

Jackson County Medical Control Authority
MICU Protocols
MICU CHEST TUBES

Date: December 2017

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Chest Tubes

*MICU paramedics will monitor and troubleshoot chest tubes, they will NOT insert chest tubes.

Indications: Chest tubes are indicated for pneumothorax, hemothorax and pleural empyema.

MICU Directives:

1. Follow generalized protocol for MICU transports.
2. Assure that the chest tube(s) is securely fastened to the patient.
3. Check chest tube(s) for patency and proper function prior to transport.
4. Assure that the long flexible tubing is securely fastened to the container that acts as a drainage device, water seal and suction control device. Assure that the tubing is free of kinks.
5. Make note of the fluid and blood levels in the drainage and water seal compartments.
6. Obtain orders as to the water seal level.
7. When suction is used, assure that there is bubbling in the suction control chamber. (If not, check the suction unit).
8. If the water seal fails to stop bubbling after the lung is re-inflated or later begins to bubble:
 1. Momentarily clamp the flexible tubing near the chest. If the bubbles quit emanating from the tube while it is clamped, then the problem is either a persistent air leak in the patient's lung or the chest tube is not sealed at the chest wall.
 2. NEVER LEAVE THE CLAMP ON FOR MORE THAN A FEW SECONDS.
 3. Evaluate the insertion site.
 4. Apply occlusive dressings to the site.
 5. Evaluate the patient for distress.
 6. Consult physician immediately if needed.

If the bubbling does not cease during the clamping of the proximal end, then suspect a leak at a connection site in the tubing or the tubing itself.

1. Check all connections and secure with tape.
2. Seal the leak with occlusive dressing and tape or replace the tubing. When replacing the tubing, remember to clamp the distal end of the chest tube to avoid the formation of a pneumothorax.
1. If water seal device becomes damaged, a temporary water seal can be accomplished by putting flexible tubing into a bottle of sterile saline. Keep this device and tubing below chest level.

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2. To clear clots from the tubing, squeeze the proximal end of the tubing with one hand and with the other below, squeeze the tube, stripping the material down the tube toward the drainage container.
 3. Consult with the physician/staff for the best patient positioning.
 4. If the chest tube is not functioning and a tension pneumothorax is suspected, perform a needle decompression of the affected side.