

# A No Suture Chest Tube

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## Technology description

In Emergency and Trauma Medicine, chest tubes are common medical devices used to treat patients. Typically, chest tubes are used to treat pneumothorax, air around the lung, and hemothorax, blood or fluid around the lung, in a trauma situation; however, they also can be used to treat other spontaneous conditions such as cancer, COPD, or body habitus. Current practices for a patient requiring a chest tube would be to make a skin incision across the rib, insert the chest tube, and then use sutures to secure the tube within the chest and allow for the fluid to drain. Dressing for a typical chest tube would include Vaseline dressing that is airtight, cloth gauze, and tape strips. This current practice can be dangerous to the patient because sharp objects, such as sutures, expose the patient to the risk of infectious diseases.

The disclosed technology provides a new chest tube apparatus that can be used to improve the treatment of patients. The major difference is that this new chest tube requires no sutures after it is placed. Without the need for sutures, the invention becomes faster to secure than current methods, which can be critical in an emergency situation. Importantly, the invention works in the same circumstances as chest tubes used today. All of the dressings necessary to secure the tube come pre-attached to it, so no extra materials are required. This results in easy implementation in any emergency medical scenario.

Keywords: chest tubes, sutures, wound care, emergency medicine

## Application area

Emergency Medicine

Trauma Medicine

## Advantages

Lowers risk of infections

Faster to use

Easier to use than current methods

No sutures needed

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