

# The Impact of a Dedicated Team on Living Organ Donation

C Durand<sup>1</sup>, J Verhave<sup>1</sup>, H Cardinal<sup>1,2</sup>, J-A Fugère<sup>2</sup>, MR Pâquet<sup>1,2</sup>, MC Fortin<sup>1,2,3</sup>

1. Centre de recherche du Centre hospitalier de l'Université de Montréal (CHUM), Montreal, Canada
2. Nephrology and Transplantation Division, Centre hospitalier de l'Université de Montréal (CHUM), Montreal, Canada
3. Department of Social and Preventive Medicine, School of Public Health, Université de Montréal, Montréal, Canada

## BACKGROUND

- Living kidney transplantation (LKT) offers the best medical outcomes for organ recipients. (1)
- Historically, our centre (CHUM) had a low rate of LKT (between 10% and 20% of all renal transplantations performed). (2)
- In 2009, in an effort to increase living organ donation (LOD), a dedicated team was created. Its mandate was to promote LOD at our centre and referring centres, to coordinate assessments of living organ donors, to facilitate the process, and to ensure long-term follow-up after the donation.
- This dedicated team included a nephrologist, transplant surgeons, a nurse, a transplant coordinator, two psychologists (one for the living donor and one for the recipient) and one social worker.

**Aim of study:** to document the impact of this team by comparing LOD rates at our hospital from 2005 to 2008 and from 2009 to 2012

## METHODS

Using our electronic database, we conducted a retrospective analysis of all living organ donors who contacted our centre from 01-01-2005 to 31-12-2008, and from 01-01-2009 to 31-12-2012. Follow-up was conducted until 31-12-2013.

## RESULTS

**Table 1: Number of Donors and Recipients**

	Cohort 1 (2009–2012)	Cohort 2 (2005–2008)	P
<b>Donors</b>	304 (13 altruistic donors)	191 (no altruistic donor)	
<b>Recipients</b>	203	150	NS
<b>Average D per R</b>	1.50	1.27	NS

## RESULTS

**Table 2: Donor Characteristics**

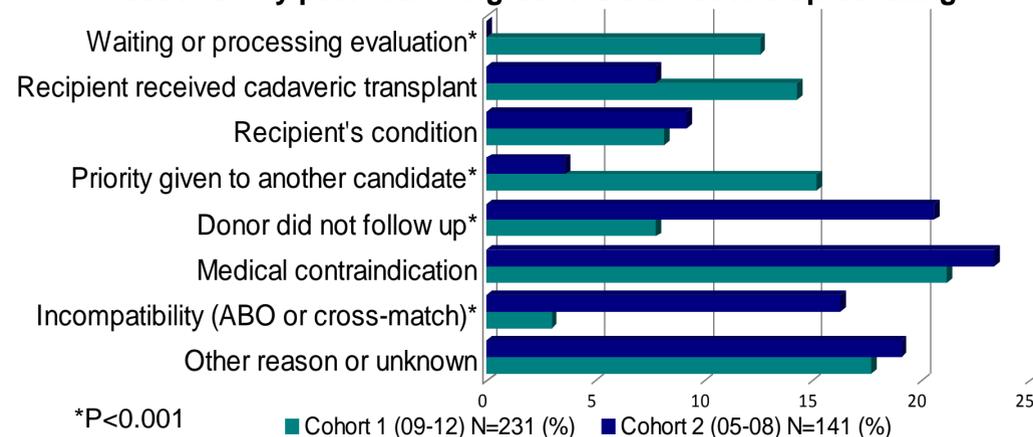
	Cohort 1 (2009–2012)		Cohort 2 (2005–2008)	
	Potential Donors N = 304 (%)	Actual Donors N = 73 (%)	Potential Donors N = 191 (%)	Actual Donors N = 50 (%)
<b>Gender</b>				
Male	120 (39.5)	34 (46.6)	81 (42.4)	20 (40)
Female	184 (60.5)	39 (53.4)	109 (57.1)	30 (60)
Unknown			1 (0.5)	
<b>Age</b>	47.7 12.6 years	47.3 11.2 years	46.4 11.3 years	45.6 8.8 years
<b>Relationship with recipient</b>				
Related <sup>1</sup>	165 (54.2)	45 (61.6)	118 (61.8)	37 (74.0)
Unrelated <sup>2</sup>	137 (45.1)	28 (38.4)	70 (36.6)	13 (26.0)
Unknown	2 (0.7)		3 (1.6)	
<b>Blood group</b>				
A	93 (30.6)	22 (30.1)	54 (28.3)	18 (36)
B	23 (7.6)	3 (4.1)	10 (5.2)	1 (2)
AB	5 (1.6)	0	1 (0.5)	0
O	152 (50)	48 (65.8)	101 (52.9)	31 (62)
Unknown	31 (10.2)		25 (13.1)	
<b>Time interval between first contact and organ procurement</b>		397.0 242.8 days*		249.5 236.4 days*

\*p<0.005

1. Related = genetically related

2. Unrelated = anonymous donor and emotionally-related donor such as spouse, friend, etc.

### Reasons why potential living donors did not end up donating



## DISCUSSION

- The implementation of a dedicated LOD team increased by 59.2% the number of potential donors who contacted our centre, resulting in 46% more LKTs.
- Although there are more donors in cohort 1, conversion rate is almost the same (24% in the cohort 1 and 26% in the cohort 2). This can be explained by the number of potential donors in cohort 1 waiting for an assessment (12.6%) and by the fact that there are, in some cases, many donors for one recipient (15.2% give up because priority was given to another potential donor for the same recipient in cohort 1).
- In cohort 2, incompatibility was one of the major reasons potential donors did not finally donate (16.3%). In cohort 1, incompatibility was no longer an important reason for not proceeding to donation (3%), since the Living Donor Paired Exchange (LDPE) kidney transplant registry had been put in place. Eight LKTs have been performed through the LDPE since 2010.
- There was a longer time from first contact to conclusion in Cohort 1 than in Cohort 2. One of the explanations for this finding is that incompatible pairs who had been approached had to wait until the LDPE was implemented in the province of Quebec at end of 2010.
- These data support the creation of dedicated LOD teams to increase LKT.

## REFERENCES

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