

Management of post-operative chylothorax and chylous ascites in pediatric patients: preliminary results of a two year, single center PICU experience.

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Argomento: Terapia Intensiva Pediatrica

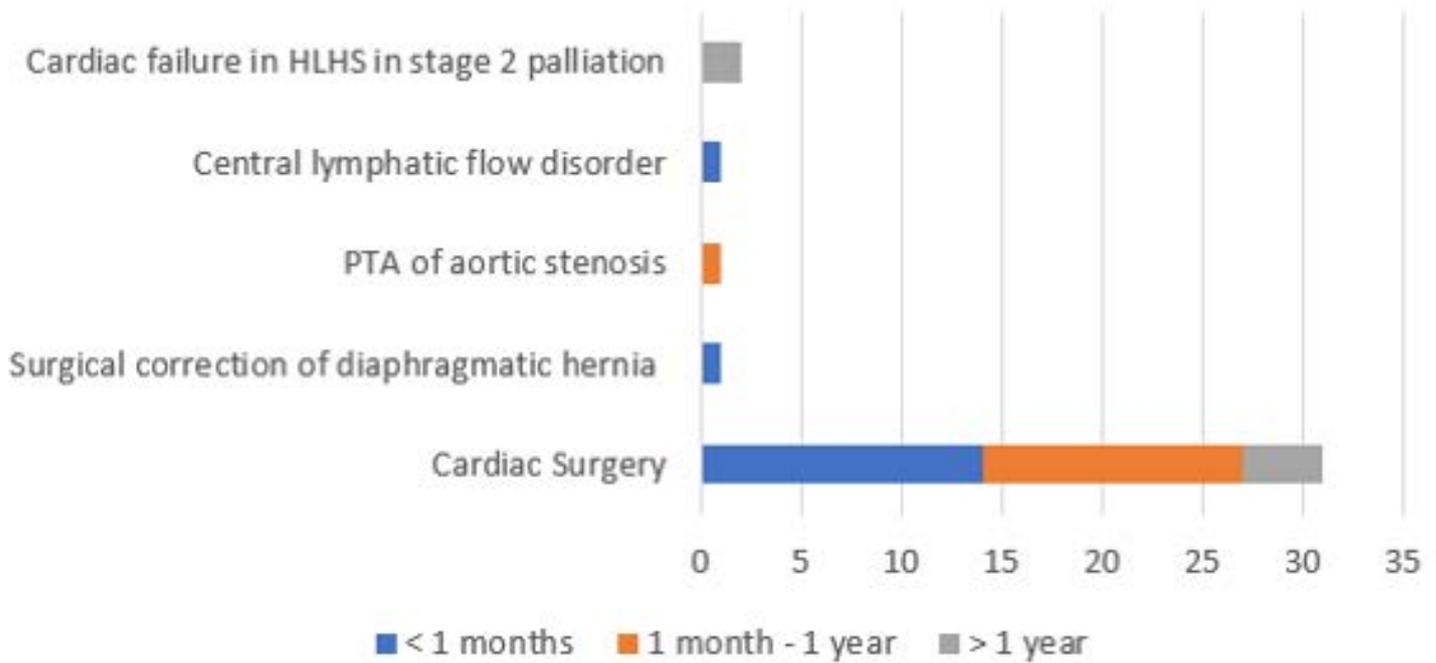
Background. Postoperative chylothorax (CT) and chylous ascites (CA) are challenging problem with substantial morbidity. Consensus treatment guidelines are lacking and variability exists in duration of medical treatment and timing for surgery.

Methods. After institution of a clinical practice guideline for management of chylous effusion, we prospectively collected data concerning patients admitted in our PICU with CT or CA using an electronic case report form (PROSAFE) with a dedicated petal. Data included demographics, surgical procedure, treatments, infections, PICU and hospital length of stay (LOS), duration of mechanical ventilation (MV) and central venous catheter utilization.

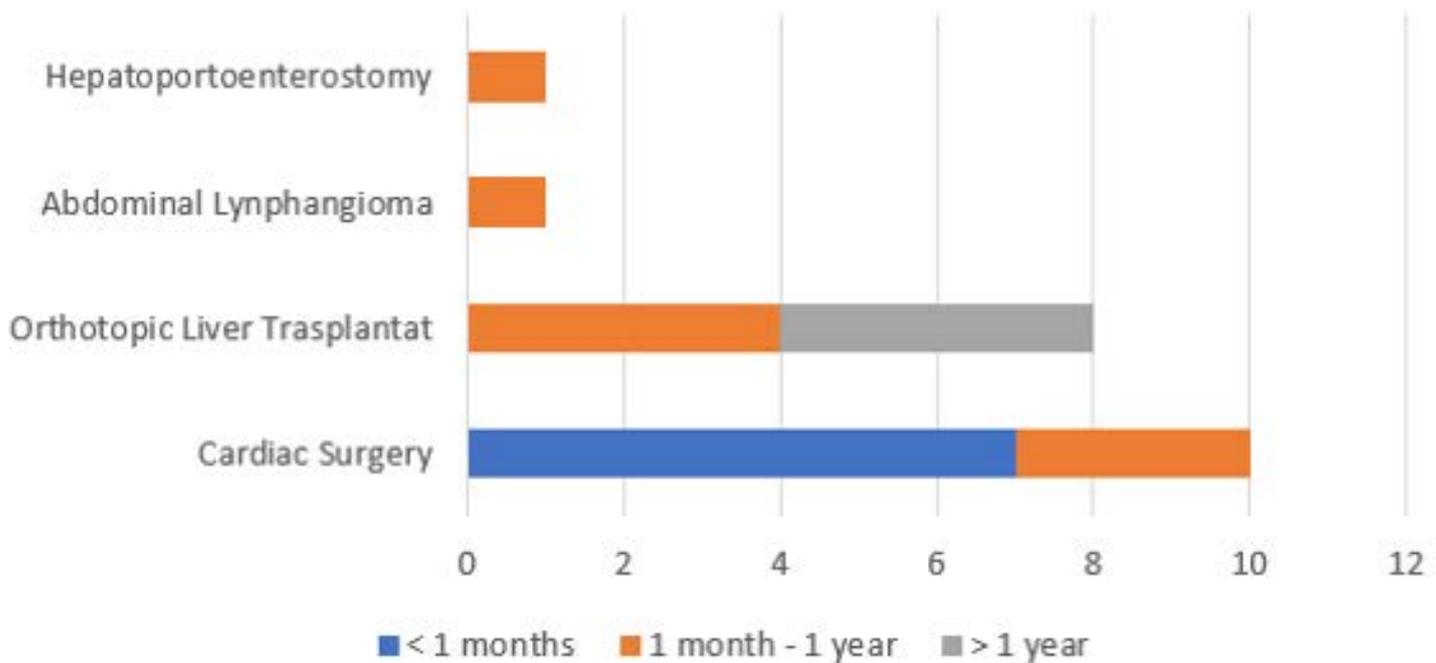
Results. From January 2017 to February 2019 we enrolled 49 patients: 29 presented CT, 13 CA and 7 both effusions. Etiology and patient's age are presented in *figure 1*. All CA and all but one CT resolved with medical therapy. 67% CT and 70% CA resolved with diet (medium-chain triglyceride [MCT] milk) in a median of 3 (2-4) days. One week of total parenteral nutrition (TPN) was effective for 8% CT and 10% CA. In 22% CT and 20% CA we proceeded with TPN with adjunct of octreotide and achieved resolution respectively at day 20 (13-24) and 14 (12-24) from diagnosis. The lymphoscintigraphy of the refractory patient revealed a central lymphatic flow disorder: symptoms resolved after pleurodesis. Infection developed in 55% of patients, among them we registered 41% sepsis and 27% septic shock. Four patients died in PICU: all underwent cardiac surgery for congenital heart disease; 2 presented CT and 2 CA. Median PICU LOS was 19 (9-37), hospitalization 50 (26-109), CVC utilization 19 (19-37) and MV duration 7 (3-19) days.

Conclusions. Post-operative CT and CA occurrence is associated to prolonged PICU stay and high infection incidence. Medical management allowed resolution of all cases except one that was treated by pleurodesis

Chylothorax etiology and patient's age



Chylous ascitis etiology and patient's age



HLHS: Hypoplastic Left Heart Syndrome; PTA: Percutaneous Transcatheter Angioplasty