UPMC
LIFE CHANGING MEDICINE

Case #3: Cirrhosis and its complications

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Question

- Which famous composer underwent several large volume paracenteses toward the end of his life in 1827?

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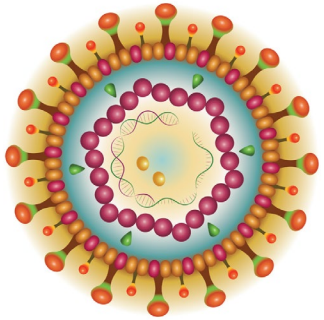
nature

Beethoven's cause of death revealed from locks of hair

Genetic sleuthing points to liver disease, viral hepatitis and alcohol consumption as causes of the composer's demise.

- Autopsy report: "[liver] shrunken to half its normal volume…it was beset with knots the size of a bean…the spleen was double its proper size"



Begg et al, 2023. *Current Biology.*

Case 3

A 63-year-old female with MASH-related cirrhosis, refractory ascites requiring q2weekly therapeutic paracentesis, and esophageal variceal bleed s/p banding (1 year ago) presents with AKI and confusion.

MELD 3.0 = 16, CTP B

Past Medical History:

- Obesity with weight loss over last 5 years, current BMI 24 kg/m^2
- Hypertension, dyslipidemia, T2DM
- Recurrent AKIs with diuretics

Social History:

- Widowed
- Daughter in another state
- No smoking, alcohol, drugs

ED Evaluation

- Physical Exam:
  - BP 98/60, HR 80
  - Drowsy, temporal wasting, lungs clear, large ascites, no jaundice, 1+ b/l LE edema, +asterixis
- Labs:
  - Hgb 9/Platelet count 80
  - Na 136, Cr 0.8->1.6
  - Tbili 1.7, albumin 2.8
  - INR 1.7
  - MELD 3.0 = 21
- RUQ US w/ Doppler: cirrhosis, large ascites, patent portal vein and hepatic veins
- Paracentesis: Ascites fluid PMN count >250/mm^3

Hospital Course

- SBP treated with ceftriaxone
- Given albumin challenge
- LVP 6L with albumin repletion
- Mental status clears with lactulose/rifaximin
- Cr rising to 2.6, bland sediment
- Starts midodrine/octreotide without improvement
- TTE: normal

ICU Transfer: Day 5

- Develops hematemesis and melena, transferred to ICU
  - EGD with 3 columns large esophageal varices, one with red wale sign, banded. No further bleeding.
  - Cr now 3.6 and oliguric, bland sediment
  - MELD 3.0 = 28

Summary: 63F with MASH cirrhosis with refractory ascites, AKI, HE, SBP, with course complicated by esophageal variceal bleed and worsening AKI-HRS.

Questions

- What are the options for managing her AKI-HRS?
- Is this patient a viable candidate for TIPS?
- If TIPS is an option, what is the optimal timing for TIPS?
- When would you consider liver transplant referral for this patient?