

**THERAPEUTICS II**

Name \_\_\_\_\_

**Cirrhosis Quiz****April 22, 2004**

RE is a 48 y/o WM who presents to the ER with worsening mental status. The patient's wife is his primary caregiver and the history of present illness was obtained completely from her. She states that RE was diagnosed with hepatic encephalopathy in December 2003; however, it was controlled well with lactulose. In March 2004, the patient underwent chemoembolization (chemotherapy delivered directly to a tumor in the liver) for his hepatocellular carcinoma and since then his mental status began to deteriorate. The wife reports that it has gotten worse over the past 2 weeks. The patient now frequently falls and is found "sliding" along the floor. RE has worsening coordination and does not recognize his wife at times but does make the connection after reorientation. His PO intake has decreased significantly and he continues to lose weight. He previously had 4 soft bowel movements per day but in the past week his bowel movements have become less frequent - usually only 1 bowel movement per day. RE's wife also reveals that two weeks ago, cyproheptadine was added to his medication regimen. Cyproheptadine is an antihistamine that was prescribed for appetite stimulation since RE hadn't been eating. He also was prescribed diazepam at bedtime to help him sleep. There have been no changes in the frequency of his narcotic use.

PMH: Alcohol abuse  
 Cirrhosis
 

- CT scan 7/03 revealed extensive esophageal and intraabdominal varices
- No history of variceal bleeding or SBP

 Hepatocellular carcinoma s/p chemoembolization 3/04

Meds: Duragesic patch 25mcg q 72h  
 Oxycodone 5mg po q 3h prn  
 Spironolactone 100mg po qd  
 Thiamine 100mg po qd  
 Multivitamin 1 tablet po qd  
 Lactulose 30ml po bid  
 Cyproheptadine 4mg po bid  
 Diazepam 5mg po q hs prn

All: Penicillin - rash

SH: (+) tobacco - ½ ppd since age 18  
 Drinks a 12 pack of beer daily since age 18  
 Occasional marijuana use

ROS: Per HPI

PE: VS: T 97.7°F BP 133/60 P 78 RR 20 O<sub>2</sub> 97% on room air

Ht: 65" Wt: 56.3kg

Gen: Extremely wasted male that appears chronically ill  
 Skin: (-) jaundice, (-) spider angiomas  
 HEENT: Nonicteric sclera, PERRL, EOMI  
 Neck: No JVD or lymphadenopathy  
 Lungs: CTAB  
 CV: RRR, no murmurs, rubs or gallops  
 Abd: Non-tender, non-distended, (+) BS, (-) fluid wave, (+) caput medusae  
 Ext: No edema  
 Neuro: Oriented to person only. Confused, attempting to smoke a cigarette that does not exist. Follows simple commands with frequent redirection. Diffuse hyperreflexia. (+) asterixis, but difficult for patient to cooperate.  
 Rectal: Guaiac (-), external hemorrhoids

Labs: 

133	103	14	}	79
4.6	24	1.3		

}	12.7	}	150
	6.42		38.1

PT/INR 14.9/1.28  
Albumin 3.5  
AST 159  
ALT 55  
Alk Phos 160  
T. Bili 1.7  
Ethanol 0

1. Assess this patient's worsening mental status. Include problem, classification, grade and precipitating factors? (5 points)

**Problem: Hepatic encephalopathy (1pt)**

**Classification: Chronic OR acute exacerbation of chronic HE (1pt)**

**Grade: 3 (1pt)**

**Precipitating factors (need only 2 @ 1pt each): Cyproheptadine, diazepam, constipation (patient previously had 4 bowel movements per day) or superimposed acute liver disease (patient just underwent treatment for HCC which could worsen liver function)**

2. Select/recommend drug therapy for RE. Include plans for existing therapy and new therapy, if appropriate. Include recommendations for RE's primary problem as well as any other complication of cirrhosis present in this patient. (5 points)

**D/C cyproheptadine (+0.5pt)**

**D/C diazepam (+ 0.5pt)**

**Increase lactulose to 30-60ml po q 1-2h until catharsis begins (+2pts)**

**Propranolol (+1pt) 10mg po tid (+1pt) OR nadolol 20mg po qd**