injury predict 2-year mortality in patients with acute myocardial in-

[23] Schoolwerth AC, Sica DA, Ballermann BJ, Wilcox CS, Council on the
Kidney in Cardiovascular Disease and the Council for High Blood Pressure
Research of the American Heart Association. Renal considerations in
angiotensin converting enzyme inhibitor therapy: a statement for health-
care professionals from the Council on the Kidney in Cardiovascular
Disease and the Council for High Blood Pressure Research of the

et al. Postoperative intubation time is associated with acute kidney injury


eComment. Statin usage and acute renal injury: a long-drawn debate with
inconclusive results

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We read the article by Nemati et al. [1] in this study, they aimed to assess the
effects of preoperative administration of statins on lowering the incidence of post-
operative acute kidney injury in patients undergoing cardiac surgeries. We congratu-
late the authors on the study. However there are some contradictory points when
compared with literature.

In the literature, there is no consensus about the duration of perioperative statin
therapy. Some studies have shown the beneficial pleiotropic statin effects in
patients treated with a statin for longer than 1 week before cardiac surgery [2]. The
current study lacks detailed information on the duration of perioperative statin
therapy. There should also have been a subgroup analysis for the patients for the correl-
ation between duration of the statin usage and the postoperative acute renal failure

Besides statin dosage. In the study, the patients were categorized into one of the
three groups: no statin, low-dose statin or high-dose statin. However, the authors do
not present any information on their institutional criterion regarding the start of the
statin regimen. If this was in line with guidelines, there should be certain cut-off
levels. Current guidelines of the ACC/AHA and NCEP recommend a statin therapy for
patients with coronary artery disease (CAD), when serum LDL levels are higher than
100 mg/dl [3]. If these values are also correlated with the extension of the athero-
sclerosis, there should be also some occult lesions in other vascular sites such as
renal arteries, carotid arteries etc. These situations have a direct effect on post-
operative outcomes. However, the authors do not present any information on these
possible comorbidities. Also for the patient undergoing heart valve surgery, what
were the criteria for starting statin therapy?

In the literature, cardiopulmonary and total cross-clamp times and high tidal
volumes after cardiac interventions have been known to be potential risk factors for
developing kidney injury [4]. However, in the study, there is not enough information
on intra-postoperative data for such contributing factors.

The authors stated that they included 1064 consecutive patients into the study. We
have some doubts regarding the homogenous nature of the study as it is considered
a retrospective study. This high homogeneity of the study brings a possible selection
bias to mind. Since authors also do not recommend any patient with missing data in
a retrospective study, this situation also brings another question to mind regarding
the prospectively designed but retrospectively written nature of the study.

Conflict of interest: none declared.

References

[1] Nemati MH, Astaneh B. The effects of preoperative statins on the incidence of
postoperative acute kidney injury in patients undergoing cardiac surgeries.

at high risk for cardiovascular morbidity undergoing surgery: a review. Br J
Anaesth 2015;114:44–52.

statin therapy for patients undergoing cardiac surgery. Cochrane Database Syst