To the Editor.—Acute renal failure (ARF) is a severe perioperative complication and, until today, strategies to avoid it remain controversial.1 Kheterpal et al.2 performed an informative retrospective analysis on this topic, underlining the impact of perioperative ARF on patient mortality. Moreover, they identified several independent predictors of ARF in noncardiac surgery. To have them in mind will be useful for our daily practice.

However, the authors’ conclusions regarding intraoperative risk factors drawn in the abstract, despite being markedly attenuated in the main text, seem somewhat misleading to us, especially in combination with the title announcing a study on “Patients with Previously Normal Renal Function.”2 To prevent general confusion regarding the perioperative use of vasopressors and diuretics, it is important to clearly stress that one major shortcoming limits a direct transfer of the findings to the healthy individual: More than 65,000 patients were primarily screened to evaluate the propensity of patients with certain risk factors to ARF. Unfortunately, not only those 6,534 patients without preoperative renal function measures were excluded from the study,3 but in addition 25,537 outpatient cases. In all, the investigators excluded the healthier part of their primary collective. To draw an overall conclusion questioning the use of vasopressors and diuretics in healthy patients from this preselected collective seems a bit overreaching to us. But a careful look into their subgroup analysis does not lower our concerns: In the low-, medium-, and medium–high-risk groups, only 0.8% of the patients receiving vasopressors and 1.5% of the patients receiving diuretics developed ARF. The authors themselves state that ARF occurs in 1–5% of all hospitalized patients,2 meaning that diuretics seem to have no influence and that vasopressors seem to even lower the risk of ARF. This picture is slightly changed when taking the high-risk patients into account. However, even now, the overall risk (vasopressors 4.8% and diuretics 2.3%) is still within the range anticipated in hospitalized patients.2

To make such a striking statement in the abstract is an unnecessary overinterpretation and falls short of this otherwise very well-performed retrospective analysis.

The above letter was sent to the authors of the referenced editorial. The authors did not feel that a response was required.—James C. Eisenach, M.D., Editor-in-Chief

References


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