

## **Thrombotic Complications in Cirrhotic Patients: Balancing Risks and Benefits of Anticoagulation Treatment**

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### **ABSTRACT**

The risk of excessive bleeding and thrombotic complications coexist in cirrhotic patients due to synthetic reduction in both pro and anticoagulants. However, investigators suggest the prevalence and consequences of thrombotic complications are underestimated. There is convincing evidence that thrombosis causes worsening portal hypertension, hepatic fibrosis and increases patient mortality. New evidence is emerging about the benefits of treating and preventing thrombotic complications in patients with liver disease. In the absence of well-designed trials, clinical experience has become the most consistent guide to choose and dose anticoagulant drugs in this patient population. Practical use of anticoagulants however, is hindered by the lack of simple methods to monitor drug effect. In this review, we present a concise appraisal of current evidence on the most commonly studied indications for anticoagulation in cirrhotic patients. Information about drug action, dosing and monitoring are presented to provide a basis for clinical decision-making. The ongoing challenges in identifying therapeutic targets for treatment and monitoring drug effects are examined to highlight important clinical questions that have not yet been fully addressed.

**Key words:** liver cirrhosis; coagulation; bleeding; thrombosis