



*AAST Acute Care Surgery Didactic Curriculum*

**Cirrhosis in Emergency General Surgery**

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Highlights:

- Despite historic use of the Child-Pugh class as a risk stratification system, studies suggest the MELD score may be superior as a predictor of operative risk. The revised MELD-Na score appears to be a further improvement and it is being further validated.
- Hepatic dysfunction can lead to an increased risk of infection, hemorrhage, thrombosis, distorted hemodynamics, and impaired drug metabolism. Peri-operative multi-organ optimization is critical in patients with cirrhosis undergoing emergency surgery. Hypovolemia and coagulopathy can be postoperative complications that are particularly difficult to manage.
- Typical sources of minor bleeding may be worsened by underlying coagulopathy. The intraoperative use of bipolar and ultrasound devices, mechanical vascular staplers, and hemostatic agents should be considered.
- Laparoscopic and minimally invasive approaches have been found to be safe with recommendations including open port placement taking care to avoid abdominal varices, caution with liver retraction, & reduction of pneumoperitoneum.
- In cirrhotic patients with non-complicated hernias, surgical indications are debated. Though the development of bowel strangulation and rupture of overlying skin prompt emergency surgical treatment and cirrhosis management.
- There is limited published data on management guidelines for emergency surgery in patients with chronic liver failure.

Controversies:

- The use of intra-abdominal drains to control postoperative ascites is gaining popularity, though published data on best techniques and management strategies is limited.
- In severe cirrhosis, percutaneous cholecystostomy may be challenging due to ascites and increased risk of infection and complications. In these patients endoscopic transpapillary gallbladder drainage may be a consideration.