中文題目：以乳糜性腹水為初始症狀之濾泡型淋巴瘤一個案報告

英文題目：Chylous ascites as an initial presentation in a patient with follicular lymphoma - a case report

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Introduction

Chylous ascites is defined as a milky appearing, triglyceride-rich peritoneal fluid, characterised by the presence of thoracic or intestinal lymph in the abdominal cavity. Abdominal malignancy, cirrhosis, lymphatic disruption after abdominal surgery, and infections represent the leading causes of chylous ascites in adults. The underlying cause of chylous ascites is the disruption of lymphatic flow. Lymphangiography is the gold standard diagnostic tool in cases of lymphatic obstruction. Management of chylous ascites is to optimise the patient's nutritional status, including high-protein and low fat diet supplemented with medium-chain triglycerides. Somatostatin, or octreotide, have been used as well in the treatment of chylous ascites. Therapeutic paracentesis may be performed to provide temporary symptomatic relief.

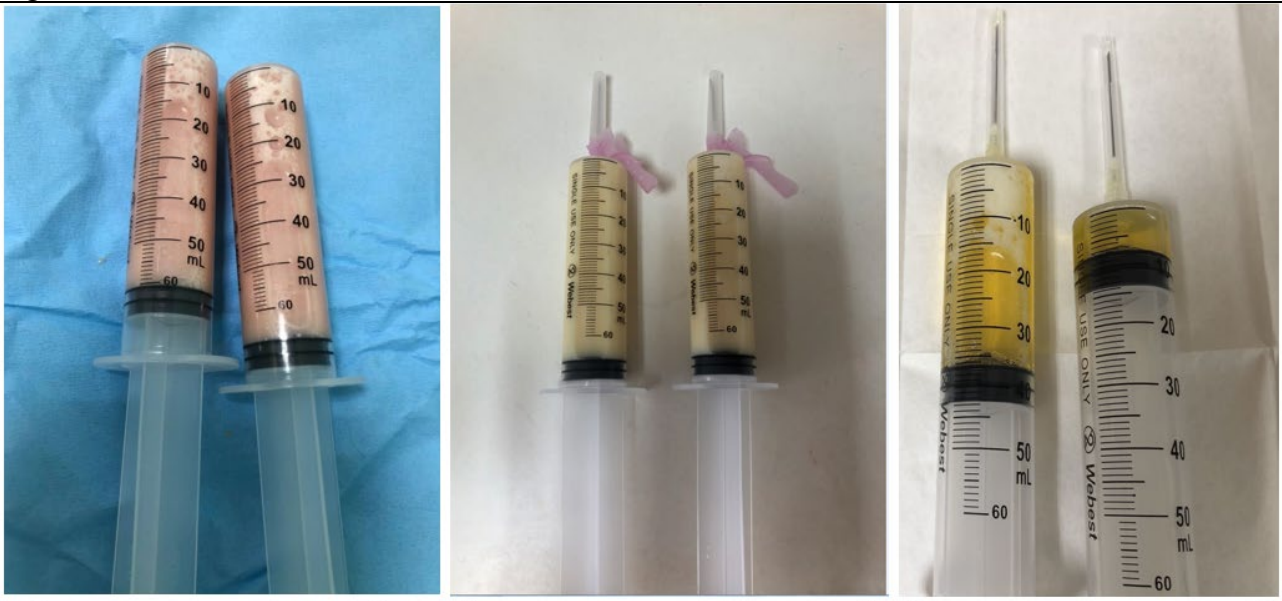
Follicular lymphoma is the most common indolent lymphoma and the second most common non-Hodgkin lymphoma in Western countries. Incidence rates of follicular lymphoma in Taiwan increased continuously (0.34 to 0.91 per 100,000 person-year from 1993-1997 to 2008-2012 in men, and from 0.29 [1993-1997] to 0.81 [2008-2012] in women). It usually characterized by asymptomatic diffuse lymphadenopathy. Bone marrow involvement is present in 70 percent of patients. Less than 20 percent of patients present with B symptoms, and also less than 20 percent of patients present with an increased serum lactate dehydrogenase (LDH). Cytopenias can occur, but constitutional symptoms of fever, nightsweats, and weight loss are uncommon. A prospective study identified chylous ascites (6.7%) among 45 patients with malignancy-related ascites among 448 ascites patients, and all patient with chylous ascites in this study had associated lymphoma.

Case presentation

A 66-year-old female was referred to our hospital for further evaluation of abdominal mass and massive ascites. Her symptoms initially presented as epigastric discomfort for 2 weeks which exaggerated after intake. Accompanied symptoms included intermittent nausea and vomiting, shortness of breath, poor appetite, and progressive abdominal distension. There were no fever, body weight loss, cold sweating, cough with purulent sputum, melena, hematochezia, or dysuria. Her laboratory tests showed lactate dehydrogenase level:230 IU/L. Esophagogastroduodenoscopy was arranged but only revealed LA Gr.A reflux esophagitis, no tumor was seen. Abdominal computed tomography revealed a huge enhancing soft tissue mass over 14cm at central mesentery and retroperitoneum accompanied with massive ascites. Abdominal paracentesis disclosed pink creamy ascites with WBC:9920, RBC:28600, N/L ratio:1/96, protein:2894mg/dL, glucose:118mg/dL, triglyceride:1604mg/dL, albumin:2130mg/dL, serum albumin:3.6g/dL, which was referred to as chylous ascites. Pigtail catheter was placed for ascites drainage. Fluid cytology revealed malignant lymphoma with positive of CD20 stain. Biopsy specimens obtained from bone marrow discovered

paratrabecular lymphoid aggregates with mainly CD20 positive B cells, which are also positive for CD10, BCL-2 and BCL-6. Whole body positron emission tomography found the lymphoma involving both side of diaphragm, peritoneal seeding, splenic, right adrenal, and bone involvement. Based on these results, the patient was diagnosed with follicular lymphoma, Ann Arbor stage IV, and first cycle of chemotherapy with R-CHOP and Venetoclax were administered. After that, the color of her ascites turned clear (Figure 1) with WBC:45, RBC:170, N/L ratio:6/85, protein:1909mg/dL, glucose:215mg/dL, triglyceride:1985mg/dL, albumin: 1650mg/dL, serum albumin:3.5g/dL. Because of persisting large amount of her ascites drainage, lymphangiography was performed and showed extravasation over left pelvic region, therefore percutaneous embolization targeting left external iliac lymph node and lymphatic channels was performed. Her pigtail catheter drainage amount gradually decreased, and the catheter was removed before her discharge. The patient finally achieved complete remission after 6 courses of chemotherapy with R-CHOP and Venetoclax. Whole body positron emission tomography disclosed no residual tumor. Now the patient is in robust status and still regularly visited our outpatient clinic for follow up.

Figure 1.



Conclusion

Chylous ascites is a rare form of ascites resulting from an accumulation of lymph in the abdominal cavity. The diagnosis is established when the concentration of triglycerides in the ascitic fluid is >200 mg/dL. The most common malignancies reported to cause chylous ascites are lymphomas, neuroendocrine tumors, Kaposi sarcoma and chronic lymphatic leukemias. Treatment should be individualized and adjusted to the severity of lymphatic leakage and its consequences. Patient with lymphoma presented as chylous ascites can have significant improvement following treatment such as chemotherapy or percutaneous embolization therapy.

Discussion

Our patient initially presented as massive malignant ascites, and follicular lymphoma was diagnosed based on bone marrow biopsy result. Her ascites was strawberry-like at first, and became clear after first cycle of chemotherapy. A successful lymphangiography along with adjunctive embolization procedure managing chylous ascites usually leads to significant reduction in the amount of drainage, and the fluid consistency may change from milky to clear. Drainage amount less than 200–300 mL/d as a marker of successful embolization and an indication that a drain tube can be removed.

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