Kidney injury molecule-1 (Kim-1) as an early marker for acute kidney injury in critically ill patients

Kareem Salah
Menoufia University, Egypt

Objective: To evaluate the role KIM-1 as an early marker for AKI in critically ill patients as compared to conventional markers (blood urea and serum creatinine).

Background: Depending on traditional markers for renal functions, namely blood urea and serum creatinine has lead to unacceptable delay in diagnosis and in initiating treatment.

Methods: This study included 89 subjects: 79 critically ill patients, 10 healthy subjects served as controls. All the patients were prospectively followed from the time of ICU admission. Blood and urine samples were collected simultaneously at predetermined time points: At time of ICU admission, 6 hours after arriving, 12 hours after arriving and daily for a minimum of the next 2 days and up to maximum 5 days. Baseline renal functions were defined by the value calculated on the time of ICU admission.

Results: KIM-1 can detect acute kidney injury as early as 6 hours from its occurrence and before elevation of the conventional markers by 48 hours at least. KIM-1 is (unlike the conventional markers) not influenced by age, sex and body mass index.

Conclusion: KIM-1 is a reliable indicator of morbidity and mortality in critically ill patients.

Biography
Kareem Salah was graduated from Faculty of Medicine, Tanta University in 2006. He has joined police academy in 2008 and graduated in 2009 as a first Lieutenant Doctor and worked in the police authority hospitals in General Medicine departments. He was enrolled in Master’s degree of Internal Medicine in 2009 at Faculty of Medicine, Menoufia University and obtained Master’s degree in 2012. Since 2015 he has been working as a Specialist of Internal Medicine in Maha Medical Polyclinics in Saudi Arabia.

kareem_salah2000@yahoo.com