Thoracostomy Tube Irrigation: A Multi-Center Trial Investigating its Efficacy in the Reduction of Secondary Intervention for the Management of Retained Hemothorax

Thoracic Irrigation Protocol

**Necessary Supplies:**
- Standard Thoracostomy Tube Tray
- 28-36 French Thoracostomy Tube (TT)
- 1000mL of sterile **WARM** normal saline
- Sterile suction tubing and Yankauer
- 60mL sterile Toomey syringe (plunger removed)

**Procedure Outline:**
1. A 28-36 French TT is placed utilizing standard aseptic technique.
2. Insert the sterile Yankauer into the TT.
   - Suction maintained until no return of effluent.
   - Operative Intervention pursued in the setting of initial output \(>1500\text{mL}\).
3. Option: At discretion of Attending, suction catheter may be inserted directly into chest to evacuate hemothorax prior to placement of TT.
4. Record amount of hemothorax drained.
5. The sterile 60mL Toomey syringe is connected to the TT as a funnel to allow for irrigation.
6. 500mL of warm sterile saline is instilled via the TT by pouring through the Toomey syringe.
   - Saline is poured by an assistant into the open end of the 60mL syringe.
   - The syringe is held above the level of the chest to ensure proper instillation.
7. Sterile suction is reinserted into the TT to evacuate the thoracic cavity.
8. Steps 3-5 are repeated for a total of 1,000mL of irrigation.
9. Record amount of fluid removed following irrigation.
10. TT is connected to a standard atrium and placed to -20mmHg suction for the first 24 hours.