

STUDY OF PLATELET INDICES IN CIRRHOTIC PATIENTS WITH SPONTANEOUS BACTERIAL PERITONITIS

Rania M. Elkafoury, Abdelrahman A. Kobtan, Taher E. Attia,
Amal H. Abdelhamed

Tanta University, Egypt

Context: Ascites is a pathological collection of fluid within the peritoneal cavity and the most common complication of liver cirrhosis. Spontaneous bacterial peritonitis (SBP) is an infection that develops in cirrhotic ascitic patients. Platelets release prothrombotics and proinflammatory agents and participate in induction and advancement of vascular and inflammatory disorders.

Aims: To study platelet indices as non-invasive predictors for diagnosis of spontaneous bacterial peritonitis in cirrhotics.

Methods and Material: Patients were divided into Group (I) which included 52 cirrhotic ascitic patients with SBP, and Group (II) which included 34 cirrhotic ascitic patients without SBP, in addition to a control group (group III) consisting of 20 healthy individuals. A complete blood count analysis was executed with the use of Erma PCE-210 hematology analyzer. Platelet count, mean platelet volume (MPV) and platelet distribution width (PDW) were registered for all the participants.

Results: In this study there were differences in MPV and PDW between the three groups. MPV showed significant elevation in SBP in comparison to ascitic patients and control subjects (11.39 ± 1.08 , 10.39 ± 1.32 and 9.47 ± 1.29 fl respectively), p value < 0.001. Likewise the PDW was greater in SBP patients compared to those in groups II and III but with no significant difference (14.14 ± 2.01 , 13.96 ± 3.58 and 12.90 ± 3.13) respectively.

Conclusions: MPV measurement is an inexpensive, fast, easily used test capable of predicting development of SBP in cirrhotic ascitic patients.

dr_ranon3000@yahoo.com