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Nicorandil and Contrast-Induced Nephropathy

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We read the article "Preventive Effects of Nicorandil Against Contrast-Induced Nephropathy in Patients With Moderate Renal Insufficiency Undergoing Percutaneous Coronary Intervention" with interest.[1]

Contrast-induced nephropathy (CIN) has become the third leading cause of hospital-acquired renal injury because of the increasing number of invasive procedures performed using contrast agents.[2] Contrast-induced nephropathy is affected by many factors.[3] The effect of procedural glucose level on CIN was shown[4] and a commonly prescribed drug, metformin, has an adverse effect in the diabetic population after contrast agent exposure.[5] Patients with CIN are at increased risk of long-term loss of renal function, cardiovascular events, and death.[6]

Another widely used drug, trimetazidine, which is effective in angina treatment, has been shown to be effective in CIN.[7-9] Trimetazidine has an antioxidant effect, inhibits excess release of oxygen-free radicals, limits cellular acidosis, and decreases peroxidation of membrane lipids.[10] It also has anti-inflammatory effects and inhibits neutrophil infiltration.[11]

Zhang et al investigated several characteristics of patients and there is a diabetic population in the nicorandil and control groups,19.2% and 23.2%, respectively.[1] But there are no details about metformin use, preprocedural glucose levels, or trimetazidine administration.

Do Zhang et al have data about metformin and trimetazidine use or preprocedural glucose levels? These parameters could affect the interpretation of the study.

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