

Pearls in the Management of Cirrhosis

25 years have passed since you last saw Tiffany. She moved to California to start a new life but has now returned to Maine and not much has changed. She never was treated for Hep C and did not have reliable primary care since she was last with you. She is now post-menopausal and takes no medications. She has actually succeeded in avoiding alcohol, but continues to be obese (BMI 32). She was hospitalized once overnight a few years ago for hematemesis but was observed and sent home without other intervention

Her concerns today include ongoing fatigue, increasing weight gain and a sense of feeling bloated. She states sometimes she feels cloudy in the head and isn't thinking as clearly as she used to. On exam she has a protuberant, non-tender belly and 2+ bilateral LE edema.

What are other physical exam findings associated with cirrhosis?

Fluid wave, caput medusa, flap, etc.

You plan to check a CBC, LFTs, INR and an abdominal U/S as you are concerned that she has ascites due to advancing cirrhosis.

What other diagnostic steps could you consider in the evaluation of ascites?

*Diagnostic paracentesis – consider in order to verify from liver dx/portal HTN
Level of protein in fluid is sometimes used in decision re: SBP prophylaxis*

Therapeutic paracentesis sometimes used for symptom relief, but has complications related to fluid shifts and infection

What treatments options could you offer her to improve her symptoms of volume overload?

*Diuretics – Start with Spironolactone 50mg qd – follow K - Evidence A
Lasix is second or third line due to higher risk of pre-renal failure*

Salt restriction – 1500-2000 mg per day

Fluid restriction (1 L per day)– useful if sodium is less than 125

**** Note two year survival of patients with ascites is about 50%**

Tiffany has her U/S and paracentesis. The radiologist mentions something to her about being on antibiotics to prevent an infection in her abdomen.

How would you explain this to her – does she need to be on antibiotics and why?

Risks of SBP are: previous SBP, previous bleeding, ascitic fluid protein < 1.0 or 1.5 gm/dl

2009 AASLD guidelines are:

Patients admitted with GI bleeding should receive prophylactic abx x 7 days (CFTX)

Secondary prevention of SBP is indicated as an outpt indefinitely (Norfloxacin daily)- Evidence A

Consider outpt primary prevention of SBP in patients with fluid protein < 1.5 AND another comorbidity (Creat > 1.2, BUN > 25, Na < 130, Child-Pugh > 9 with elevated bili >3)

Intermittent abx dosing for prevention is inferior to daily dosing

Tiffany continues to have problems with confusion. Her partner accompanies her to the next visit wanting to know what can be done. An ammonia level from a recent ER visit was elevated at 80.

What are the treatment options for presumed hepatic encephalopathy?

Cool timeline of symptoms on their handout

Look for a precipitating cause if acute in onset – infection, metabolic, GI bleeding, etc.

Lactulose with goal 2-4 BM per day

Limited utility of ammonia levels – follow symptoms preferentially

You are called by the inpatient team that Tiffany was admitted over the weekend for an upper GI bleed. She was seen by GI and found to have no varices but evidence of gastritis only. She was placed on a PPI and discharged.

What endoscopic follow-up should she have?

What is the role of antibiotics in patients with cirrhosis and GI bleeding?

Endoscopy is recommended q 3 years if no varices – for surveillance

If varices are found- EGD is repeated annually

Propranolol (Inderal) – Evidence B – is recommended to decrease portal pressure gradients

Tiffany sees you again in follow-up. It has now been a year since she has returned to Maine. Though compliant with her diuretics, Lactulose and low salt diet she still feels poor and feels her quality of life is not very good. She is wondering if she is eligible for transplant and what her life expectancy is. She also has heard that people with cirrhosis sometimes get liver cancer and she is wondering what you have done to make sure she doesn't have this.

How can you estimate her life expectancy?

Calculating her MELD score can be used to predict her three month survival.

This is based on her bilirubin, INR, and creatinine.

Do you have anything else to add here about quality of life measures from the hospice world?

What criteria are used to assess a patient's eligibility for liver transplant?

She probably would be a reasonable referral to a transplant team, just to be "in the system".

Refer for MELD > 10 or any complication of portal hypertension

Transplant eligibility is based on:

MELD score – primary score to allocate

Extent of complications: encephalopathy, variceal bleeding, or recurrent ascites

What are the screening recommendations for liver cancer in patients with cirrhosis?

Incidence is 3% per year in patients with compensated cirrhosis

Surveillance has not been shown to decrease mortality

Most hepatologists screen with AFP +/- abdominal U/S q 6 months