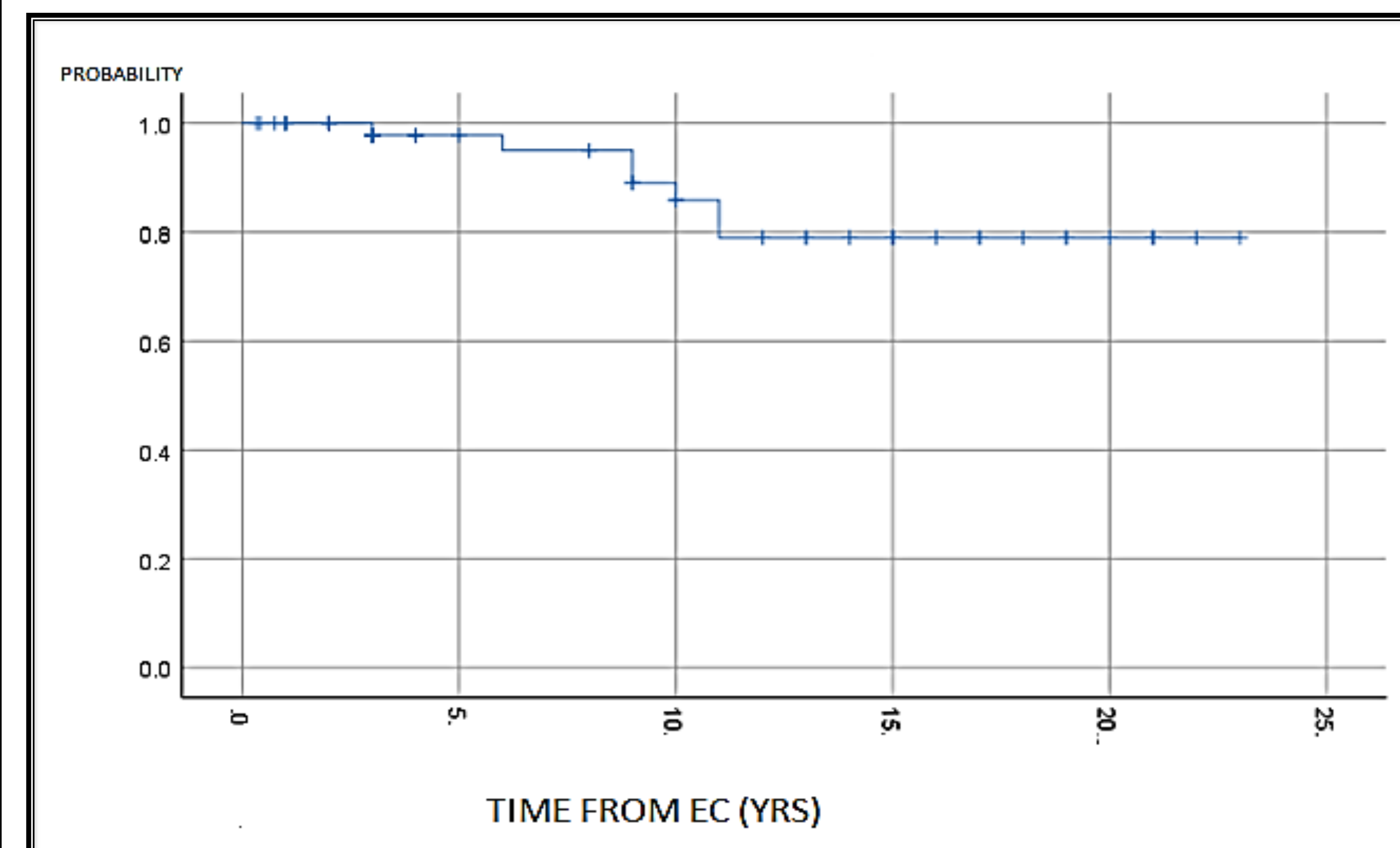
Graft loss Total n=7

Patient	Indication for EC	Time to EC from Transplan t	Time to GL from EC	Cause of GL
1	Hematuria	10-20 yrs	20	
2	Dehydration	10-20 yrs	6	Rejection at the time of conversion
3	Dehydration	1-5 yrs	74	Pancreas autoimmunity s/p pancreatectomy
4	Dehydration	1-5 yrs	87	Pancreatectomy due to GIB
5	Dehydration	1-5 yrs	88	
6	Pancreatitis	1-5 yrs	75	
7	Leak	<6 months	2	

Conclusion

- Low rate of Conversion at 11.8%
- Persistence of UTI post-conversion indicates the cause UTI could be T1D related neurogenic bladder and should not be an indication for conversion by itself.
- Long term (>10 yrs) euglycemia is possible after Bladder-drained pancreas transplantation with the caveat that EC may be necessary at some point in the future.

Death Censored Graft Survival (Pancreas)



References

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