Notes: (1) This pathway 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.

Please refer to Page 2 for criteria for diagnosis of chylothorax.

Chylothorax Algorithm

Low Volume Output
<20mL/kg/day
(~1mL/kg/hr)

Chylothorax diet for 7 days

Chest tube output
<10mL/kg/day?

YES

Continue chylothorax diet for 4-6 weeks

NO

Remove chest tube when drainage < 2mL/kg/day

High Volume Output
>20mL/kg/day
(~1mL/kg/hr)\(^1\)

NPO + TPN for 7 days

Chest tube output
<10mL/kg/day?

YES

Octreotide x 7 days\(^2\)
Continue TPN/NPO

NO

Chest tube output
<10mL/kg/day?

YES

Wean octreotide by 1mcg/kg/hr q24h
Transition to enteral feeding

NO

Wean octreotide by 1mcg/kg/hr q24h\(^3\)

Discuss surgical intervention

NO

YES

Continue chylothorax diet for 4-6 weeks

Remove chest tube when drainage < 2mL/kg/day
Footnotes:
1. Obtain PVLs for high-output
2. Start octreotide at 0.5mcg/kg/hr IV. Increase by 1mg/kg/hr q24h up to 6mcg/kg/hr until effect is seen
3. For patients refractory to above methods, consider use of prednisone (1mg/kg/day divided BID for 5-7 days)

Diagnosis of chylothorax:
Pleural fluid with WBC>1,000 cells/uL, lymphocytes >80%, TG level > 100 mg/dL
OR
Pleural fluid TG: serum TG > 1

Considerations after diagnosis:
- Echocardiogram to assess for thrombus. If thrombus present, consider treatment with heparin
- Fluconazole prophylaxis
- Replacements for high output – start with 0.5:1 of chest tube output with 5% albumin (increase to 1:1 for hemodynamic instability). Can substitute FFP or IVIG if indicated

Laboratory Guidelines:
- **At diagnosis**
  - Albumin
  - DIC panel
  - IgG

- **Daily labs**
  - Albumin

- **Low Output**
  - Weekly IgG and DIC panel

- **High Output**
  - M/W/F IgG and DIC panel