60 y/o M w/ PMH of EtOH abuse, hepatitis C and cirrhosis presented for newly diagnosed liver mass, also with fever and leukocytosis. Paracentesis was performed for management of ascites.

Samantha Huq, MD, MPH
Spontaneous bacterial peritonitis
Axial CECT in this cirrhotic patient with spontaneous bacterial peritonitis demonstrates loculated ascites with enhancement and thickening of the visceral and parietal peritoneum.
Coronal CECT reveals ascites fluid with classic imaging finding of bacterial peritonitis. Few locules of air are also present in the peritoneum from recent paracentesis.
Spontaneous bacterial peritonitis (SBP)

SPB is an infectious/inflammatory process involving the peritoneum or peritoneal cavity. SBP can occur in cirrhotic patients or secondary to bowel perforation, gastrointestinal infections, TB, trauma, surgery etc.

Best imaging tool is contrast enhanced CT. It demonstrates ascites +/- loculated fluid collections or discrete abscess. The ascites may be slightly higher in attenuation (15-30 HU) on CT when compared to simple ascites. Smooth thickening and hyperenhancement of the peritoneum is present. In chronic setting, peritoneal lining may be thickened with smooth, curvilinear calcification.

Top differentials include peritoneal carcinomatosis, benign ascites, pseudomyxoma peritonei or hemoperitoneum.

Treatment is dependent on etiology and may include antibiotics and surgery.
References