Centro Regional de Enfermedades Renales Roberto González Barrera

DELAYED CROSS CONSULTATION TO NEPHROLOGY, A COMMON ISSUE.

AKI & CRRT Conference



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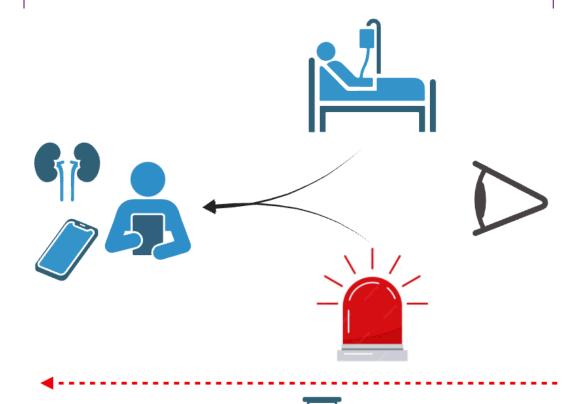
Introduction

Currently, the incidence of acute kidney injury (AKI) is higher than acute myocardial infarction, affecting up to 10 million people annually worldwide. AKI should not be seen only as a disease, but as a syndrome, which involves multiple factors and therefore deserves a multidisciplinary approach.

In the context of AKI, the non-nephrologists' physicians are responsible for evaluating patients and must have the ability to identify risk factors, to effectively stratify the risk of developing or progressing the renal insult.

Methods and Materials

A retrospective study was carried out at the Hospital Universitario "Dr. José Eleuterio González" in Monterrey, Mexico, where the cross consultations (CC) to the nephrology department between January and October of the present year were analyzed. Patients with a CC from the emergency department (ED) and the intensive care unit (ICU), with a complete clinical record, and with a diagnosis of AKI were included. Those with incomplete data or with chronic kidney disease were excluded. The information was collected into a database for statistical analysis.



Results

A total of 62 CC were analyzed. The mean age of the patients were 51.5 years, 40 patients (64.5%) were men. 24 (38.7%) CC were made from the ICU and 38 (61.2%) from the ED. 44 (70%) were diagnosed with AKI 3 according to KDIGO at the time of the CC.

The mean admission creatinine (CrS) was 4.5 mg/dL and a blood urea nitrogen (BUN) was 87.3 mg/dL, but by the time of cross consultation there were 5.6 mg/dL and 75.32 mg/dL of creatinine and BUN respectively. 43 patients (69%) had community acquired AKI (CA-AKI) defined as those with a serum creatinine more than 1.2 mg/dL at admission. Among patients with CA – AKI, 34 (54.8 %) had early CC. The mean hours between admission and CC were 109 hours.

The Spearman's rank correlation between the time it took to complete the consultation and the serum creatinine levels on admission is -0.782 with a p-value of < 0.001.

The results of the Mann-Whitney U test assessing differences in time taken by the attending physician to activate a nephrology consultation after detecting elevated serum creatinine (>1.2 mg/dL) finds a significant correlation. The Spearman's rank correlation coefficient (Rho) is -0.689, indicating a strong negative correlation between the severity of creatinine levels upon admission and the time it takes for the non-nephrology physician to activate a nephrology consultation.

Conclusions

The results suggests that, as the level of creatinine increases, the time for a nephrology cross-consultation is longer. This is proportional to the number of CC that we receive.

We must encourage health professionals, to perform an AKI risk assessment that focuses on medical record, clinical scenario, and physical examination, not only on laboratory results. This will help identify the patient that could eventually develop AKI and, in those with high risk, activate to the nephrology team as fast as possible to prevent further kidney damage. Prevention is the key to avoiding the heavy burden of mortality and morbidity associated with AKI.



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