Penn Medicine

Chief Report

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59 y o male: CC

- Abdominal distension

Abdominal Distention

Solid

Common

- ↑ Adiposity
- Pregnancy

Rare

- Hepatomegaly
- Splenomegaly
- Malignancy

Liquid

Blood

Hemo-peritoneum

Other

Ascites

Gas

- Ileus
- Obstruction

Other

- Abdominal Wall Weakness

59yo male: Initial History

Abdominal distension **Jaundice**	**Medical history:** MDD HLD BPH
HPI: Symptoms progressed over 3 weeks Anorexia Abdominal pain Shortness of breath Diarrhea PCP noted jaundice	**Surgical history:** Appendectomy (12 yrs ago)
Medications: Sertraline 50mg daily Atorvastatin 10mg daily Tamsulosin 0.4mg qhs	**Social history:** Smokes 4 cigarettes per day 15 shots of whiskey daily No drug use

59yo male: AUDIT C

9 points

Scores ≥5 are consistent with alcohol misuse and possible liver damage.

Copy Results | Next Steps

How often did you have a drink containing alcohol in the past year?	
Never	0
Monthly or less	+1
Two to four times a month	+2
Two to three times per week	+3
Four or more times a week	**+4**
How many drinks containing alcohol did you have on a typical day when you were drinking in the past year?	
1 or 2 drinks	0
3 or 4	+1
5 or 6	**+2**
7 to 9	+3
10 or more	+4
How often did you have six or more drinks on one occasion in the past year?	
Never	0
Less than monthly	+1
Monthly	+2
Weekly	**+3**
Daily or almost daily	+4

59yo male: Physical Exam

Vitals T 36.1C BP 147/62 HR 90 RR 20 SpO2 95%	**Abdominal:** Distended Tender to palpation throughout Severe TTP in RUQ
Cardiac: Regular rate and rhythm No murmurs JVP distended to earlop with patient sitting upright	**MSK** Bilateral lower extremities warm with pitting edema
Pulmonary: Bibasilar crackles	**Neuro** Asterixis AAOx2

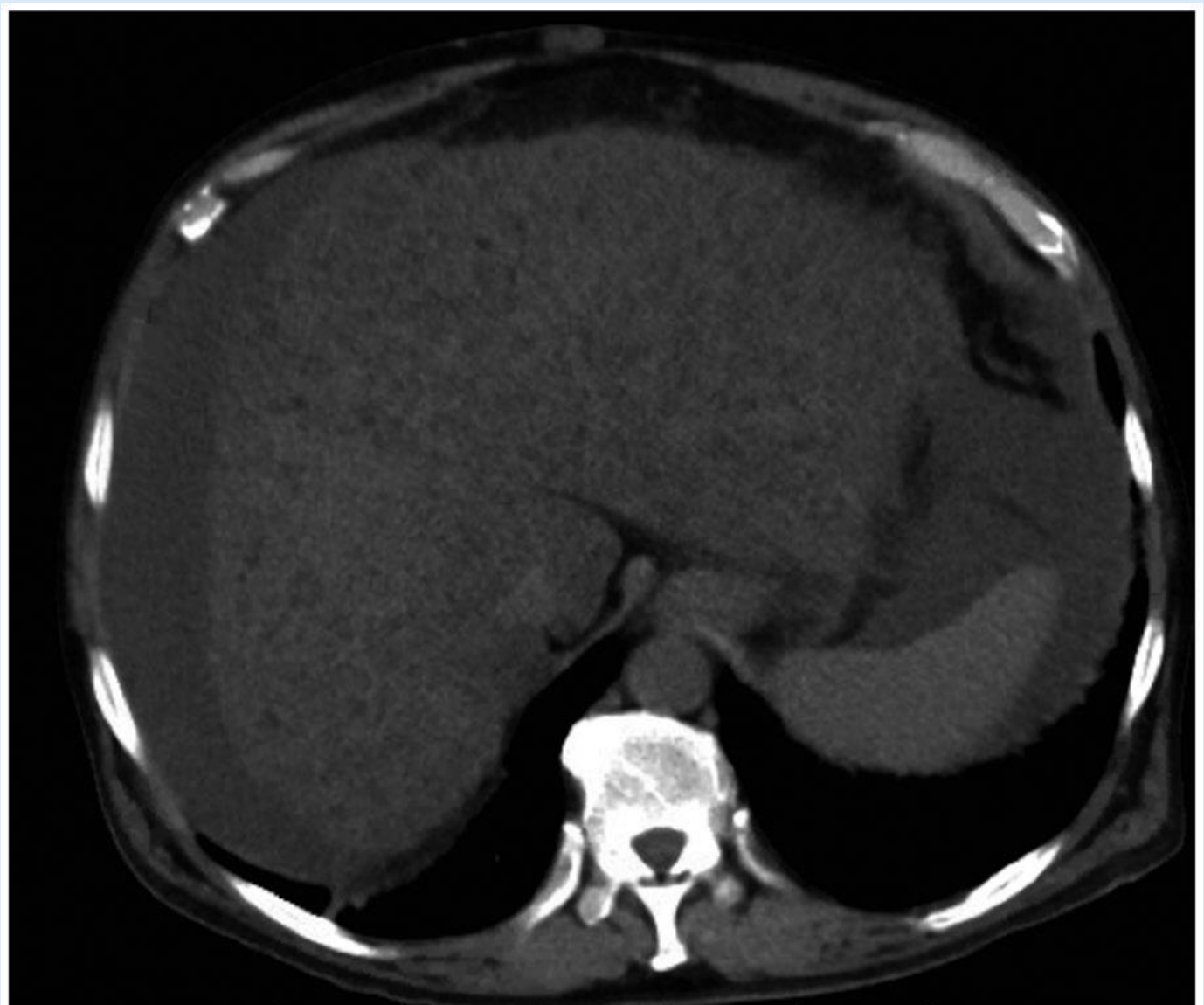
59yo male: Labs

- Na 126
- AST 178
- ALT 52
- TBili 23.7
- Albumin 2.8
- Cr 0.8
- INR 1.77
- WCC 17
- Hb 9.7
- Plts 80,000

- Ferritin 1089
- TSat 42%
- Hepatitis A IgM neg
- Hepatitis B core IgM neg
- Hep C Ab neg
- ANA neg, ASMA neg, IgG elevated
- US abdomen with doppler, no hepatic vein thrombosis

59yo male: Additional labs

59yo male: Imaging



Cirrhosis

Parenchyma

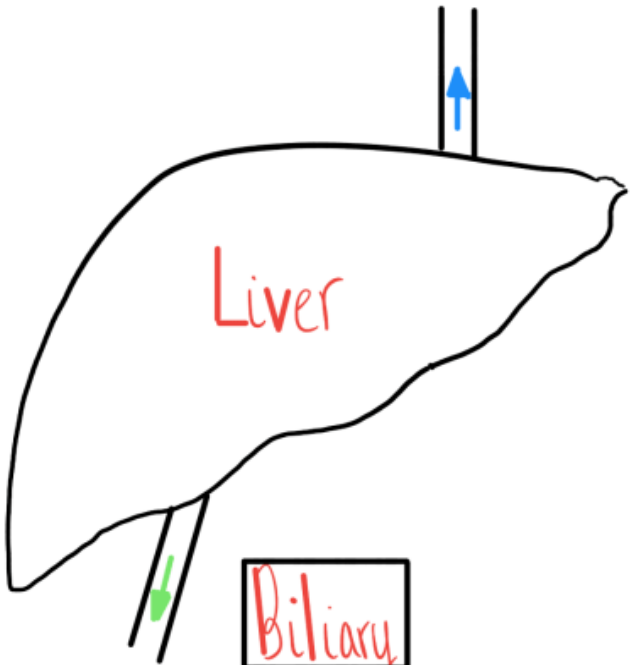
Metabolic
- NASH

Toxin
- EtOH
- Aflatoxin

Infection
- HBV +/- HDV
- HCV

Genetic
- Hemochromatosis
- Wilson
- α-1-Antitrypsin
- Telomerase

Autoimmune
- Autoimmune Hepatitis



Biliary
- PBC
- PSC
- Cystic Fibrosis

Hepatic Vein
- Cardiac Cirrhosis

Epi
1. NASH
2. Infection
3. Toxin

What is the most likely diagnosis?

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- Acute cholecystitis
- Alcoholic hepatitis
- Hemochromatosis
- Acetaminophen toxicity
- Hepatic abscess

Learning point #1

- Most typical alcoholic hepatitis is a clinical diagnosis

- Liver biopsy is only indicated for atypical presentation with clinical uncertainty

Diagnosis of Alcoholic Hepatitis

What is the best next step in management?

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- Liver biopsy
- Pentoxifylline
- Paracentesis
- Prednisolone
- Cefepime

Learning point #2

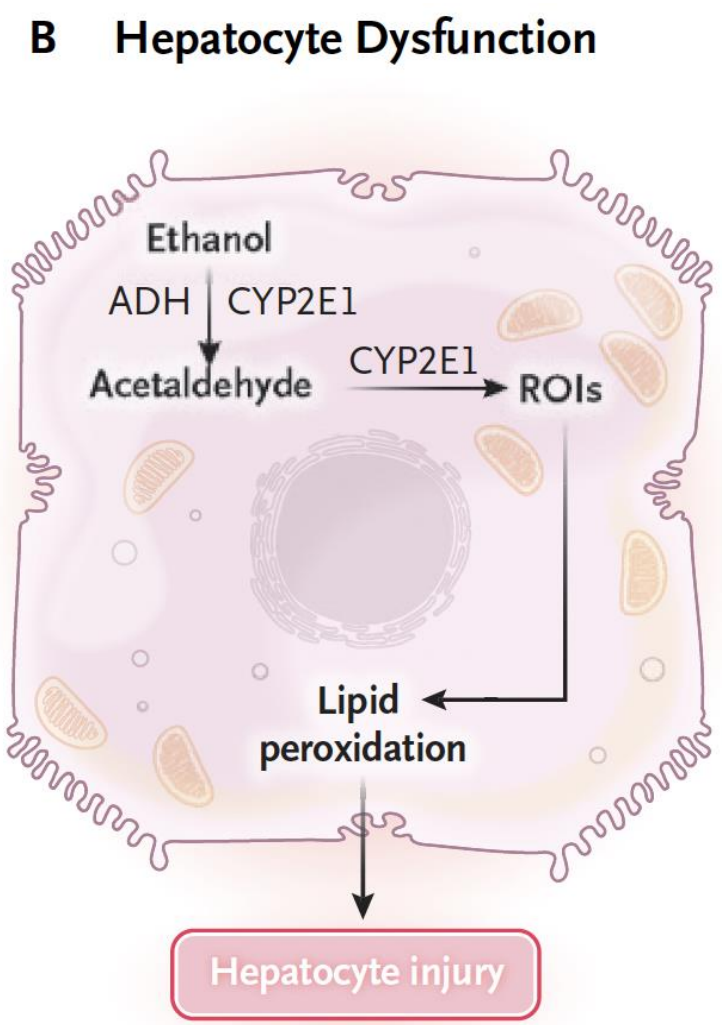
- Prednisolone should be given for Maddrey's discriminant function >32 when there is no suspected infection

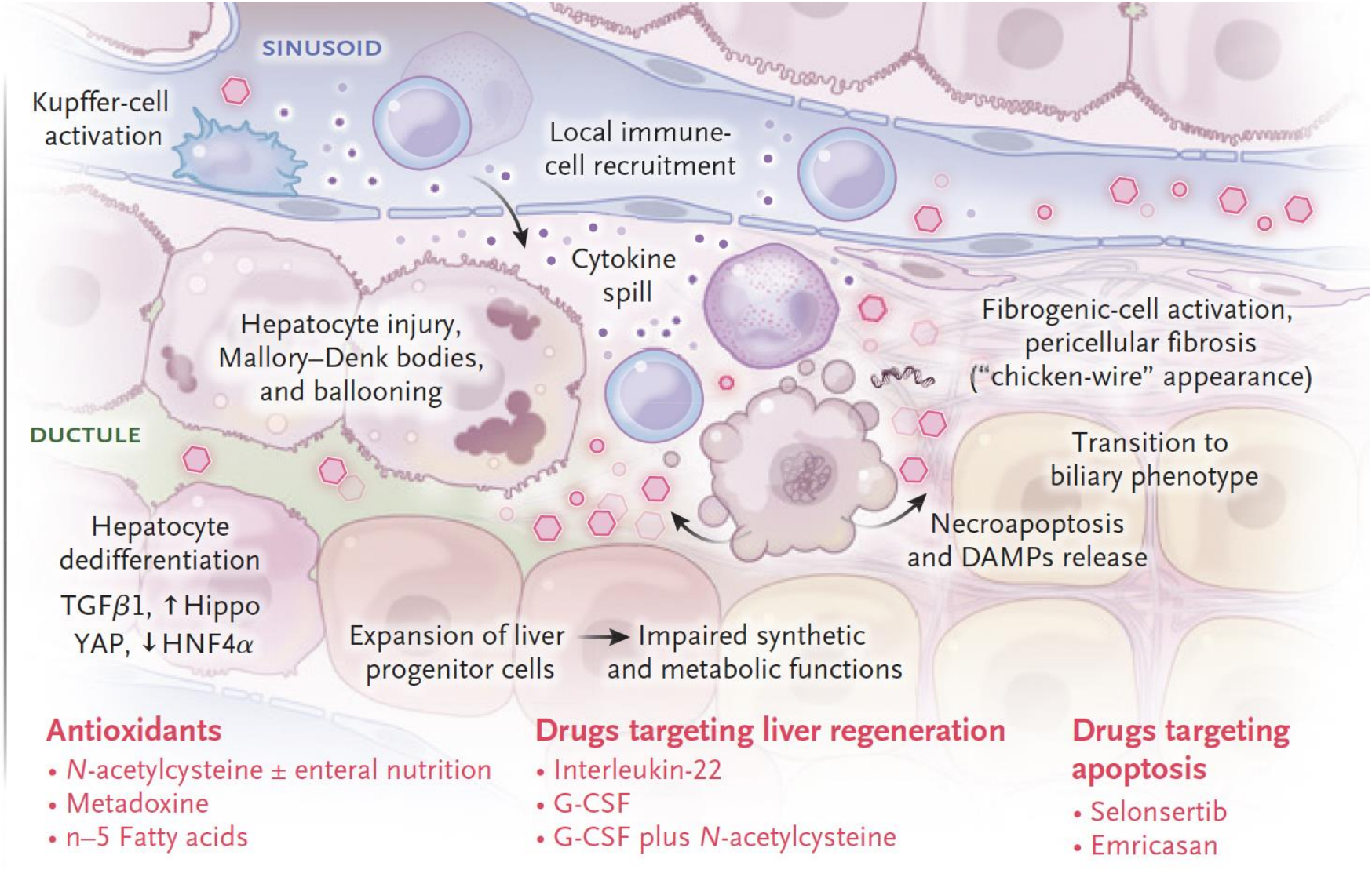
- Paracentesis should be performed in patients with AH and ascites to rule out SBP

Epidemiology

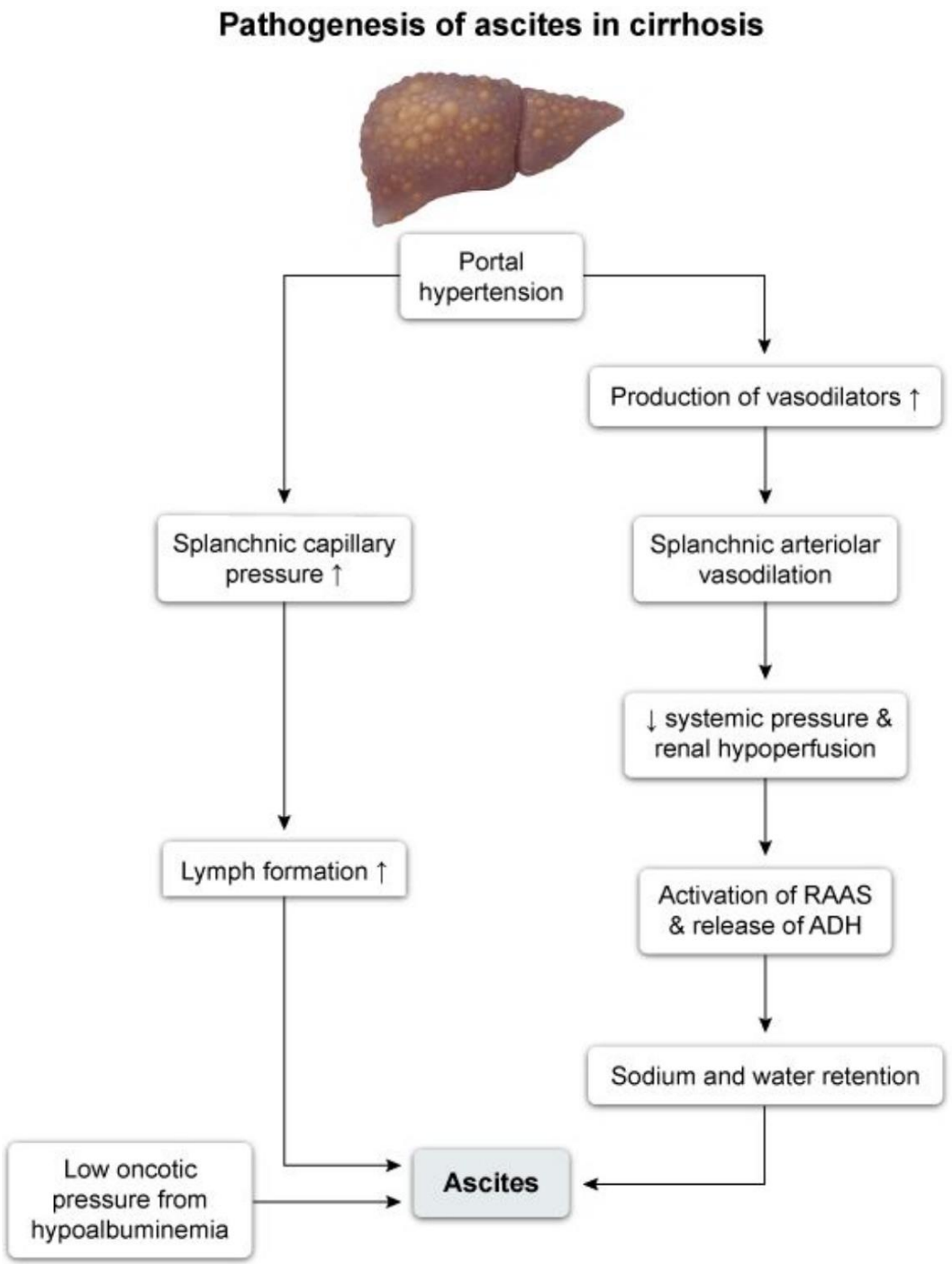
- 50% of all deaths due to liver disease are due to alcohol
- Alcohol associated liver disease develops in 35% of patients with AUD
- Liver disease ranges
  - Steatosis
  - Steatohepatitis
  - Fibrosis accumulation
  - Cirrhosis
  - Hepatocellular carcinoma

Cirrhosis in Alcohol use disroder





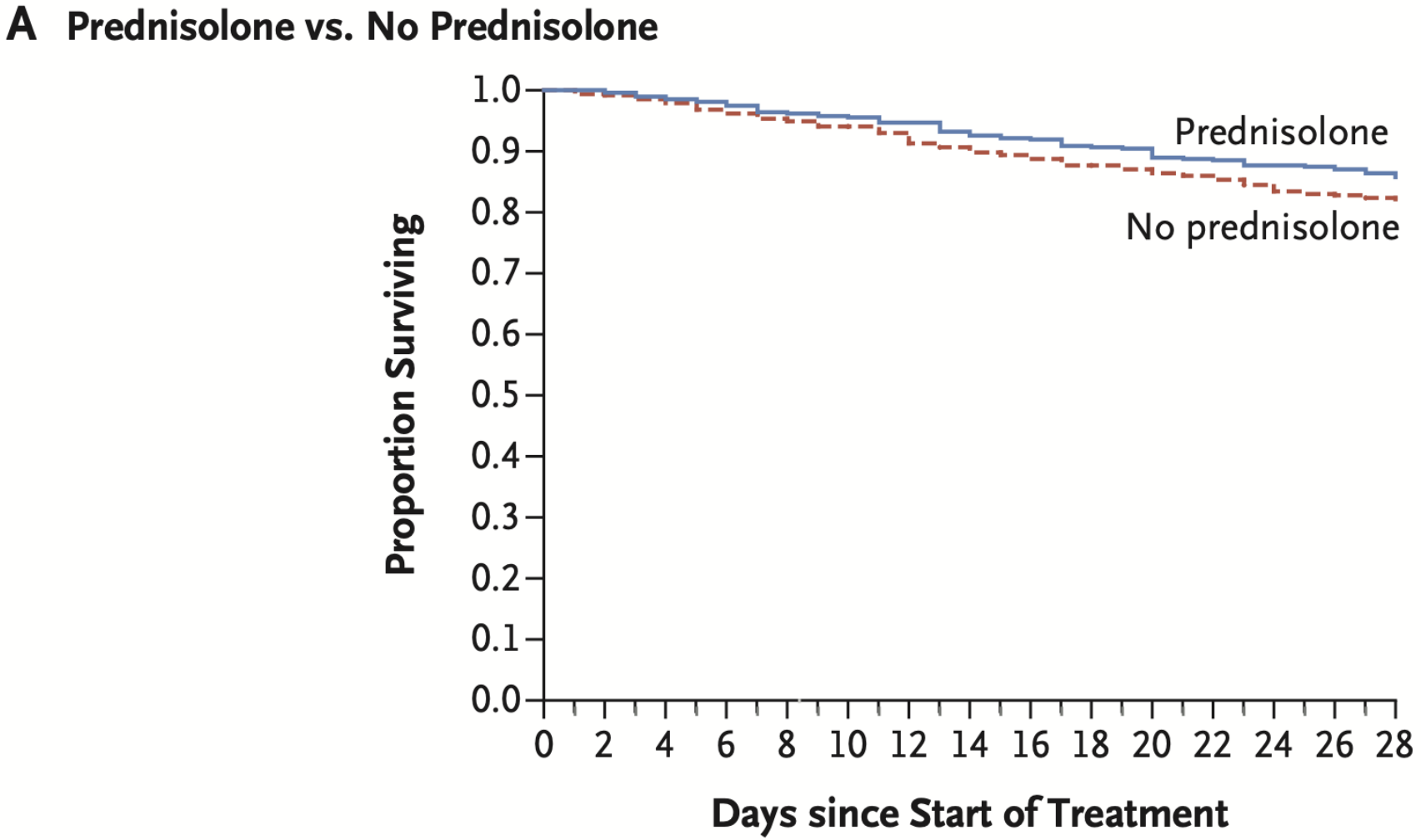
Ascites in Cirrhosis



Treatment of Alcoholic Hepatitis

- Enteral nutrition, adequate protein and caloric intake
- Thiamine, B complex vitamins
- Treatment of sepsis if appropriate
- Gastric ulcer prophylaxis
- Prednisolone for MDR > 32 and no infection
- N-acetylcysteine may benefit these patients
- Liver transplant

STOPAH Trial



Liver transplant

- Alcohol related cirrhosis – 15% of liver transplants
- Referral
- Evaluation for comorbidities
- Evaluation for risk of recidivism
- Outcomes – survival rates around 84% at 1 year, 58-73% at 10 years

Learning points

- AUDIT C score for alcohol use disorder
- Most alcoholic hepatitis is a clinical diagnosis
- Liver biopsy is only indicated for atypical presentations
- Maddreys discriminant >32 -> prednisolone if no infection
- Paracentesis should be performed in patients with AH and ascites to rule out SBP

References

- Bataller R, Arab JP, Shah VH. Alcohol-Associated Hepatitis. N Engl J Med. 2022 Dec 29;387(26):2436-2448. doi: 10.1056/NEJMra2207599. PMID: 36577100.
- Singal AK, Bataller R, Ahn J, Kamath PS, Shah VH. ACG Clinical Guideline: Alcoholic Liver Disease. Am J Gastroenterol. 2018 Feb;113(2):175-194. doi: 10.1038/ajg.2017.469. Epub 2018 Jan 16. PMID: 29336434; PMCID: PMC6524956.
- Verma A, Jensen D. A Case of Rapid Decline in Alcohol-Associated Liver Disease. Clin Liver Dis (Hoboken). 2021 Feb 28;17(2):67-70. doi: 10.1002/cld.997. PMID: 33680438; PMCID: PMC7916431.

Thank You!