Author's response

Resposta do autor

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Authors' reply

In reply to the letter of Mallhi *et al.* about article entitled "Careful Selection of Predictor Variables of AKI for robust Regression Model in Intensive Care Unit" I appreciate for the considerations about our manuscript entitled "Predictors of Acute Kidney Injury and Mortality in an Intensive Care Unit".[1]

We think that serum creatinine (SCr) at admission in Intensive Care Unit is important predictor of acute kidney injury (AKI), dialytic AKI and mortality. Ponce *et al.*[2] in multivariate analysis identified baseline creatinine above 1.2 as risk factors for AKI. Luo *et al.*[3] deduced that a small increase in creatinine might be accompanied by increased mortality. Risk factors for increased level of serum creatinine and the development of AKI have been widely studied after cardiac surgery.[4]

Alkandari *et al.*[5] published the first AKI study in pediatric patients to evaluate the return of SCr to baseline values after AKI and the first to explore how early SCr increases can aid in predicting AKI in this population. Baseline SCr measurement were independent predictors of AKI development. Stepwise multiple logistic regression analysis was used to evaluate the independent effect of AKI on pediatric intensive care unit mortality. In a study of children undergoing cardiac surgery, Zappitelli *et al.*[6] found that early increases in SCr (< 50%) moderately predicted future overt AKI.

A preoperative risk prediction model consisting of seven predictors including lower estimated glomerular filtration rate for acute kidney injury was developed, with good predictive performance in patients undergoing orthopaedic surgery using logistic regression analysis.[7]

We understand the inclusion of SCr, urine output and electrolyte disturbances at admission in intensive care unit it can be appropriate for regression analysis and can provide useful predictors of AKI during the follow up until outcome. We recognized that the main limitations of our study were the reduced sample size. Future studies with bigger statistic power will be necessary.

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