

CHOOSING WISELY[®]: THINGS WE DO FOR NO REASON[™]

Things We Do for No Reason[™]: Routine Correction of Elevated INR and Thrombocytopenia Prior to Paracentesis in Patients with Cirrhosis

Byron Crowe, MD^{1*}, Sami G Tahhan, MD², Curtis Lacy, MD³, Julie Grzankowski, MD⁴, Juan N Lessing, MD, FACP⁵

In a cirrhotic liver, hepatic synthetic dysfunction results in a complex milieu through reduced production and plasma concentrations of both pro- and anticoagulant factors that can lead to either bleeding or clotting.⁴ This "rebalancing" makes prothrombin time (PT) and INR unreliable indicators of bleeding or clotting risk. Similarly, in patients with cirrhosis, thrombocytopenia does not necessarily reflect impaired clotting ability. These patients experience an increase in production of von Willebrand factor, which may compensate for low platelet counts by producing stronger platelet adhesion to collagen.

In more than 1,100 procedures, no major bleeding events occurred despite 27% of patients having INR greater than 2.0 and 54% having platelet counts less than 50,000/ μ L. Kurup et al examined bleeding risk among 304 procedures performed on patients with platelet counts less than 50,000/ μ L referred to radiology for ultrasound-guided paracentesis.⁷ Three bleeding events occurred, an overall event rate of 0.99%. They also found no association between preprocedure platelet count and bleeding risk.