Abstract

Background: Acute pancreatitis is an inflammatory disease of the pancreas, accompanied with/out fibrosis. Red blood cell distribution width (RDW) has received much attention in clinical decisions and determining the severity of diseases in recent years. This study was conducted to determine the predicting value of RDW in patients who presented to the emergency ward with acute pancreatitis.

Methods: In this cross-sectional analytical study performed on 100 patients with acute pancreatitis in Department of Emergency Medicine, Tabriz University of Medical Sciences, and the predicting value of RDW was determined in patients with acute pancreatitis presenting to the emergency ward.

Results: Of the patients, 47 people were male, and 53 people were female. Mean RDW in patients was 13.82 ± 1.69. Two patients died during the study. Mean RDW in dead patients and other patients was 19.17 ± 4.55 and 13.65 ± 1.26, respectively. Comparison of the two mean values showed a significant difference between the two groups ($P<0.001$). The cut-off point of 13.45 for RDW was determined for predicting mortality in patients with 100% sensitivity and 54.6% specificity.

Conclusion: The initial serum RDW is an independent factor appropriate for predicting in-hospital mortality in patients with pancreatitis but not for determining the need for surgery or admission to the ICU.

Keywords: Pancreatitis, mortality, prognosis