

## A Man with Recurrent Ascites after Laparoscopic Cholecystectomy

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### CASE DESCRIPTION

A 32-year-old man presented with severe abdominal pain and ascites. His medical history included diagnosis of Sandifer syndrome, scoliosis requiring 3 spinal surgeries, microgastria, and hiatal hernia repair, and most recently, laparoscopic cholecystectomy (7 weeks prior). Postprocedural abdominal pain led to a computed tomography (CT) scan which confirmed ascites. The possibility of a postcholecystectomy common bile duct leak prompted an endoscopic retrograde cholangiopancreatography (ERCP) with stent placement. Unfortunately, this did not prevent peritoneal fluid from reaccumulating and the patient was transferred to our institution for further evaluation and management. The patient was afebrile and vital signs were normal. The abdominal examination revealed mild diffuse nonspecific tenderness. CT scan of abdomen was performed revealing increased peritoneal fluid. The radiologist noted that the findings were likely iatrogenic and could represent a bile, lymph, or pancreatic leak. CT guided paracentesis aspirated 280 mL of fluid accumulated near the right hepatic lobe and paracolic gutter. Aspirate was described as watery opaque and white with a pink tinge. Results of body fluid laboratory analyses are described in Table 1.

<b>QUESTIONS TO CONSIDER</b>
<ul style="list-style-type: none"> <li>• What is the utility of body fluid lipid analysis in the differential analysis of a body fluid specimen?</li> </ul>
<ul style="list-style-type: none"> <li>• How is definitive diagnosis of a chyle leak achieved?</li> </ul>
<ul style="list-style-type: none"> <li>• What is the potential benefit of lipoprotein electrophoresis analysis on fractions of an ultracentrifuged body fluid as compared to the whole fluid?</li> </ul>
<ul style="list-style-type: none"> <li>• What is the concern with using a triglyceride assay that does not blank for endogenous glycerol?</li> </ul>

Table 1. Bodyfluid testing laboratory results.		
Analyte	Result	Reference value
Bilirubin	0.26 mg/dL (4 $\mu$ mol/L)	NA <sup>a</sup>
Amylase	6 265 U/L	NA
Triglycerides	332 mg/dL (3.75 mmol/L)	NA
Cultures	Negative	Negative
Malignant cells	None	None
Nucleated cells	930/ $\mu$ L	<500
Neutrophils	1%	<25%
Lymphocytes	9%	<75%
Monocytes/ macrophages	26%	<70%
Eosinophils	3%	NA

<sup>a</sup> NA, not applicable.

### Final Publication and Comments

The final published version with discussion and comments from the experts will appear in the July 2017 issue of *Clinical Chemistry*. To view the case and comments online, go to <http://www.clinchem.org/content/vol63/issue7> and follow the link to the Clinical Case Study and Commentaries.

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