< VADA Guidelines for Perioperative Assessment and Management of Patients with Cirrhosis >

Background:

- Up to 1% of all elective surgical patients have cirrhosis. At least 1/3 of patients with cirrhosis remains undiagnosed.
- Patients with cirrhosis undergoing surgery are at increased risk of morbidity and mortality due to potential multisystem effects of cirrhosis and risk of perioperative hepatic decompensation.
- Risk perioperative of morbidity and mortality correlate with severity of liver disease as determined by MELD-Na score and CTP Class.

In those with suspected or diagnosed cirrhosis presenting for surgery:

- Preoperative anesthetic assessment should include assessment for severity of liver disease, as defined by:
    - Presence or history of **decompensating events**:
        - Ascites
        - Encephalopathy
        - Jaundice
        - Variceal hemorrhage
    - Presence of **clinically significant portal hypertension**:
        - Splenomegaly with platelet count < 100
        - Ascites
        - Varices on upper endoscopy
        - Venous collaterals present on cross-sectional abdominal imaging
        - Hepatic venous pressure gradient > 10 mmHg
            - *(The latter two will be more difficult and unrealistic for anesthesiologists in the clinic to identify.)*
- **Calculated MELD-Na score**
    - https://www.mdcalc.com/meldna-meld-na-score-liver-cirrhosis

Risk Stratification:

- **CTP-A or MELD < 15:** May proceed with most elective surgeries as indicated, if asymptomatic.
- **CTP-B or MELD 15-19:** Refer to hepatology for preoperative assessment, optimization and potential liver transplant candidacy assessment. Surgery should occur at VGH only.
- **CTP-C or MELD 20 or higher:** Elective surgery is contraindicated. If emergency surgery is required, hepatology should be consulted for preoperative assessment, optimization, and follow-up.

Preoperative hepatology referrals can be made to:

- Dr. Saumya Jayakumar
- Dr. Vladimir Marquez
- Dr. Eric Yoshida