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# Pregnancy, CKD and solitary kidney: kidney donation between clinical logic and taboos

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## **Abstract**

On the occasion of the Congress of the American Society of Nephrology, the yearly issue of the NEJM introduces a selection of articles of interest for Nephrology, drawing attention to the incidence of hypertensive disorders of pregnancy in kidney donors.

The article reconsiders this issue five years after two studies that described an increase in risk for adverse pregnancy outcomes after kidney donation. It disproves a previous assumption of "non-interference" between kidney donation and pregnancy outcomes.

Meanwhile, CKD has been recognized as a risk factor for pregnancy, regardless of the presence of reduced renal function, hypertension and proteinuria, although these factors modulate the risk.

In the discussion, the authors help to dispel the taboos that donor women are substantially different from women born with a solitary kidney or were so as an effect of a disease. Beside the issue of transplantation, the study indicates that we have to pay attention to all patients with CKD in pregnancy, giving us a very interesting clue for counselling. The risk of complications is greater in the donor population compared to a "low risk" population, but it is roughly equal to that of the general population, if the latter is not subject to a careful clinical work-up. Control and follow-up offset the risk: in a time when economic cuts to health care are almost killing the prevention programs, this is probably the most important message.

**Key words:** kidney donation, preeclampsia, pregnancy, single kidney

The issue of the New England Journal of Medicine that, every year, introduces a selection of articles of particular interest for our specialty, on the occasion of the Congress of the American Society of Nephrology, this time grants space to a matter of boundary among different specialty: the incidence of hypertensive disorders of the pregnancy in the women who donated a kidney (1)

The article, conducted by the Canadian epidemiologists with their usual methodological elegance, proposes the matter of pregnancy in kidney donors at five years of distance from a couple of studies, twinned on the American Journal of Transplantation, that described, with different methodology, an increase of risk for adverse pregnancy outcomes after kidney donation (2) (3). The two works confuted a previous assumption of "non-interference" between kidney donation and pregnancy that, indeed, belonged to a period when the kidney donation was about "the best kidneys for the best patients" (4).

Meanwhile, everything changed.

The term chronic renal failure disappeared in favor of chronic kidney disease (CKD) and CKD has been recognized as a risk factor for pregnancy, regardless of the presence of reduced renal function, hypertension and proteinuria, although these factors are known to substantially modulate substantially the risk (5) (6) (7).

In this regard, a praise goes to our Canadian fellows, that, in the long and diplomatic discussion, help to dispel the taboos that donor women are substantially different from women who were born with a solitary kidney or were so as an effect of disease.

If the clinical logic wins the cultural taboo, why should the hypertensive disorders of pregnancy in kidney donors be of high interest for the Nephrologists on one of the countries with lower incidence of living donation? (8)

Firstly because the study teaches us that we have to pay attention to all patients with CKD in pregnancy, from the beginning of the disease history.

Secondly, because it induces us to doubt of all axioms, not to deny them, but to overcome them, fully enjoying the dialectical aspects of our profession. Not least, because it gives us a very interesting suggestion for counselling: the risk of complications is greater in the donor population compared to a "low risk" population, but it is roughly equal to that of the general population, if the latter is not subject to a careful clinical work-up. Control and follow-up offset the risk: in a time when economic cuts to health care are almost killing the prevention programs, this is probably the most important message.

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