LETTER TO THE EDITOR

Comment on: Is the renoprotective effect of erythropoietin in chronic kidney disease a myth?

Dear Editor,

We read with great interest the article by Yeh and colleagues,1 entitled “Is the renoprotective effect of erythropoietin in chronic kidney disease a myth?”, published in the esteemed Journal of the Formosan Medical Association. In this article, they discussed the evidence in favor of the renoprotective potential of erythropoietin in patients with chronic kidney disease. However, they suggested further clinical studies to decide when to start erythropoietin treatment and determine the optimal erythropoietin dosage for slowing disease progression in patients with chronic kidney disease. More importantly, they speculated that the application of erythropoietin for kidney protection might need to be prior to that for erythropoiesis.1 In this context, we would like to present a few points about the kidney protective effect of erythropoietin. In a study of 40 male Wistar rats, performed to evaluate the ameliorative effect of erythropoietin on tubular cells, we found that erythropoietin was able to prevent the increase in serum creatinine and blood urea nitrogen levels. Furthermore, coadministration of gentamicin and erythropoietin effectively reduced the kidney tissue damage induced by gentamicin, compared to the control group. Our investigation disclosed the kidney protective effect of erythropoietin, when the drug was given in combination with gentamicin. However, the protective properties of erythropoietin were evident even when the drug was applied after induction of tubular damage by gentamicin, and it was still effective after tissue injury.2 This indicates that erythropoietin may have a curative effect, in addition to its preventive properties.2 Thus, erythropoietin is a promising kidney protective agent that can prevent, ameliorate, or attenuate tubular damage induced by gentamicin or other nephrotoxic agents such as cyclosporine.3,4 Various studies have also shown the beneficial effect of erythropoietin on renal allograft survival. It seems reasonable that we start erythropoietin prior to erythropoiesis, as Yeh et al1 described in their article; however, the curative effect of this drug should also be considered. In this regard, to better understand the renoprotective properties of erythropoietin, more experimental or clinical studies are suggested.

Conflicts of interest

The authors have no conflicts of interest relevant to this article.

References


Mahmoud Rafieian-Kopaei
Medical Plants Research Center, Shahrekord University of Medical Sciences, Shahrekord, Iran

Hamid Nasri*
Department of Nephrology, Division of Nephropathology, Isfahan University of Medical Sciences, Isfahan, Iran

*Corresponding author. Department of Nephrology, Division of Nephropathology, Isfahan University of Medical Sciences, Isfahan, Iran.
E-mail address: hamidnasri@med.mui.ac.ir

25 April 2013

DOI of original article: http://dx.doi.org/10.1016/j.jfma.2013.05.005.