

Abstract 36

Predicting Surgical Complications from Liver Disease

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Case Presentation: Patient is a 45-year-old male scheduled for a right ankle fusion. Medical history includes alcohol cirrhosis complicated by transjugular intrahepatic portosystemic shunt procedure and regularly scheduled large-volume paracentesis. Patient had emergent surgery 1 year ago for methicillin-resistant *Staphylococcus aureus*-infected hardware in the right ankle. Model for end-stage liver disease (MELD) score at time of surgery was 30. At that time, postoperative course was complicated by exsanguination. Patient was resuscitated by 7 U of packed red blood cells, Factor VII, and fresh frozen plasma.

Today in preoperative clinic, patient reports he has not had a drink in 1 year. He has "cleaned himself up." He wants to "return to the golf course," and cannot do so until his ankle is repaired. In addition to abruption of alcohol, he has started to attend a gymnasium.

Physical Exam:

Vital signs: blood pressure 130/80, heart rate 63 bpm, temperature 98.6, respiration 12

General: appears older than stated age

Cardiovascular: + gynecomastia, regular rate and rhythm

Lungs: + hepatosplenomegaly, + large umbilical hernia, + caput medusa

Extremities: trace edema

Laboratory:

Hemoglobin: 9.6 g/dL

Platelets: 125,000 K/ μ L

Creatinine: 1.36 mg/dL

International normalized ratio: 1.4

Discussion: Decision regarding patient's safety going for an ankle fusion was multifaceted:

(1) What was patient's MELD score today compared to 1 year ago?

(2) Does the risk of surgery outweigh the benefit of an ankle repair?

After calculating the patient's MELD score, it was evident the MELD had improved drastically since time of last surgery: MELD 12 today vs MELD 30 one year ago.

The patient's surgical risk was felt to be increased even with this low-risk surgery. Despite the surgeon's hesitation, the patient was approved for surgery.

Conclusion: MELD score alone does not give enough information.

A MELD score of 12 in combination with a low-risk surgery equals moderate or increased risk for surgical complications relating to liver disease.

It is recommended that perioperative medicine clinics have a modality available to objectively decide on patient's hepatic risk for surgery in addition to routinely calculating MELD score.