

Stripping or breaking the sterile field of chest tubes to remove clot is not recommended.

Class (Strength) of Recommendation	Class III: No Benefit (Moderate)
Level (Quality) of Evidence	Level A

Maintenance of chest tube patency is recommended to prevent retained blood.

Class (Strength) of Recommendation	Class I (Strong)
Level (Quality) of Evidence	Level B-R (Randomized)

## Main Points

- Chest tubes used to evacuate shed mediastinal blood are prone to clogging with clot.
- Large volumes of retained mediastinal blood can lead to mechanical compression of the heart or lungs, resulting in the need for re-interventions.
- Smaller volumes of retained mediastinal blood promotes an inflammatory process that can contribute to the development of pleural and pericardial effusions or the triggering of atrial fibrillation.
- Retained blood is associated with increases in transfusion, AKI, time of mechanical ventilation, length of stay and mortality.
- Milking or stripping tubes has been shown to be time consuming, ineffective, and potentially harmful.
- Active tube clearance (ATC) has been shown to prevent chest tube occlusion and reduce the incidence of the retained blood in cardiac surgery patients.
- Studies have additionally shown ATC can be helpful in reducing rates of reoperation for bleeding and atrial fibrillation.

## Key References

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