



Got Milk? A Complex Case of Chylous Ascites

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INTRODUCTION

Chylous ascites (CA) is characterized by peritoneal fluid rich in triglycerides and is rarely encountered in clinical practice. Herein, we report a case of recurrent CA suspected to be caused by multiple abdominal surgeries.

CASE DESCRIPTION

58-year-old female with history of obesity status post Roux-en-Y gastric bypass, and ventral wall hernia incarceration presented with abdominal ascites, lower extremity edema, and abdominal pain. The patient had her bypass surgery 14 years earlier, and had undergone ventral herniorrhaphy one year prior to presentation.

Abdominal paracentesis removed 7 liters of cloudy fluid with a triglyceride level of 592 mg/dL, consistent with chylous ascites. Liver biopsy showed low grade nodular regenerative hyperplasia without evidence of bridging fibrosis or cirrhosis. Patient had thrombocytosis (platelet count of 555,000) and cytology testing for underlying myeloproliferative disorder was performed and was negative.

Patient underwent CT imaging of chest/abdomen/pelvis along with further infectious workup and was ruled out for overt malignancy and tuberculosis. Lymphatic duct injury or leakage from prior surgery was considered highly on the differential and lymphoscintigraphy obtained, however this showed no abnormal accumulation of tracer in chest or abdomen. Patient was placed on high protein and low-fat diet with medium chain triglycerides to control accumulation of ascitic fluid.

RESULTS

	6/17/2019	1/8/20	3/12/20	6/26/20	12/24/20	1/11/21
WBC	507	156	168	487	70	50
Segs (%)	16	6	35	2	24	16
Lymph (%)	30	35	10	7	22	46
Macro (%)	34	57	50	65	45	34
Meso (%)	20	2	5	26	3 (6% histio)	4
SAAG	1.1	>1.1	>1.1	>1.1	N/A	>1.1
T. Prot	1.7 g	1.4 g	1.4 g	1.9 g	N/A	1.5 g
Triglyceride	N/A	N/A	592	N/A	542	211

Image 1. Serial Paracentesis Fluid Studies

Final Diagnosis

- A. ABDOMEN; PARACENTESIS FLUID
 - INFLAMMATION, PREDOMINANTLY LYMPHOHISTIOCYTIC
 - NEGATIVE FOR MALIGNANT CELLS (SEE COMMENT)

Image 2. Cytology



Image 3. Chylous Ascites.

DISCUSSION

Chylous ascites is a rare form of triglyceride-rich ascites that typically occurs from underlying malignancy, cirrhosis, or lymphatic disruption after abdominal surgery. The etiology of our patient's CA was most likely from prior abdominal surgery as there was no evidence of underlying malignancy or cirrhosis. Lymphangiography can be performed to help identify source of leak, however it was not performed in our patient due to risks from the study including tissue necrosis and fat embolism. Complications of CA include malnutrition, dehydration, immune suppression and superimposed infection. The goal of treatment is to address underlying causes, and when this is elusive management revolves around control of the accumulation of chylous ascites. Diuretics have no role in management, and a high protein and low-fat diet with medium chain triglycerides is recommended to slow accumulation of ascites.

CONCLUSIONS

- Paracentesis will show high triglycerides
- History of malignancy, abdominal surgery (pancreatic, colorectal surgery) infection such as TB
- Lymphoscintigraphy, CT abdomen/pelvis can be helpful in elucidating cause of CA
- Management consists of conservative management such as diet modification to include low fat diet, fasting, TPN, somatostatin, optimal nutritional intake

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