参考資料 6

ELSEVIER

Use of Kidneys From Anti-HCV Positive Donors

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PEREIRA et al[1] demonstrated that transmission of HCV infection occurred in 100% of the patients receiving a kidney from an HCV RNA positive donor and 50% of infected patients developed chronic liver disease. This observation in the early 1990s has led several procurement centers to advocate that all HCV-infected kidneys should be discarded. This policy has remained controversial because there are other studies showing that transmission of HCV infection and the subsequent development of chronic liver disease were uncommon.[2] The heterogenicity of data on the rate of transmission has not been well explained, but undoubtedly renal transplant patients who receive kidneys from HCV-positive donors have a high risk on liver disease.[1] Therefore, according to current information the widely held opinion is that HCV-positive kidneys should not be transplanted into HCV-negative recipients.

The problem is that a complete restrictive policy of discarding kidneys from HCV-positive donors will aggravate organ shortage. Some authors have therefore suggested that kidneys from HCV-positive donors should be transplanted into HCV-positive recipients.[3] There are several arguments against this approach and solid arguments for the use of these kidneys, mainly that organ shortage is very important and many patients on the waiting list for transplantation will die before receiving a kidney transplant.

In 1990, our two hospitals in Spain introduced the policy of accepting kidneys from HCV-positive donors for HCV-positive recipients after full information and informed consent.[4] The Spanish Transplant Organization supported this policy. The results of our prospective study showed no differences in terms of the prevalence of liver disease (32% vs 56%, respectively), graft survival (96% vs 93%) and patient survival (100% vs 98%) in 24 anti-HCV positive patients who received kidneys from anti-HCV positive donors compared with 40 anti-HCV positive recipients who received kidneys from HCV negative donors.[5] These results are in agree with retrospective studies from Los Angeles[6] and Washington[7] and indicate that transplantation of kidneys from anti-HCV positive donors into HCV-positive recipients is relatively safe at least for a period of 5 years.

However, in our study, when HCV RNA was determined in all available serum, we showed that 80% of HCV-positive but RNA-negative patients who received a kidney from an HCV RNA-positive donor turned to have a positive HCV RNA after transplantation, 50% of them developing chronic liver disease.[5] Therefore, these results suggest that HCV-positive kidneys should be offered to HCV RNA-positive recipients only. So, this policy was adopted in our Hospitals in 1993. In HCV-positive patients in our waiting list, HCV RNA is determined every 6 months. Widell et al[8] pointed out that superinfection is possible with a new genotype[8] although in a short-term follow up there were no important clinical consequences. Matching donors and recipients for HCV genotype would be desirable to minimise the risk of superinfection. HCV-positive patients on the waiting list for transplantation should be therefore tested for HCV RNA and genotype.

In Spain, kidneys from HCV-positive donors are transplanted in some hospitals into HCV-positive recipients only. Long-term experience (10 years) with this policy shows that liver disease (50% vs 44%), graft (74% vs 79%), and patient survival (89% vs 87%) are not different in 98 patients compared to 158 HCV-positive recipients who received organs from HCV negative donors.[9]

In summary, because of shortage of organs, we propose that HCV-positive donors may be offered to HCV RNA-positive recipients. Full information and informed consent are mandatory. Matching donors and recipients for HCV genotype would be desirable and measures to minimize the effect of HCV infection in renal transplant patients should be recommended.

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