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SCIENTIFIC LETTER

An Uncommon Cause of Chylous Ascites in an Infant

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To the Editor: Chylous ascites secondary to heart failure is uncommon [1]. A 2-mo-old term infant without perinatal complications, presented with fast breathing for 20 d. The examination revealed HR - 146/min with good pulse volume, BP - 76/40 mm Hg, RR - 62/min with retractions, bilateral inspiratory crepitations, SpO_2 - 97% on room air, pan systolic murmur over left parasternal border, and hepatomegaly. The treating team considered acyanotic congenital heart disease with congestive cardiac failure (CCF). The baby was given a high-flow nasal cannula and intravenous diuretics. CXR revealed cardiomegaly with increased pulmonary plethora. Echocardiography revealed a 5 mm patent ductus arteriosus (PDA) with severe pulmonary arterial hypertension with a massively dilated right atrium and ventricle. As PDA cannot explain right heart dilation, CTA of the thorax was performed that revealed a partial anomalous pulmonary venous connection (PAPVC) with the left inferior pulmonary vein draining into the left hepatic vein and the right superior pulmonary vein into the superior vena cava. She was intubated on day 3 of admission and developed ascites and pitting edema by day 8. Laboratory parameters revealed hypoalbuminemia with normal kidney function. She was given albumin infusion. A Doppler USG revealed dilated hepatic veins and inferior vena cava. There was no clinical or microbiological evidence of tuberculosis. Diagnostic paracentesis revealed milky fluid and laboratory parameters confirmed chylous ascites. MR lymphangiogram and lymph scintigraphy revealed no leak of chyle and it was attributed to high systemic venous pressures secondary to elevated pulmonary artery pressure as a result of PAPVC, causing high lymphatic pressure. Chylous ascites was managed conservatively with a low-fat diet and octreotide infusion. However, the baby succumbed to nosocomial infection due to immunosuppression caused by loss of chyle. Hence, the possibility of chylous ascites should be considered in diuretic refractory ascites in the setting of heart diseases with elevated systemic venous pressure. Management of underlying congenital heart disease and associated immunosuppression is crucial as well as challenging in such rare cases of chylous ascites associated with CCF [2, 3].

Declarations

Conflict of Interest None.

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