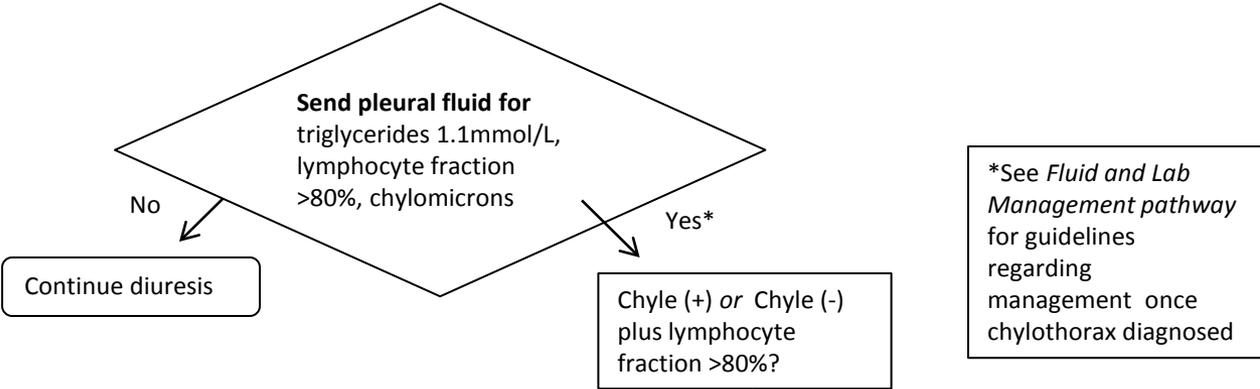


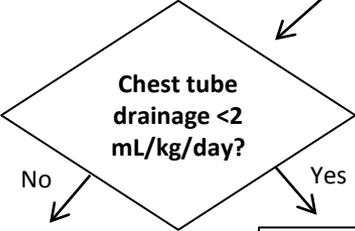
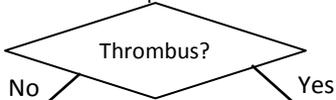
NC Children's Chylothorax Algorithm *DRAFT 5.21.12*



PERSISTENT CHEST TUBE DRAINAGE (CTD) (>5 mL/kg/day) ON POD#4 OR PRESENCE OF MILKY DRAINAGE



PHASE 1
Chylothorax diet (see Nutrition Management pathway) for 5 days
Diagnostic imaging (U/S, ECHO to rule-out thrombus)

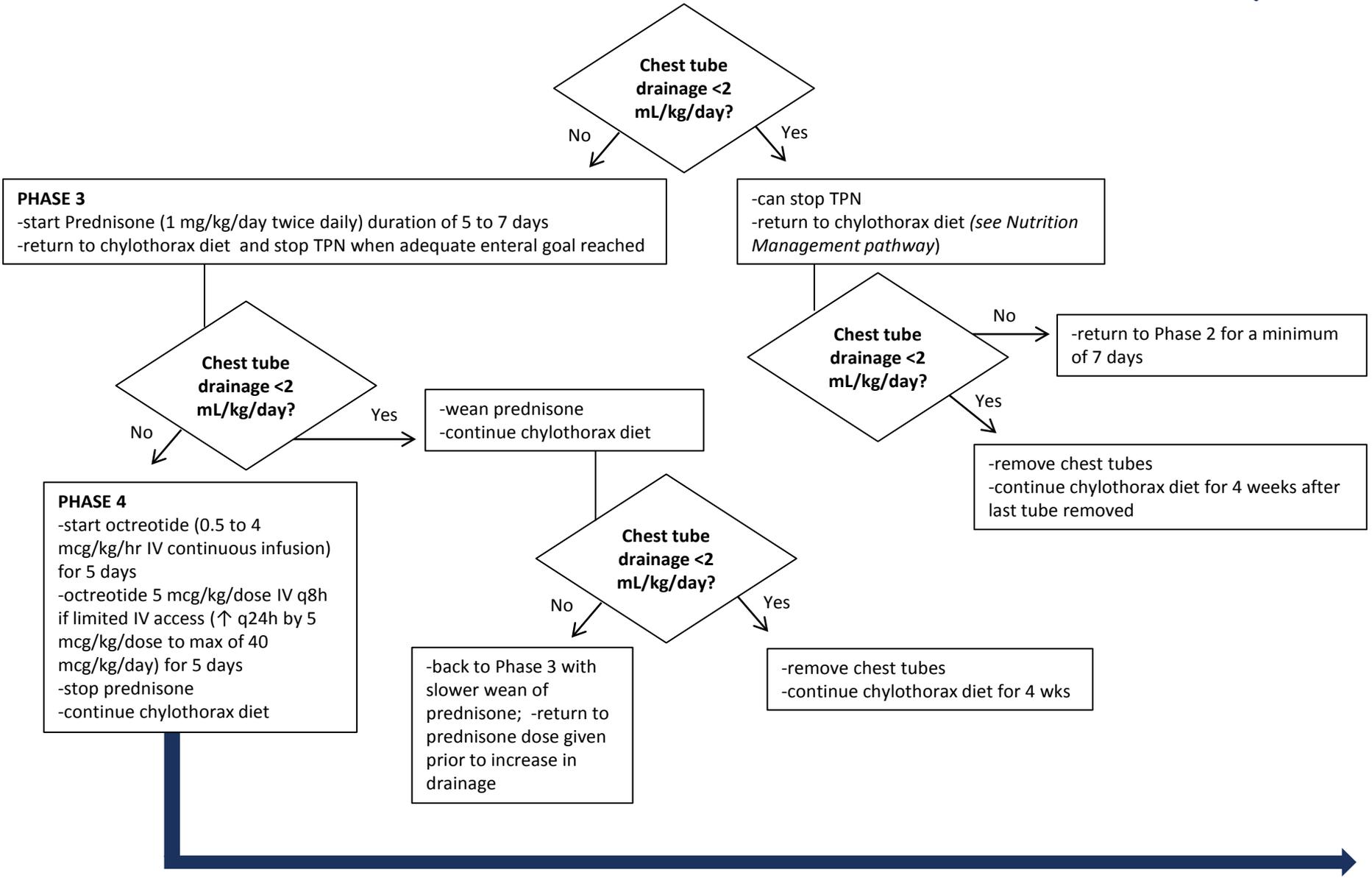


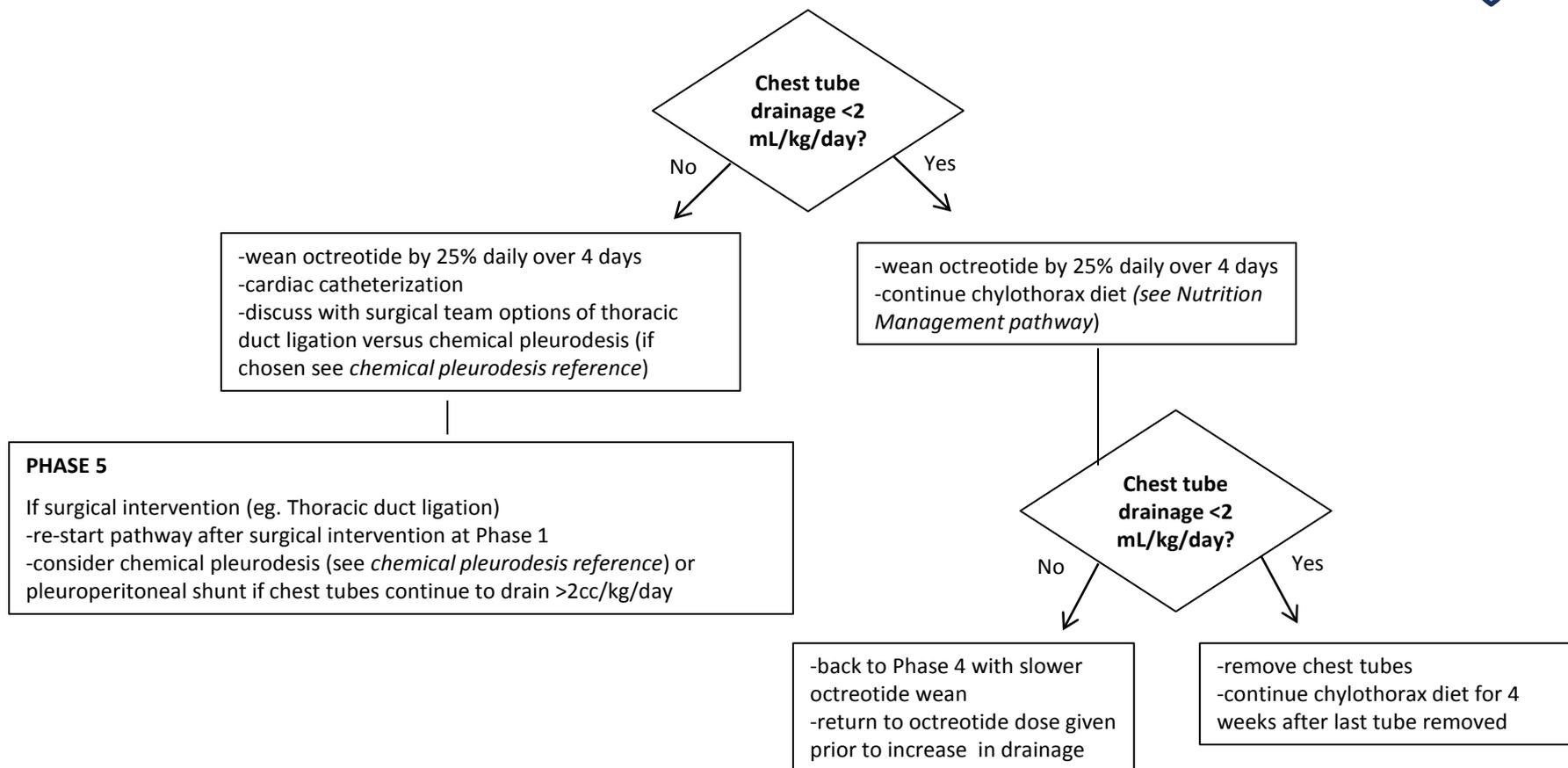
-remove chest tube
-continue chylothorax diet for 4 weeks after last chest tube removed

PHASE 2
Start TPN/NPO for 5 days
-attain longer-term vascular access
Note: For patients who had aortic arch reconstruction, notify surgeon to consider early thoracic duct ligation.

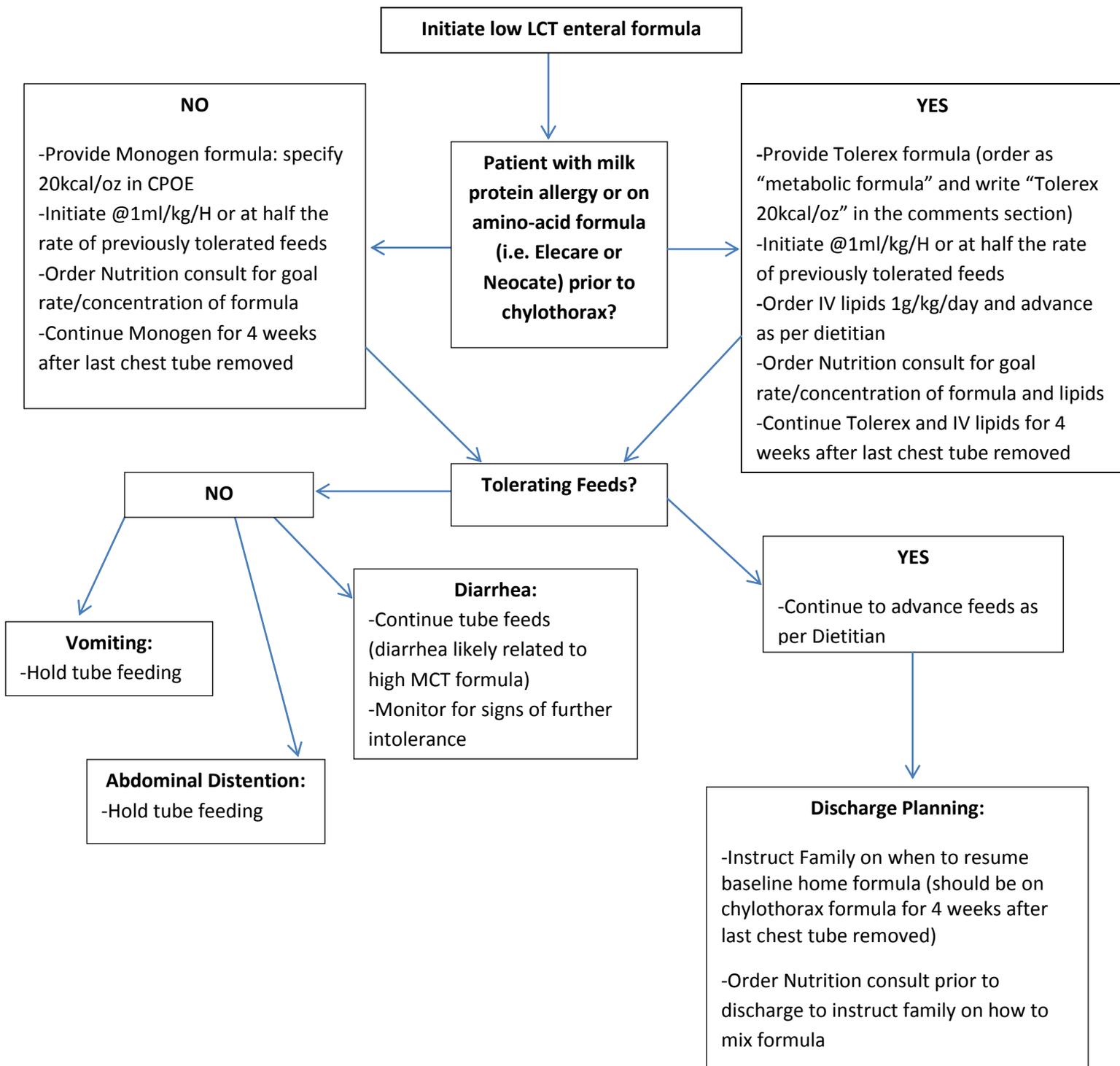


NC Children's Chylothorax Algorithm *DRAFT 5.21.12*





Nutrition Management Pathway for Pediatric Chylothorax



Notes: (1) This is a general guideline and does not represent a professional care standard governing providers' obligations to patients. Care is revised to meet the individual patient needs. (2) This is a quality improvement document and should not be a part of the patient's medical record.

NC Children's Hospital Pediatric Congenital Heart Surgery Chylothorax Fluid and Laboratory Guidelines

[Refer to NC Children's Hospital Chylothorax Management Algorithm]

1. For chest tube output replacement, replace in a range of [0.5 ml in to 1 ml in]: [1 ml out] based on patient needs with 5% Albumin
2. Avoid hyponatremia
3. Follow albumin level daily
4. Keep albumin level ≥ 3 by administering 25% albumin in 1 Gram/KG doses
5. Follow ATIII level daily initially and keep at least $> 80\%$ of normal – follow less frequently than daily or discontinue following ATIII levels if not requiring product
6. Follow IgG level every Monday/Wednesday/Friday if requiring IVIG – follow less frequently or discontinue following IgG levels if not requiring IVIG
7. Administer IVIG to keep IgG in normal range
8. Consider following TEG daily initially to assist with replacement of products and assess clotting risk, discontinue following if normal and chylothorax is responding to therapies

References:

1. V. Bernet-Buettiker et al. Antithrombin activity in children with chylothorax. *European Journal of Cardio-thoracic Surgery* 29 (2006) 406–409
2. H. P. Leite et al. Serum albumin and clinical outcome in pediatric cardiac surgery. *Nutrition* 21 (2005) 553–558
3. Cabrera et al. Nutrition and surgery for congenital heart disease. *Curr Opin Cardiol* 25:88–94

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