

Ipsilateral Placement in Double-Kidney Transplantation: An Old Technique in a New Fashion

We read with interest the communication of Gaber et al. (1) from Memphis, Tennessee describing the ipsilateral (monolateral) placement of both adult deceased donor kidneys into a single recipient in double (dual) kidney transplantation (DKT). The first DKT was reported in 1996 by Johnson et al. (2) as shown in Gaber et al. article. The authors mentioned that there was no prior description available for monolateral positioning of DKT (MPDKT).

We report that the first description of MPDKT was published in 1998 by Masson and Hefty (3) with a very similar figure of the technique as published by the Memphis group. In that report, no such detailed description of ipsilateral technique was given but the technique was described briefly. However, as it was the first report with the detailed figure of the technique, we believe that it should have been mentioned in such surgical technique article.

Besides the first report by Masson and Hefty, we recently published 29 cases of MPDKT from marginal donors in an "old-for-old" allocation policy (4). In our report, we described the MPDKT technique in ample details in comparison with the first report and we provided a detailed figure of our technique in MPDKT.

Interestingly, Gaber et al. (1) did not provide the figure of their surgical technique, especially of interest in vascular anastomoses. The authors mentioned that the preference of arterial anastomosis for the first kidney is proximal internal iliac artery after suture ligation of the distal end (1). However, the

surgical artwork shows an end-to-side anastomosis, which is an option for the authors and which was already shown by Masson and Hefty (3) and our group (4). Besides, the authors described the same technique for ureteral anastomosis (combined) as Masson and Hefty.

Approximately a decade after the description of the MPDKT in an adult recipient, the usage of DKT has recently blossomed because of the important increase of older deceased donors and their optimal usage at long term (5). The assessment of preoperative biopsy of older donor kidneys could be of help to the surgeons to perform either DKT, single kidney transplantation, or discard them (5, 6). The MPDKT has had particular interests reducing the operating time and surgical trauma, and leaving the contralateral iliac fossa for further retransplantation as much as it had many doubts because of compression of the anastomosed vessels and surgical hurdles of the technique itself especially on older recipients.

Our group has reached more than 65 cases of MPDKTs using the described technique in previously published article (4) and we have experienced only one case of renal vein thrombosis in a patient with a heterozygosity for Factor V Leiden gene mutation (4, Ekser and Rigotti, Unpublished data).

The question remains whether the technique described by the Memphis group would result in an actual novelty as a surgical procedure and also in the graft outcomes. We think that our previously described and refined surgical

technique has so far yielded excellent operative and survival data.

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Author's Reply: Ipsilateral Double Kidney Transplantation

The authors thank Dr. Ekser and his colleagues for their comments on our recently published article (1). We certainly agree that Masson and Hefty

(2) and Ekser et al. (3) should be credited for their earlier description of placement of two kidneys on the same side. Our article was written, as stated

in the article, to provide a detailed technical description of the procedure that could be useful for the practicing surgeon. Besides the technical

details, we describe dissociating the bench preparation from the recipient operation as a crucial step in these procedures, and we describe different alternatives for revascularization of the kidneys. We regret the omission of the article by Masson and Hefty (2), which was not identified by our literature search. The publication by the Padua group (3) occurred during the interval between submission and publication of our article.

The use of two kidneys for transplantation in a single recipient has gained increasing acceptance the past few years as an answer to an evolving phenomenon; the rapid rise in both kidney recipient (4) and kidney donor (5) ages. The option of ipsilateral placement of two older donor kidneys provides,

as evidenced by the published and unpublished data of Ekser et al. (3), excellent outcomes for transplant recipients. We hope that more publications detailing alternative techniques and describing long-term follow-up will further establish the feasibility of this procedure.

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MELD and Gender in the Waiting List for Liver Transplantation

Huo et al. (1), using the methodology of our published paper (2), confirmed that the model for end-stage liver disease (MELD) score did not have a good performance to predict mortality beyond 3 months (3). In addition, the authors have validated our previous findings in their cohort of Asian patients with mainly hepatitis B virus-related cirrhosis on a liver transplant (LT) waiting list (2). In clinical practice, serum creatinine (Cr) is often discrepant in relation to the "true" glomerular filtration rate (GFR). Indeed, in our study (2), we were able to confirm that "true" GFR using ethylenediamine-tetraacetic acid-Cr⁵¹ (4) is lower (worse renal function) in females than in males cirrhotics, despite a lower Cr concentration.

Similar to our study (2), Huo et al. (1) also found that these discrepancies have a significant effect on MELD score calculation and may influence waiting list mortality. Although the superiority of MELD score is related to the impact of renal dysfunction on mortality in cirrhotics (5), Cr provides only a rough estimation of GFR and renal function (6). These findings could explain the results of a recent study, reported in abstract form, which showed that women evaluated in a MELD-based allocation system for LT in the USA have higher mortality and thus are less likely to undergo LT than men (7).

The main issue from our paper (2), that female gender might negatively influence the chances of receiving a liver transplant with respect to men, was not answered convincingly by Huo et al. (1). The authors did not clarify if the patients were stable at their initial evaluation, did not report the causes of deaths in the cirrhotics who finally died without receiving a liver transplant, and excluded 10 patients who underwent LT during the study period. In addition, it is known that in the MELD-based allocation system, MELD score is re-calculated and all patients are prioritized according to their last and not the baseline MELD score. In addition, Huo et al. (1) did not provide the range of difference they found or details of if it worsened with higher MELD scores, that is the candidates at the top of the list. In our study (2) we found a 3-point difference in 75% of females with MELD scores >19 points.

Huo et al. (1) suggested that a corrected-Cr MELD in females may only be justified in predicting intermediate-term (9- and 12-month). However, the time on the waiting list cannot be assessed accurately and may be longer than 6 months (e.g. according to recent UNOS data, the mean waiting time to LT: 250 days) (8).

Thus, we believe that further evaluation is needed before discounting

gender differences related to Cr in prioritization for LT. Furthermore, in centers that have a wide ethnic mix, female Asian candidates will have a greater discrepancy between GFR and Cr, compared to non-Asian females. Moreover, these differences are not accounted for by calculated GFR formulas. If further studies confirm our findings (2), then a correction factor for gender should be introduced or a more accurate serum marker of renal function could be used, such as cystatin-C (9) to be substituted in prognostic scores including MELD.

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