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Alcoholic Hepatitis (Learner's Guide)

I. <u>Objectives</u>

- Recognize the signs and symptoms of alcoholic hepatitis
- Understand the treatment options and the limitations of the current data
- Recognize the appropriate patient to treat, and recall contraindications to treatment
- Recognize the poor prognosis of patients with severe alcoholic hepatitis

II. <u>Case</u>

A 28-year-old woman complains of severe right upper quadrant pain and jaundice. She has a low-grade temperature of 100.1° F. On exam, she is icteric, but alert and oriented with no asterixis. She has a severely tender, enlarged liver. Her labs include: AST = 250 U/L, ALT = 112 U/L, total bilirubin = 25 mg/dL, alkaline phosphatase = 230 U/L, albumin = 3.0 g/L, creatinine = 1.4 mg/dL, WBC = 18,000/µL with a leftward shift, PT = 26 seconds and INR = 2.2.

What is your differential diagnosis for this patient?

What signs, symptoms and laboratory values would increase the likelihood of alcoholic hepatitis over other diagnoses on your list?

What would be your next step in the case?

Case (cont.)

The ER admits her to you with a working diagnosis of choledocholithiasis. An ultrasound demonstrates a large liver but no gallstones or dilation of bile ducts, and minimal ascites. On exam, you hear a bruit over the right costal margin, and you note alcohol on her breath.

Would this patient benefit from corticosteroids? What about pentoxifylline?

Is there any evidence for other therapies, such as N-acetylcysteine?

What is this patient's prognosis?

III. Questions for Further Discussion

Case (cont.)

After admitting the patient and ruling her out for an acute infection, you decide to start her on prednisolone. She receives counseling on alcohol cessation and is discharged two days later. One week later, she returns to your clinic. She feels fatigued and slightly nauseous, but denies any confusion. She says she is taking her medicine and abstaining from alcohol. On exam, she now has moderate abdominal distention, with shifting dullness, but no asterixis. Her repeat labs are as follows: total bilirubin = 10 mg/dL, AST = 105 U/L, ALT = 49 U/L and creatinine = 1.4 mg/dL.

Is this patient's hepatitis responding to the steroids? Should you continue the prednisolone?

If the patient does not respond to therapy, is there a role for orthotopic liver transplantation?

IV. Key Articles

- 1. Carithers R, *et al.* Methylprednisolone therapy in patients with severe alcoholic hepatitis. *Ann Int Med* 1989; 110: 685-90. <u>ABSTRACT</u>
- 2. Thursz M, et al. for the STOPAH Trial. Prednisolone or pentoxifylline for alcoholic hepatitis. N Engl J Med 2015; 372: 1619-28. FULL TEXT PDF

V. <u>Reference Articles</u>

- Lucey M, Mathurin P, Morgan T. Alcoholic hepatitis. N Engl J Med 2009; 360: 2758-69. <u>EXTRACT</u>
- 4. Nguyen-Khac E, *et al.* Glucocorticoids plus N-acetylcysteine in severe alcoholic hepatits. *N Engl J Med* 2011; 365: 1781-9. FULL TEXT PDF
- Louvet A, *et al.* The Lille model: a new tool for therapeutic strategy in patients with severe alcoholic hepatitis treated with steroids. *Hepatology* 2007; 45: 1348-54. <u>FULL TEXT</u> <u>PDF</u>
- Mathurin P, *et al.* Early liver transplantation for severe alcoholic hepatitis. N Engl J Med 2011; 365: 1790-1800. <u>FULL TEXT</u> <u>PDF</u>

VI. <u>Resources</u>

7. <u>LILLE MODEL CALCULATOR</u>. This website also includes calculators for the MELD, Child-Pugh and Maddrey (Discriminant Function) scores.