

Letter to the Editor

Ellagic acid protects against cisplatin-induced nephrotoxicity in rats: a dose-dependent study

Dear Editor,

We read with great interest the recently published article in the esteemed Journal of "Eur Rev Med Pharmacol Sci", by Al-Kharusi et al, entitled "Ellagic acid protects against cisplatin-induced nephrotoxicity in rats: a dose-dependent study"¹. The study has aimed to investigate the ability of different doses of Ellagic acid to ameliorate cisplatin nephrotoxicity in rats. They found that Ellagic acid ameliorated most of the physiological, histological, and biochemical markers of cisplatin nephrotoxicity. We would like to mention a few points about cisplatin renal toxicity. In an experimental investigation, on 27 ovariectomized female Wistar rats, we observed² that estrogen attenuates defending property of erythropoietin against cisplatin-induced renal toxicity in ovariectomized rats. Also to study the protective properties of L-arginine on cisplatin-induced kidney toxicity, we found³ that L-arginine had a protective effect on cisplatin-induced renal toxicity in male rats; however it intensifies the induced damage in female rats. In this study, we concluded a gender related difference in rat model of cisplatin nephrotoxicity. In another study⁴ we observed that losartan as an angiotensin receptor blocker could prevent cisplatin renal toxicity in males, however it intensifies the cisplatin -renal damage in female rats. We concluded that, sex difference of cisplatin nephrotoxicity could be related to the renin-angiotensin system receptors in the kidneys⁴⁻⁹. Additionally, we recently found¹⁰ that vitamin E, vitamin C, or losartan have not ameliorative effects against cisplatin-kidney toxicity in presence of estrogen in ovariectomized rat model of cisplatin toxicity, which agree with our previous findings. Therefore, it is well established that there is a gender difference in the cisplatin-renal toxicity in rat model. Indeed, it is well recognized that some conditions leads to chronic kidney diseases are sex related^{5-9,11-13}. However, few studies published regarding gender difference in cisplatin-renal toxicity. Thus, there still needs to more investigate mechanisms interact in cisplatin nephrotoxicity specially on sex difference^{10,14}.

Conflict of Interest

The Authors declared no competing interests.

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H. Nasri

Department of Nephrology, Division of Nephropathology,
Isfahan University of Medical Sciences, Isfahan, Iran