AB128. 213. Red cell distribution width and neutrophil to lymphocyte ratio as predictors of outcomes in acute pancreatitis

Robert M. O'Connell, Michael R. Boland, Jeremiah O'Driscoll, Abdelmonim Salih, Mayiolne Arumugasamy, Thomas N. Walsh, Michael J. Allen, David J. Beddy

Department of Surgery, Connolly Hospital Blanchardstown, Dublin, Ireland

Background: Acute pancreatitis is a commonly encountered General Surgical emergency. Accurately predicting that subset of patients who become systemically unwell has proven difficult. Identifying simple haematological prognostic markers such as Red Cell Distribution Width to identify such patients has been shown to aid reducing morbidity and mortality.

Methods: One hundred eighty-five patients who presented with acute pancreatitis between August 2013 and August 2016 were identified, and data on survival, admission to the high dependency units (HDU)/intensive care units (ICU), length of stay and FBC parameters on presentation were collected.

Results: Twenty-three (12%) patients had a red cell distribution width (RDW) above the upper limit of normal (ULN) on presentation, and this was associated with a significantly increased likelihood of admission to ICU/HDU [relative risk (RR), 3.5; P=0.01]. One hundred and seventeen (63%) patients had a neutrophil to lymphocyte ratio (NLR) above 5 on presentation, which increased the risk of ICU/HDU admission (RR, 8.1; P=0.01) and increased mean length of stay (7.56 *vs.* 5.06 days; P=0.01). Patients who had both a RDW above the ULN and a raised NLR had a relative risk of 4.9 (P<0.001) for admission to ICU/HDU and an increased risk of inpatient mortality (RR, 9.9; P=0.04).

Conclusions: RDW and NLR can identify patients at increased risk of severe pancreatitis.

Keywords: Acute pancreatitis; red cell distribution width (RDW); neutrophil to lymphocyte ratio (NLR)

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