

Chylothorax and Chylous ascites: the same aetiology for two different conditions.

Quilotórax y Ascitis Quilosa: la misma etiología para dos entidades diferentes.

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Abstract

The authors present a rare case of a 90 years old man non-traumatic chylothorax and chylous ascites.

Keywords: Chylothorax, Chylous ascites, Lymphoma

Chylous pleural effusions result from disruption/obstruction of the thoracic duct¹. Chylous ascites is due to an interruption in the lymphatic system². Simultaneous accumulation of chyle in multiple cavities, in non-traumatic etiologies, is rare³.

A 90-year-old man was admitted in the emergency department complaining of progressive breathlessness, dry cough, asthenia

and abdominal distension over the last 8 days. He denied fever, anorexia and weight loss. He was no past of smoking habits and his past medical history was not relevant, besides history of hypertension. General physical examination showed a pale male, emaciated, with breath sounds absent in left basal area with stony dull percussion note. Per abdomen, shifting dullness

Fig. 1. Chest radiograph showing a left pleural elfusion.



was present. Routine blood investigations revealed macrocytic anemia, elevation on C-reactive protein of 3,56 mg/dL (normal value < 0,5mg/dL), erythrocyte sedimentation rate of 105 mm (normal value < 15 mm), creatinine of 2,02 mg/dL (normal value 0,6-1,20 mg/dL). The chest radiograph was suggestive of left pleural effusion. Thoracocentesis and paracentesis were performed with drainage of milky fluid. Pleural fluid examination revealed: >1000 cells/mm³, mostly lymphocytes, glucose 71,9 mg/dL, protein 3 g/dL, triglyceride 506 mg/dL, cholesterol 45 mg/dL, adenosine deaminase 17,2 UI/L. Peritoneal fluid was also examined: >1000 cells/mm³, mostly lymphocytes, glucose 69,2 mg/dL, protein 3,2 g/dL, triglyceride 489 mg/dL, cholesterol 48 mg/dL, ADA 8,9 UI/L. Serum triglyceride and cholesterol were 122 mg/dL and 106 mg/dL, respectively. Pleural and peritoneal fluid analysis did not reveal any abnormal cell and cultures were sterile, including culture for *Mycobacterium tuberculosis*. A chest computed tomography showed a large solid, nodular mass surrounding the aorta, with 14x11 cm. Flow cytometry revealed non-Hodgkin lymphoma. Our patient was treated conservatively with corticosteroid and a diet of medium chain triglyceride oil, with

progressive deterioration of clinical status with unfavorable evolution. Lymphomas are one of the main non-traumatic causes of chylothorax and chylous ascites (70% of cases, mostly non-Hodgkin lymphoma)^{4,5} and may be the first manifestation of the disease. Patients with leaks from retroperitoneal lymphatics may present as isolated chylothorax or combined with chylous ascites⁴. Treatment is the same as that of the hematologic malignancy. A pleural/ascitic fluid triglyceride level greater than 110 mg/dL is an accurate marker for the presence of chylothorax/chylous ascites^{1,3}.

References

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Fig. 2. Abdominal computed tomography (coronal view, showing a large mass surrounding the aorta (14x11cm).

