**Post-Operative Chylothorax Management Guidelines for the CVICU**

**Inclusion Criteria:** Postoperative Cardiac Surgical Patient. Diagnosis of Chylothorax confirmed as per diagnostic criteria listed.

**Exclusion Criteria:** Patients with allergy to MCT formula. Patients with gastrointestinal disease that require prolonged NPO.

**Diagnosis**
- **Pleural Fluid aspiration**
  - TG level > 100 (or higher than serum TG)
- **Fluid** – TG level, cell count and differential
- **Serum** – TG level, Transferrin, Pre-Albumin, CRP

**Low volume Chylous Output**
- (< 10 ml/kg/day)
- **Chylothorax Diet x 7 days**
  *Refer to chylothorax nutrition guidelines for details*
- Decreased CT Output
  *YES*
  - **Chylothorax Diet**
    - For min 6 weeks from surgical date
    - Change PleuraVac to portable CT drain
  *NO*
  - Decreased CT Output
    *YES*
    - Consider Discharge Home
      - When CT output is < 3ml/kg/day with portable CT system
    *NO*
    - Remove CT when output < 2 ml/kg/day*

**Evaluate Nutritional Status Post Treatment**
  *Refer to Nutritional Handouts*

  *Upon CT removal, must continue chylothorax diet for minimum of 8 weeks*

  Chylothorax diet is order set includes:
  - Low fat diet (10g per day)
  - High medium chain triglycerides (MCT)
  - Low long chain triglycerides (LCT)

**High Volume Chylous Output**
- (> 10 ml/kg/day)
- **Establish PICC line**
- Family meeting with projected time line
- **Obtain ECHO**
  - Evaluate for Stenosis/Thrombus/Collaterals
  - Consider Sildenafil, ACE inhibitors
  - Maximize diuretics and fluid restrict
- **If > 10 ml/kg/day**
- **If Echo show major area stenosis or obstructions consider further imaging (CTA) or cardiac catheterization**
- **NPO + TPN/Lipids/* 7 – 10 days**
  *Consider AT III, fibrinogen and immunoglobulin replacement if clinically indicated*

**Decrease CT Output**
- (< 10 ml/kg/day)
- **Cardiac Catheterization**
  - NPO min 24 hours post-procedure
  - Start Chylothorax diet
- **Decreased CT Output**
  *YES*
  - **Decrease CT Output**
    *YES*
    - **Thoracic Duct Ligation/Pleurodesis**
      - Approximately 3 – 4 weeks post op
    *NO*
    - NPO + TPN/Lipids
      - Minimum 4 days

**YES**

**NO**

*Reassess the appropriateness of Care Guidelines as condition changes. This guideline is a tool to aid clinical decision making. It is not a standard of care. The provider should deviate from the guideline when clinical judgment so indicates.*

*Approved EBM Committee 1-20-2016*
References for Chylothorax Guideline


