A) COMMENTS ON PUBLISHED ARTICLES

Comment on "Acute rejection of Non-functioning Renal Graft in Dialysis Patients after Starting Treatment with Interferon and Ribavirin"

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To the Editor,

With regard to the study published by Cavero-Escribano et al.[1], I wish to congratulate the authors on their initiative and attitude in face of the consequences of the immunomodulatory properties of interferon (IFN)[2]. Three clinical cases are presented in the article in addition to eleven in the literature that presented acute rejection of non-functioning renal graft after treatment with IFN, to which one more seen by our group can be added[3].

According to our experience, three out of four patients treated with IFN plus ribavirin in recent years in our hospital had not-functioning grafts at the time of antiviral treatment. To prevent anaemia secondary to ribavirin, ribavirin doses were adjusted according to blood levels with good haematocrit results after treatment with iron and colony-stimulating factors. One patient, however, presented acute rejection, sharply intensified anaemia and required a transfusion of packed red blood cells. The other two treated patients with renal grafts showed no acute rejection after combined antiviral treatment. One was blood group O negative and his renal graft remained functioning for 23 years. It was from a live donor, his mother, after also receiving from her three packed RBCs and having a positive cross-match a year prior to transplant, which later became negative. The other patient who did not suffer acute graft rejection did not show any different characteristics to the rest of the group, except for longer time between re-starting dialysis and treatment with IFN (45 months vs. 9 and 15).

Treatment with IFN can cause alloantibody synthesis, and is responsible for acute renal graft rejection[2]. Patients with failed transplants, although there is no risk as to renal function, except for the loss of residual diuresis, can suffer from a "graft intolerance syndrome" (GIS), consisting of acute anaemia, local pain and elevation of acute phase reactants. If ribavarin induced anaemia is added to GIS anaemia, treatment becomes difficult despite high doses of iron and erythrocyte stimulating factors[4]. This increases the probabilities of transfusion in these patients.

In addition, blood transfusions may induce the formation of anti-HLA antibodies in the recipient, and create a state of immunological hypersensitivity which greatly hampers the success of a future renal transplantation[5-7].

Consequently, I humbly endorse Cavero-Escribano et al.[1] recommendations that, in patients in dialysis that may be treated with IFN plus ribavirin, pending results of further studies with non-anaemia causing drugs, it is advisable to practice embolisation or nephrectomy before starting antiviral therapy. We suggest avoiding any factor which may contribute to anaemia in any patient with chronic kidney disease, but more especially in those who may be transplant recipients.

Conflicts of interest

The author declares that she has no conflicts of interest related to the contents of this article.

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