

ABSTRACT

NONINVASIVE INDEX USING COMPLETE BLOOD COUNTS (P2/MS)FOR DETECTING OESOPHAGEAL VARICES IN CIRRHOSIS

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BACKGROUND

- The diagnosis of EV is required for patients with liver cirrhosis to detect those who will benefit from variceal bleeding primary prophylaxis.
- Currently, esophago-gastro-duodenoscopy (EGD) remains the gold standard test for such diagnosis. However, EGD is limited by its invasiveness and high cost.
- A simple non-invasive widely available and cheap test would be ideal if proved to have sufficient specificity and sensitivity.
- Therefore, aim of this study is the diagnostic value of an index derived from the patients' complete blood count; namely the P2/MS ratio as a predictive tool for the presence of varices and if they are at high risk of bleeding.

AIMS & OBJECTIVES

- To evaluate the predictive value of $P2/MS$ index (platelet count)²/[monocyte fraction (%) × segmented neutrophil fraction (%)] derived from the patient's complete blood count for detecting oesophageal varices in cirrhosis.

- To compare the P2/MS index in cirrhosis patients with portal hypertension and patients without portal hypertension

STUDY POPULATION:

This study was conducted in 50 patients with liver cirrhosis attending the Department of Medicine and Department of Medical gastroenterology, Govt. Rajaji Hospital, Madurai

METHODS:

50 liver cirrhosis patients with no previous variceal bleeding and not on beta blocker prophylaxis were subjected to do complete blood count test.

P2/MS index were calculated using platelet count, monocyte fraction and neutrophil fraction.

They were subjected to esophagogastroduodenoscopy for detecting esophageal varices and comparing p2/ms index in cirrhosis patients with portal hypertension and patients without portal hypertension

RESULTS:

Out of 50 patients ogd findings were normal in 22 patients with median p2/ms index of 147, grade I varices in 9 patients with median p2/ms index of 42, grade II varices in 12 patients with median p2/ms index of 35.5, and grade III varices in 7 patients with median p2/ms index of 21 In patients with portal hypertension the median p2/ms index was 36 where as in patients without portal hypertension the median p2/ms index was 138

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In this study. above a cut-off value for P2/MS of 30.5, high risk esophageal varices could be excluded, with a negative predictive value [NPV] of 91.6%

CONCLUSION:

In patients with low p2/ms index esophageal varices are more likely present and it has emerged as significant predictors for the presence of esophageal varices in cirrhosis patient.

P2/ms index was low in patients with portal hypertension when compared to patients without portal hypertension