

MEETING ABSTRACT

Open Access

# Use of elder donors for cadaveric single kidney transplantation: a new evolution or an unacceptable risk?

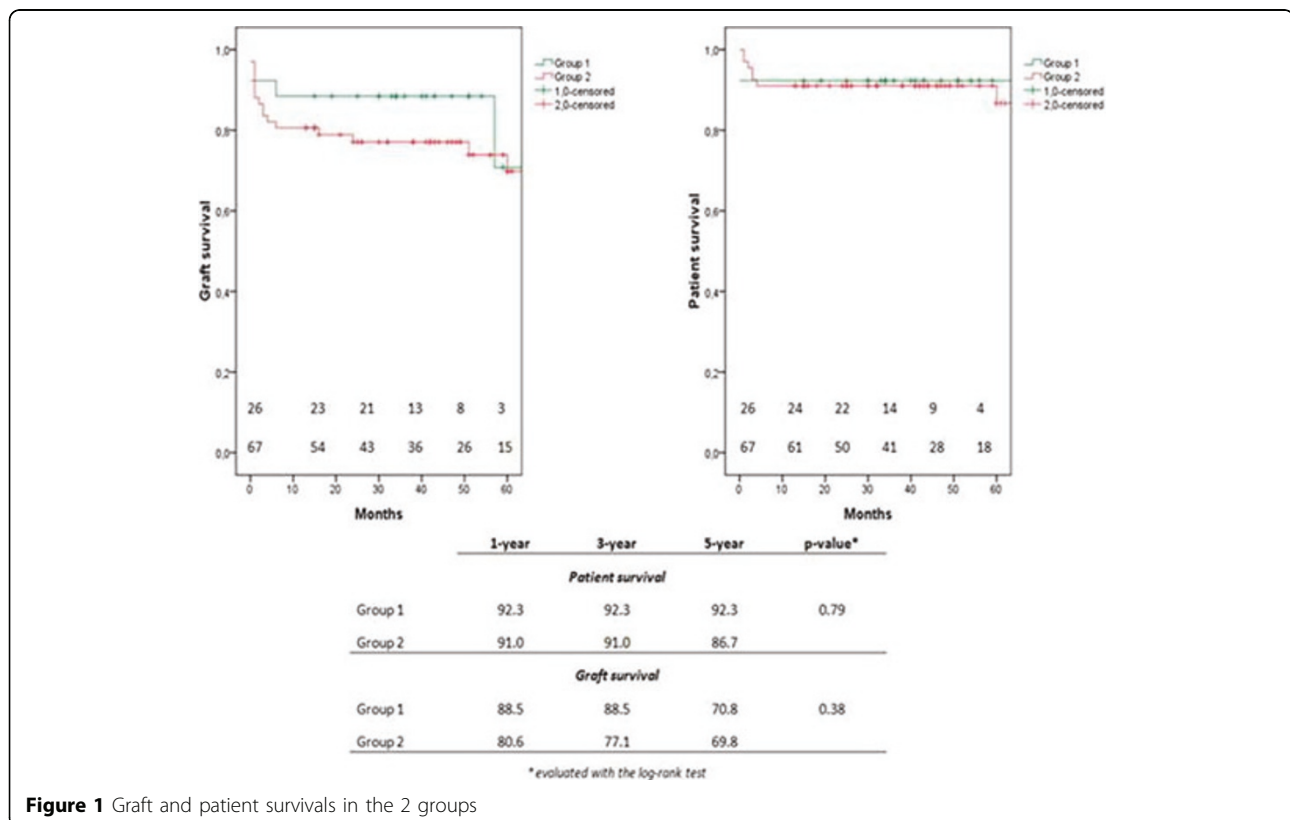
F Melandro, Q Lai\*, F Nudo, G Spoletini, GB Levi Sandri, L Poli, R Pretagostini, PB Berloco

From XXIII Annual Meeting of the Italian Society of Geriatric Surgery  
 Lecce, Italy. 2-4 December 2010

## Background

Organ shortage and long waiting times represent relevant issues in modern kidney transplantation [1]. Expansion

of the donor pool using Extended Criteria Donors (ECD) represents a way to partially resolve these limits. ECDs are defined by UNOS as  $\geq 60$ -year aged donors or



**Figure 1** Graft and patient survivals in the 2 groups

\* Correspondence: [lai.quirino@libero.it](mailto:lai.quirino@libero.it)  
 Department of General Surgery and Organ Transplantation, Sapienza University, Rome, Italy  
 Full list of author information is available at the end of the article

50-59-year aged donors with at least 2 of 3 risk factors (pre-procurement serum creatinine >1.4 mg/dl, cerebrovascular accident and history of hypertension) [2]. However, use of ECD seems to be related to worse results in terms of graft function and survival [3]. Moreover, no data exist with regard to comparison between over-60 and 50-59-year aged donors. The aim of this study is to analyze the cohort of ECD transplants performed in our Department, evaluating the role of donor age on results.

## Materials and methods

From January 2004 to May 2009, 95 single kidney transplantations using ECDs were performed. The entire cohort was stratified in 2 groups: Group A (50-59 years, n=26) and Group B ( $\geq$  60 years, n=69). Donor, recipient and transplant characteristics were compared using the chi-squared and the Mann-Whitney test. Patient and graft survival were analyzed by the Kaplan-Meier method and compared using the log-rank test.

## Results

Group A presented younger donors (55 vs 67 years) and recipients (53 vs 58 years), a higher number of donors with previous history of hypertension (92% vs 43%) and higher pre-harvesting creatinine values (1.2 vs 0.9 mg/dL). Post-transplant graft function did not present statistical differences. Five-year patient and graft survival results were similar (Fig. 1).

## Conclusions

Use of ECD seems to be safe, even using very elderly donors. In our experience, biopsy-driven selection is exclusively performed in over-60 donors. Starting from this consideration, we could speculate that the use of biopsy in over-60 donors allows "bad donors" to be excluded obtaining similar survival rates with respect to younger donors. Systematic use of biopsy in 50-59-year donors with risk factors could further improve outcomes.

Published: 24 August 2011

## References

1. Sung RS, Guidinger MK, Lake CD, McBride MA, Greenstein SM, Delmonico FL, *et al*: Impact of the expanded criteria donor allocation system on the use of expanded criteria donor kidneys. *Transpl* 2005, **79**:1257-1261.
2. Metzger RA, Delmonico FL, Feng S, Port FK, Wynn JJ, Merion RM: Expanded criteria donors for kidney transplantation. *Am J Transplant* 2003, **3**(suppl 4):114.
3. Stratta RJ, Rohr MS, Sundberg AK, Farney AC, Hartmann EL, Moore PS, *et al*: Intermediate-term outcomes with expanded criteria deceased donors in kidney transplantation: a spectrum or specter of quality? *Ann Surg* 2006, **243**:594-601.

doi:10.1186/1471-2318-11-S1-A34

Cite this article as: Melandro *et al*: Use of elder donors for cadaveric single kidney transplantation: a new evolution or an unacceptable risk? *BMC Geriatrics* 2011 **11**(Suppl 1):A34.

Submit your next manuscript to BioMed Central  
and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

Submit your manuscript at  
[www.biomedcentral.com/submit](http://www.biomedcentral.com/submit)

