

Title: Chest Tube Use in Trauma: A Western Trauma Association (WTA) Multi-Center Trials Committee (MCTC) Prospective, Observational Study

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Primary objective:

Provide a contemporary description of the current use of chest tubes in hospitalized adult trauma patients, including indications, type of tube, technique of insertion, criteria and technique of removal, complications, and experience/training of individuals performing insertion.

Secondary objective:

Compare use of imaging, duration of chest tube drainage, rate and type of complications, criteria for chest tube removal, hospital LOS, impact of tube size, and a variety of technical factors between institutions.

Study design/Methods:

Prospective, observational study of chest tube use in trauma centers. Proposed timeframe is 5/14/18 to 8/17/18.

Inclusion Criteria:

- 1. Patients \geq 18 years of age
- 2. Primary admission diagnosis of traumatic injury
- 3. Hospital length of stay ≥ 2 days
- 4. Patient had one or more chest tube placed during admission for traumatic injury.

Exclusion Criteria:

- 1. children < 18 years of age
- 2. Death within 48 (?) hrs of admission
- 3. prisoners.

Data Collection

Information will include specifics of insertion location, technique, experience of operator, size of tube, and location. Daily chest tube information will include: volume out, presence of air leak, and number of chest xrays. At the time of removal the technique, experience, followup, and complications will be noted. Additional de-identified patient information will include: hospital length of stay, need for ICU admit, complications, and management of chest tube complications. In addition, descriptive information about each trauma center participating in the project will be obtained.

Participating hospitals will receive a hospital identification number. Each patient enrolled will be numbered sequentially starting with #1. Patient's names and medical record numbers will be kept securely at the local sites, but not forwarded to the data collection center or included in the study database.