

Chylous Ascites

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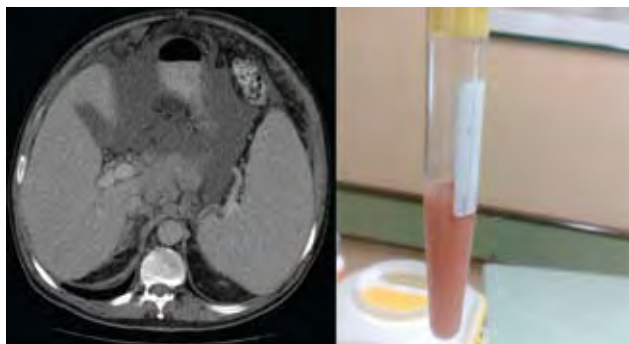
Male patient, aged 73 years, with history of B-cell non-Hodgkin's lymphoma (CD20+), diagnosed in 2002, in apparent remission until 2007. Hospitalized due to non-selective anorexia, asthenia, increased abdominal volume, weight loss, edema of the lower limbs, nocturnal sweating, dyspnea, cough and mucopurulent expectoration. Palpable submaxillary, axillary and inguinal adenopathies were visible; with the abdomen globus, distended and tympanitic in the periumbilical region, and soft in the flank region. Fluid wave sign positive. Edema of the lower limbs, reaching to the thighs.

Pancitopenia, serum triglycerides (TG) 187 mg/dL, serum creatinine 4.40 mg/dL, creatinine clearance of 12.31 ml/min and total proteinuria of 3918 mg/24h were evident. CT showed splenomegaly, increase in retroperitoneal, intraperitoneal and pelvic ganglions, with a significant increase in free intraperitoneal free fluid.

Paracentesis showed a turbid, pink liquid, similar to a redcurrant fool (Fig. 1), with serum TG of 477 mg/dL, mononucleated cells 1334 (94.81%) and leukocytes 1371.00, with 2.67% polymorphonuclear. Serum-ascites albumin concentration 1.1 g/dL. The microbiological exam was negative.

However, it was a case of chylous ascites, the definition of which is characterized by a peritoneal fluid with milky appearance, with high serum TG concentrations of over 200 mg/dL. Although rare, its incidence has increased, due to the improved survival rate of patients with neoplasia, and more aggressive surgical interventions.

It develops when there is disruption to the lymphatic system due to obstruction of the lymph nodes, causing exudation of the dilated subserosal lymphatics in the peritoneal cavity; by exudation through dilated retroperitoneal veins, through the



Left, abdominal CT image, showing enlarged spleen and lymph ganglions, and free intraperitoneal fluid. Right, photograph with sample of ascitic fluid, similar to redcurrant fool.

FIG. 1

fistula, or due to obstruction of the thoracic canal owing to trauma.

A lipid-deficient diet with medium-chain triglycerides (MCT) reduces the production and flow of lymph; and dietary restriction of long-chain triglycerides prevents their conversion into monoglycerides and free fatty acids which are transported as chylomicrons to the intestinal lymph channels.

Somatostatin and octreotide have been used to treat chylous ascites in patients with yellow-nail syndrome and lymphatic blockage following thoracic and abdominal surgery. Orlistat, a reversible inhibitor of gastric and pancreatic lipases, can minimize ascites and their content in triglycerides.

Total intestinal rest and Total Parenteral Nutrition can be used in isolation or in combination with the above-mentioned therapies.

There was a vast improvement in abdominal volume, dyspnea and well-being of the patient when submitted to a tailor-made diet with low lipid content and MTG supplements. ■

References

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