Not All Ascites is from Cirrhosis

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Background
- Cirrhosis is the commonest cause of new onset ascites
- Other uncommon causes of ascites must be sought in cirrhotic with atypical ascitic fluid characteristics, esp SAAG<1.1

Case Presentation
- 59/M with a past medical history of alcohol misuse, CAD, Hashimoto's disease s/p radioablation therapy with subsequent hypothyroidism, presented with chest pain and abdominal distension.
- ACS was ruled out, and chest pain was attributed to a GI etiology. A contrast CT of abdomen showed large volume ascites and widened hepatic fissures suggestive of a shrunken cirrhotic liver.
- Paracentesis revealed SAAG <1.1, total protein 4.2, with negative cultures and cytology. TSH - 86 with T4 <0.1 and constellation of symptoms (cold intolerance, weight gain, puffiness) pointed to severe hypothyroidism.
- Ascites resolved with thyroid replacement therapy confirming myxedema ascites

Discussion
- Hypothyroidism is a rare cause of ascites wherein the fluid accumulation occurs because of increased capillary permeability.
- Ascitic fluid studies show high in total protein (>2.5 g/dl; mean - 3.9 g/dl) and variable SAAG (mean - 1.5 g/dl; range 0.8–2.3 g/dl). WBC counts in ascitic fluid can be low or high, consisting predominantly of lymphocytes
- Table 1 mentions common causes of ascites classified based on SAAG.
- Myxedema ascites responds well to thyroid replacement therapy and is completely reversible, without any role for diuretics.

References