

# EVALUATION OF THE OUTCOME OF KIDNEYS IMPLANTED FROM A DISCARDED PAIR IN THE PROVINCE OF BUENOS AIRES, ARGENTINA



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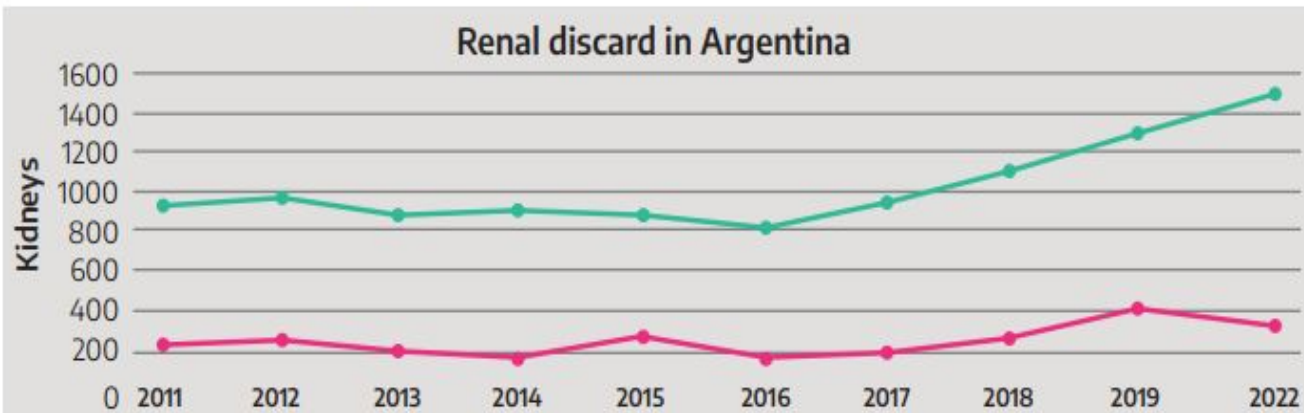
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## Introduction

In Argentina, **only 20%** of patients on the Waiting List undergo transplants annually. For this reason, procured kidneys are a scarce resource. About 20% of the kidneys procured are discarded annually (Fig. 1). In many cases there is a discrepancy in criteria between the Transplant Teams to accept or reject an organ. For this reason, an analysis of the evolution of the kidneys that were implanted compared to the pair that had been discarded by the rest of the Transplant teams was carried out.



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2022
Ablated Kidneys	914	967	874	891	885	813	939	1103	1318	1489
Discarded Kidneys	234	244	220	181	260	173	192	255	389	316
% Discarded	25	25	25	20	29	21	20	23	29	21

**Fig. 1- Renal discard\* in Argentina.**

Years 2020 and 2021 are not shown due to the distorting effect of the SARS Cov2 pandemic.

\* Renal Discard: Kidneys removed but not implanted.

## METHODS

A retrospective, comparative analysis of the evolution of pairs of kidneys that were discarded by other transplant teams during the year 2022 in the province of Buenos Aires, Argentina was carried out. The following variables were analyzed:

- ▶ Cause of discarding of the contralateral kidneys
- ▶ Mean and median serum creatinine of the implanted kidneys
- ▶ Survival of grafts and patients one year after transplantation (Kaplan Meier Analysis)

n	162
Mean	1,92
Median	1,39
S.D	1,31
Range	0,4 - 6,1

Fig. 2- Pre-ablation serum creatinine.

n	33
Mean	1,72 mg/dl
Median	1,41 mg/dl
S.D	0,84 mg/dl
Range	0,67 - 5,2 mg/dl

Fig. 3- Creatinine (currently functioning kidneys)

## RESULTS

In 2022, 1,489 kidneys were ablated in Argentina, of which 1,173 were implanted and 316 (21.2 %) were discarded (Fig. 1) The number of kidneys discarded in the province of Buenos Aires was 162 of which 40 were unilateral. The latter was the group analyzed.

### Pre-ablation serum creatinine in Fig. 2.

Functioning kidneys were 33 (82.5%). No primary function: 1, Deceased patients: 2 with functioning graft. Cause of death was cardiovascular. Four transplantectomies were performed, the causes of which were: kidney tumor (functioning graft), urinary sepsis, irreversible rejection and TAM.

The reasons for discarding the contralateral kidneys were: in 17 cases prolonged ischemia time, in 16 the macroscopic appearance of the kidney, in 4 there were ablation lesions, and in the remaining three cases the biopsy, meningitis in the donor and absence of recipient.

### Currently functioning kidneys in Fig. 3.

The graft survival at one year is 93% (Fig. 4) and the patient 's survival is 95% (Fig. 5).



Fig. 4- Graft survival

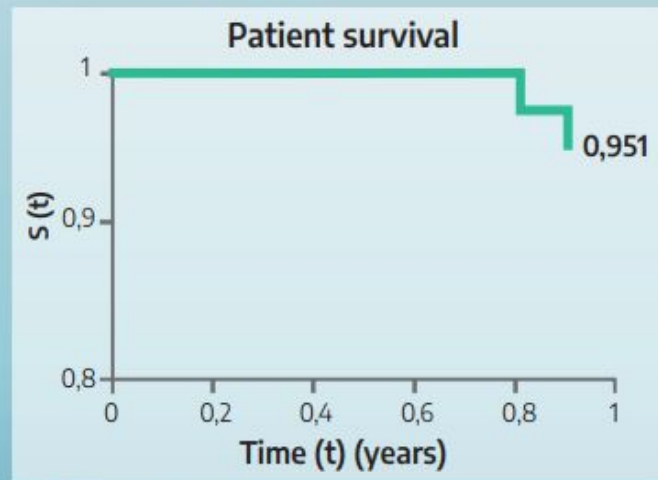
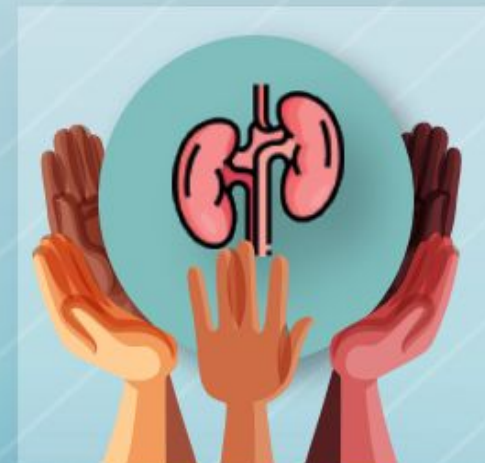


Fig. 5- Patient survival



## CONCLUSION

When 40 implanted kidneys of the pair that were discarded were evaluated, the analysis of kidney function, graft survival and patient survival is acceptable, according to current standards. Given a scarce resource such as procured kidneys, it is necessary that objective tools be implemented in our country such as the use of Clinical Score and the viability of organs with perfusion machines to make the decision to accept or reject an organ.

## DISCUSSION

- ▶ Kidneys sought for transplant are a scarce resource and many patients die on the Waiting List without being transplanted that's why it is necessary to analyze the reason why ablated kidneys are not implanted.
- ▶ This indicator is variable in different countries, being high in the USA (where peri-implant biopsy plays a predominant role despite no correlation having been demonstrated between its result and graft survival), and lower in European countries where it is not used performed routinely, although in Eurotransplant member countries such as Netherlands there is a phenomenon of consultation with the Transplant Teams before extraction, so the data must be analyzed in that context.
- ▶ In Argentina, the kidneys are extracted without prior consultation and then they are distributed and this mechanism can generate higher levels of discard. The phenomenon of discarding an organ involves subjective issues of the Transplant Team, their experience, regulatory penalties for bad results, confidence in the result of the pre-implantation biopsy, logistics, etc.
- ▶ It is necessary to have more objective tests and list Centers more predisposed to transplant kidneys with expanded criteria to offer them and reduce cold ischemia times, lowering discard levels.
- ▶ The analysis of pairs of implanted vs. non-implanted kidneys helps to highlight this issue.

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