**DIAGNOSIS**

**History:** Recent heavy alcohol use

**Common symptoms:** malaise, RUQ pain, anorexia

**Exam:** Fever, jaundice, hepatomegaly, +/- ascites, spider nevi

**Lab:** AST>ALT (both <10X ULN), ↑ Bili, ↑ INR, ↑ alk phos, ↑ WBCs, ↓ platelets

**Evaluate & Manage Complications**

- **Ascites:** paracentesis for spontaneous bacterial peritonitis
- **Encephalopathy:** asterixis present, Connect-the-Numbers test
- **Upper gastrointestinal bleed:** EGD for varices, other causes
- **Renal failure:** hepatorenal versus renal origin
- **Alcohol withdrawal:** CIWA score

**Prognosis**

Calculate MELD alcoholic hepatitis 90-day mortality

Go to: [http://www.mayoclinic.org/meld/mayomodel7.html](http://www.mayoclinic.org/meld/mayomodel7.html)

Requires labs (drawn on same day): creatinine, INR, total bilirubin

**Follow-Up**

1. Inpatients who are discharged should be seen by a primary care provider within one week.
2. Inpatients with a complicated course can be referred to general internal medicine clinic for additional consultation.
3. Persons with alcoholic hepatitis who have a second underlying chronic liver disease, such as hepatitis B or C or autoimmune liver disease, should also get routine follow-up with hepatology clinic.
4. Persons with severe alcoholic hepatitis (DF≥32) should get repeat laboratory testing, including comprehensive metabolic panel (CMP), complete blood count (CBC) and prothrombin time/INR within a week of discharge and then every 2-4 weeks thereafter depending on clinical progress.

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**Supportive Care**

1. Replace fluid, electrolytes, vitamins
2. Counseling for alcohol abstinence
3. Manage Complications

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**Systemic Steroids**

- **Dose:** Once daily x 4 wks
  - Methylprednisolone 32mg
  - Prednisolone 40mg
- **Side Effects:** facial swelling, emotional changes, diabetes, etc.
- **Advantages:** more studies than pentoxifylline
- **Disadvantage:** side effect profile
- **Non-response:** if bilirubin no better after 7 days; consider discontinuation.

**Pentoxifylline**

- **Dose:** 400 mg. TIDx4 weeks
- **Side Effects:** nausea, vomiting, headaches
- **Advantages:** may prevent hepatorenal syndrome

**Please see page 2 for Footnotes “A-G”**
Footnotes for Alcoholic Hepatitis Algorithm

**Footnotes**

**Footnote A**
AST and ALT rarely > 400; if so, consider alternative diagnosis
INR = International Normalized Ratio
WBCs = white blood count; often very high (> 40,000) for prolonged period

**Footnote B**
New presentation of clinical ascites requires diagnostic paracentesis for spontaneous bacterial peritonitis (SBP). Get cell count, albumin and total protein on ascitic fluid and inoculate blood culture tubes at bedside, which increases culture sensitivity by 60%. If cell count shows ≥ 250 polys, treat immediately for SBP before and regardless of culture results. Clinical course of culture negative SBP is same as that of culture positive. Treat with 5-day course of 3rd generation cephalosporin, preferably cefotaxime.

**Footnote C**
Connect the Numbers or Numbers Connection Test can be downloaded using any common Internet search engine such as Google. Serum NH3 level is not always reliable and is not recommended for following someone who is being treated for encephalopathy. Treatment is lactulose with dose titrated to improve mental status and avoid diarrhea. Rifaximin 550 mg. BID is effective alternative with few side effects but very expensive. There is little evidence that using both drugs at same time is better than either alone.

**Footnote D**
CIWA = Clinical Institute Withdrawal Assessment (of alcohol)

**Footnote E**
Suggested control for prothrombin time is to use the mid-range of your laboratory normal values; e.g., the normal range at Alaska Native Medical Center is 11.7-14.3 seconds and therefore we use 13.0 for control.

**Footnote F**
Prednisolone often comes in liquid preparation and is not well tolerated. Prednisone is not widely used for alcoholic hepatitis since it has to be metabolized to prednisolone by the liver but is probably acceptable in a dose of 40 mg. daily. Methylprednisolone is a better alternative than prednisone.

**Footnote G**
Hepatology service MD providers are available for telephone consultation for both Primary Care providers and Internal Medicine providers.