Ascites Due to Shortness of Breath

Jody C. Olson, M.D., FACP
Assistant Professor of Medicine and Surgery
Hepatology and Transplant Critical Care

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The Case:

32 y/o female presents to my office 8/2016 with a new diagnosis of ascites. Over the course of the last three months she has developed several complaints. In May she was treated for pneumonia with a 10 day course of antibiotics, at that time she was complaining of shortness of breath, fevers, and “could not lay flat”.
The case:

Later in the summer, she developed increasing abdominal bloating and distention, which she attributed to her hx. of gastroparesis. She was seen by a gastroenterologist and diagnosed with ascites.
Initial studies:

- EGD
  - Unremarkable
- Laboratory studies
  - CBC normal
  - Plt 436 k/mm$^3$
  - AST 10 U/L
  - ALT 6 U/L
  - T Bilirubin 0.8 mg/dL
  - Creatinine 0.75 mg/dL
  - Albumin 3.7 g/dL
  - SAAG = 1.1
  - CA 19-9 9.2 (nl < 34)
  - CA 125 2795 (nl < 35)
Additional details:

**PMH**
- Gastroparesis
- PCOS
- DM 2

**Physical Exam**
- Alert and appropriate
- Marked JVD
- Normal breath sounds
- Normal heart sounds no S3 or S4
- Marked abd distention with ascites
- Mild LE edema
Additional imaging:

- MRI abdomen
  - 4 sub centimeter indeterminate liver nodules “cannot rule out metastasis”
  - Marked hepatomegaly
  - Small cystic lesion left ovary
  - Marked abdominal ascites
Next steps in dx. And management?
# ECHO

## Vitals

<table>
<thead>
<tr>
<th>Height</th>
<th>Weight</th>
<th>BSA (Calculated)</th>
<th>BP</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>177 cm (69.69&quot;)</td>
<td>111 kg (244 lb 11.4 oz)</td>
<td>2.34</td>
<td>109/78</td>
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## Interpretation Summary

- Severe LV dysfunction, EF 10%
- Spherical, dilated LV
- Mild pulmonary hypertension
- Mild RV enlargement, moderate dysfunction
- Mild bi-atrial enlargement
- Moderate mitral regurgitation
- Moderate tricuspid regurgitation

## Echocardiographic Findings

### Left Ventricle
- Normal wall thickness. Severely dilated. Shape is spherical. Severely decreased ejection fraction. Grade III (severe) left ventricular diastolic dysfunction.

### Right Ventricle
- Mildly dilated. Moderately reduced ejection fraction.

### Left Atrium
- Mildly dilated.

### Right Atrium
- Mildly dilated.

### IVC/SVC
- Severely elevated central venous pressure (>15 mm Hg).

### Mitral Valve
- Normal valve structure. Moderate regurgitation.

### Tricuspid Valve
- Normal valve structure. Moderate regurgitation.

### Aortic Valve
- Normal valve structure. Trace regurgitation.

### Pulmonary
- Normal valve structure. No regurgitation.
Liver Biopsy

1. Liver, transjugular biopsy:
Bridging portal fibrosis with focal nodularity in transition to cirrhosis (stage 3-4 of 4).
Steatosis involving 20% of hepatocytes.
Chronic inflammation in portal and septal fibrous tissue.
Sinusoidal dilatation and congestion
Key Points

- History is important
- SAAG $\geq 1.1$ predicts portal htn. 97% accuracy
- Tumor markers can be elevated in non-malignant conditions
THANK YOU!