

FAVORABLE OUTCOME OF OLDER MEDICALLY COMPLEX LIVING DONOR: MONOCENTRIC EXPERIENCE.

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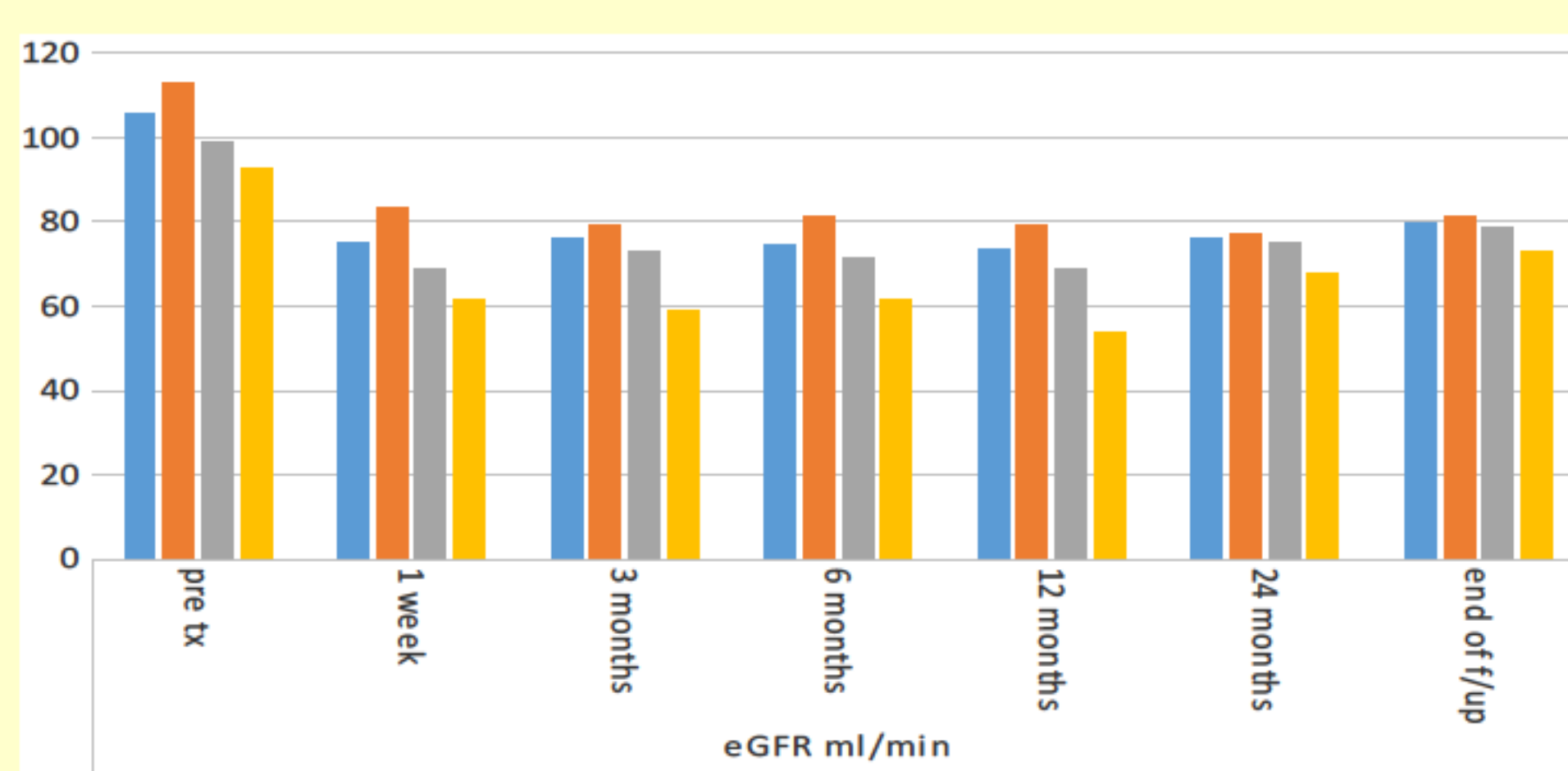
Objectives:

Given the favorable outcomes of living kidney transplantation and the increasing shortage of organs, evaluation criteria for living donors have become wider across the years to expand donor pool. Older age and some specific mild medical abnormalities are nowadays tolerated and "medically complex" living donors are now accepted in living donor transplantation programs.(1,2) While this trend has successfully expanded the live donor pool, it has raised concerns as to which acceptance criteria are safe (3,4).

Methods:

Retrospective Analysis of 116 living donor accepted for donation (1985-2013) in a single transplantation center. We define medically complex donors as those with any one of the following attributes: hypertension(>140/90), BMI>30, stone disease, dyslipidemia, impaired glucose tolerance, mild cardiopathy. We analyze also short and long term minor and major complications related to the donation. We define as short term complications: infections, bleeding, pneumotorax, other complications. We define as long term complication: impairment in renal function, Proteinuria, De novo hypertension and cardiovascular diseases

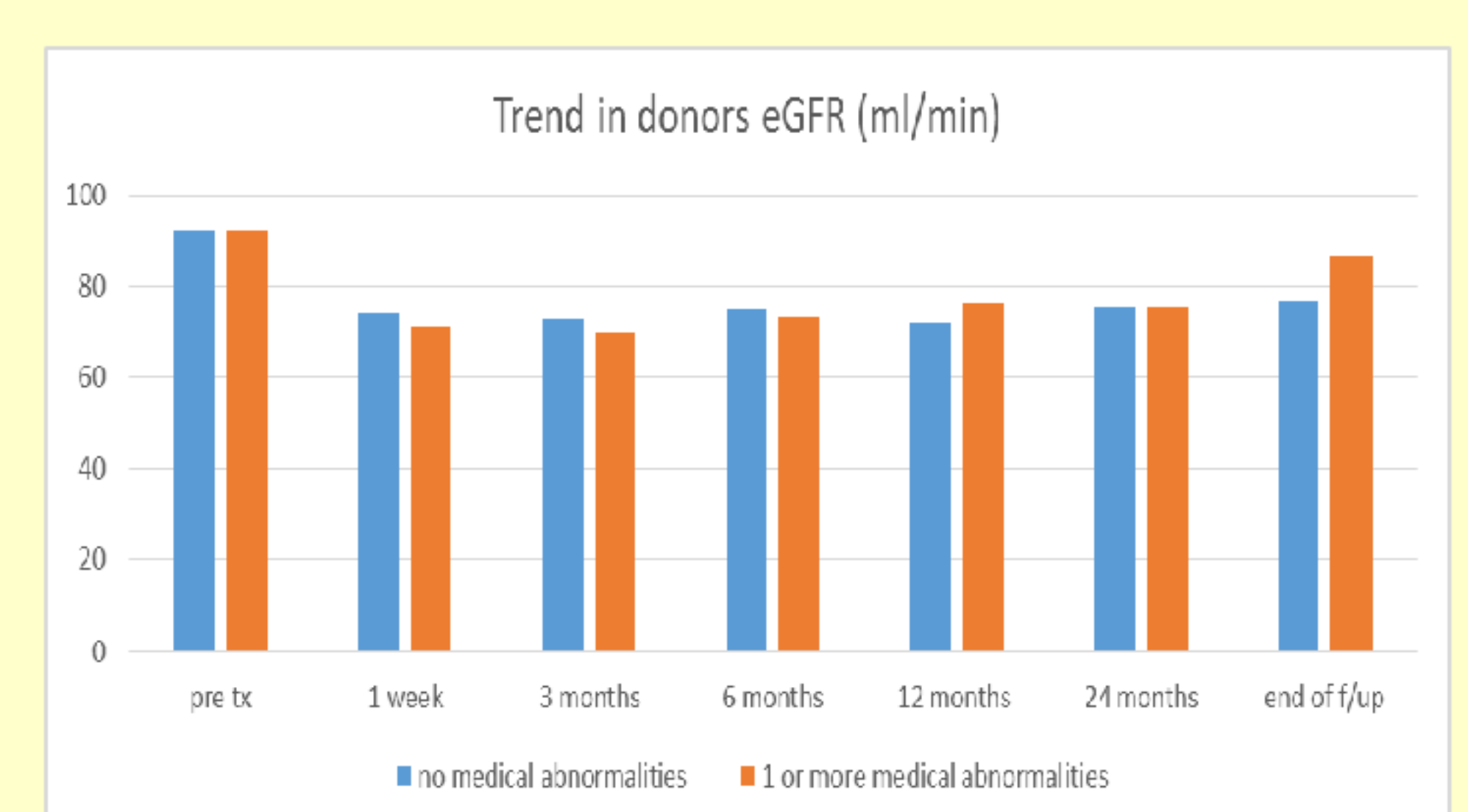
Fig. 1 Trend in living donor eGFR by age



Tab. 1 Pre donation medical abnormalities in Living donors

	Tot living donors	Living donors ≥ 60 yrs	Living donors < 60 yrs
Hypertension	12,9%	28,5%	9,3%
BMI > 30	2,6%	0%	3,1%
Dislipidemia	14,6%	19%	13,4%
Mild Cardiopathy	2,6%	0%	3,1%
Nephrolitiasis	6%	9,5%	5,2%
Impaired glucose tolerance	0,9%	0%	1%

Fig. 2 Trend in living donor eGFR by medical conditions



Results:

Among living donors 18,1% are > 60 yrs; 26,8% is characterized by medical abnormalities that appear to be related to age: among donors > 60 yrs, 38% are medically complex. Tab. 1. At the end of the f/up (mean f/up 84,2±66,4 months) no difference develops between donors < and ≥ of 60 yrs in terms of patient survival, 98,9% vs 100%, and renal function (eGFR: 80,76 ± 22,4 ml/min vs 72,76 ± 25,51 ml/min, p=0,29; Crs: 1,05 ± 0,21 mg/dl vs 1,06 ± 0,15 mg/dl; pto: 0,12 ± 0,11 g/die vs 0,07 ± 0,06 g/die). Fig. 1. Similarly we observe no differences in terms of renal function between donors with and without medical abnormalities (at the end of the f/up: eGFR 86,9 ± 25,26 ml/min vs 76,93 ± 20,74 ml/min, Crs 1,03 ± 0,18 mg/dl vs 1,05 ± 0,21 mg/dl, Pto: 0,14 ± 0,18 g/die vs 0,1 ± 0,09 g/die) Fig. 2. With regard to complications we have not noticed any significant difference between donors ≥ and < 60 yrs (respectively 23,8 % and 20 %; P= ns) and between donors with and without medical abnormalities although with a trend to have more short term complications in medically complex donors (respectively 32,2 % and 17,8%; p=ns). 18,1% of donors develops de novo hypertension, 16,3% develops dyslipidemia and 1,4% develops cardiovascular diseases with no incidence differences between older and younger donors and between non medically and medically complex donors.

References:

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Conclusions:

In our monocentric experience "marginal" living donor transplantation provides for good results for the recipient with no apparent supplementary risks for the donor. With the increasing age the living donor become more "medically complex". With the lack of strong outcome data in literature on donors with medical complexities is extremely important to determine a convincing risk assessment. (5,6) In this context is mandatory to ensure a very careful pre-donation evaluation with additional examinations and to involve the donor in an intensive short and long term follow up. Data deriving from our experience suggest that wider acceptance criteria could be used in the older donor more safely than in younger minimizing long term risks.

