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Don't Jump to Albumin for Decompensated Liver Disease

You'll be asked about **the role of IV albumin in patients hospitalized with acute decompensated liver disease**.

New evidence shows that giving these patients DAILY albumin to raise and maintain levels above 3 g/dL does NOT reduce infection, kidney dysfunction, or death.

Plus albumin may increase pulmonary edema risk...and costs about $120 per 25 g dose.

Continue to avoid routine use of albumin in stable floor patients admitted with new or worsening ascites...hepatic encephalopathy...or a suspected variceal bleed.

But some patients with acute decompensated liver disease may still need albumin.

For example, use albumin to prevent central volume depletion in those undergoing large-volume paracentesis...removing over 5 L.

And give albumin for spontaneous bacterial peritonitis IF there's a risk of renal dysfunction...BUN over 30 mg/dL, serum creatinine above 1 mg/dL, or total bilirubin over 4 mg/dL.

Also continue to think of albumin to resuscitate a septic shock patient who isn't responding to adequate crystalloids.

Create an order set with indications to help with albumin dosing.

For example, give 1.5 g/kg, then 1 g/kg two days later for spontaneous bacterial peritonitis. But for shock, use 12.5 g to 25 g boluses until mean arterial pressure and other markers improve.

When giving albumin in liver disease, generally use the 25% product. Its oncotic pressure draws fluid into the intravascular space.

Typically max the 25% albumin rate at 2 mL/min for nonemergent use...to limit fluid overload. Monitor for respiratory distress, hypertension, etc...especially with heart failure or other risks.

See our FAQ, *Decompensated Chronic Liver Failure*, for more on treating ascites, encephalopathy, acute bleeding, etc.

Key References:

-N Engl J Med 2021;384(9):808-17
-Hepatology 2013;57(4):1651-3
-Medication pricing by Elsevier, accessed May 2021

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