



# Clearing the misconceptions about chest tube clogging. Yes, it's serious.

Chest tubes clog after cardiac surgery. That's a fact acknowledged by 100% of surgeons and ICU nurses surveyed. But what is the actual incidence of clogging and what are we doing about its associated adverse complications? A new prospective study from Cleveland Clinic sheds new light into the damaging prevalence of chest tube clogging and demonstrates the need for new technology and programs to help fight it.

## 36% Chest Tube Clogging in Cardiac Surgery Patients

In a recently published prospective observational study from the Cleveland Clinic, investigators found 36% of heart surgery patients had clogged chest tubes.<sup>1</sup> The results of the study show patients with clogged chest tubes tended to have longer hospital stays, more renal failure, and a trend toward higher rates of stroke and cardiac arrest. Patients with chest tube clogging also had statistically significant increases in post-operative atrial fibrillation, a common complication after cardiac surgery increasing length of stay and readmissions.

## 86% of Clogging Invisible to the Clinicians

Perhaps most significant is the fact that 86% of the clogs occurred in the portion of the tube inside the patient and therefore were not identified by clinicians. Though chest tube clogging is associated with serious complications, most of the time it goes unobserved and hence unaddressed. This is a potentially dangerous situation. Fortunately, it's one we can combat with protocols and the proper tools.

## Active Clearance Technology\* from ClearFlow Reduces Chest Tube Clogging

One way to prevent chest tube clogging before it occurs is to actively clear the tubes during the early recovery period. PleuraFlow<sup>®</sup> Active Clearance Technology<sup>®</sup> enables clinicians to actively prevent chest tube clogging, which studies show improve the evacuation by 3 times as much compared to traditional drainage systems in evacuating post-surgical blood.<sup>2,3</sup> PleuraFlow ACT allows for better evacuation while maintaining a closed sterile system and allowing for the use of smaller, more comfortable drainage catheters for your patients.

## The Unfiltered Truth About Chest Tube Clogging Isn't Pretty. It's Time For a Change

Chest tube clogging occurs in more than one in three cardiac surgery patients.<sup>1</sup> This is linked to a statistically significant association with serious postoperative complications, and mostly goes unobserved. Let's agree this is the right time to be proactive. Contact your ClearFlow representative for a thoughtful analysis about this problem and how we can help your patients and your hospital.

### References

- 1 Karimov, J.H., Gillinov, A.M., Schenck, L., et al. Incidence of chest tube clogging after cardiac surgery: a single-centre prospective observational study. *Eur J Cardiothorac Surg.* 2013;44(6):1029-1036. doi:10.1093/ejcts/ezt140.
- 2 Shiose, A., Takaseya, T., Fumoto, H., et al. Improved drainage with active chest tube clearance. *Interact CardioVasc Thorac Surg.* 2010;10:685-688. doi: 10.1510/icvts.2009.229393.
- 3 Arakawa, Y., Shiose, A., Takaseya, T. et al. Superior Chest Drainage With an Active Tube Clearance System: Evaluation of a Downsized Chest Tube. *Ann Thorac Surg.* 2011;91:580-583. doi: 10.1016/j.athoracsur.2010.10.018.



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