A 47 year-old male presents for the new onset of hematemesis and melena. He smells of alcohol and cannot provide a reliable history. No prior medical records are available.

Physical examination reveals a malnourished appearing male with splenomegaly. The patient is not jaundiced. There is no ascites. The patient is tachycardic and hypotensive. A CBC reveals hemoglobin 8.1 g/dL, macrocytosis and thrombocytopenia (platelets 58,000). Liver chemistries reveal a normal bilirubin and INR, AST 150, ALT 80 and a serum albumin of 3.3 g/dL.

In patients with suspected cirrhosis and upper GI bleeding all of the following are appropriate recommendations **EXCEPT:**

a. Octreotide infusion 
b. Parenteral antibiotics 
c. Transfusion to a hemoglobin of 12 g/dL or greater 
d. Endotracheal intubation 
e. Admission to the ICU

**ANSWER: C. Transfusion to a hemoglobin of 12 g/dL or greater**

**Explanation:** Variceal hemorrhage is a life threatening complication of chronic liver disease with a high mortality rate. All patients with upper GI bleeding suspected of having cirrhosis should be treated as variceal bleeders until proven otherwise. Bleeding is often torrential and admission to the ICU and elective intubation for airway protection is appropriate. Patients should be started on an octreotide infusion to help reduce portal pressures. Parenteral antibiotics (when patients are unable to take oral antibiotics) have been proven to improve survival in cirrhotic patients with GI bleeding. While it is critical to adequately resuscitate patients, excessive transfusion should be avoided as it may further increase portal pressures and lead to recurrent bleeding. Patients should be transfused to a goal hemoglobin of approximately 10 g/dL.