"The Facts" About Milking And Stripping

- "'Milking' or 'stripping' an occluded chest tube is no longer recommended because it increases the negative pressure in the intrathoracic cavity, which could damage lung tissue."
 - Association of periOperative Registered Nurses (AORN) Journal
- "... stripping chest tubes may significantly increase negative intrathoracic pressures that could cause harm (e.g. tissue entrapment, increased bleeding, left ventricular dysfunction), thereby further impairing patients' postoperative recovery."²
 - American Journal of Critical Care



- "We conclude that due to possible tissue damage and lack of demonstrable benefit, in most patients drainage tube manipulation should not be performed."³
 - Interactive Cardiovascular and Thoracic Surgery
- "... 76 of 106 responding nurses (71.7%) asserted that stripping the chest tube was not allowed as a means to manage the clogged chest tube at their institution."
 - Journal of Cardiac Surgery
- "... the body of current knowledge may be summarized as representing "Class III" evidence...Chest tube manipulation did not show any clear benefit in enhancing chest tube patency."²
 - American Journal of Critical Care

SOLUTION: The PleuraFlow Active Clearance Technology System proactively clears chest tubes of clots and prevents the retention of retained blood and fluids in the chest cavity.

 Multiple published peer-reviewed studies show data that would constitute Class I, Level B evidence demonstrating superiority of active clearance over conventional chest tube drainage.^{5,6,7}

From the Journal of Thoracic and Cardiovascular Surgery (JTCVS):

- Patients treated with the **PleuraFlow**® **ACT**® **System** experienced:
 - 43% reduction in Retained Blood complications such as bloody pleural and pericardial effusions⁷
 - o 33% reduction in post-operative atrial fibrillation (POAF)⁷



1. Durai, R., et al. Managing a Chest Tube and Drainage System. Association of periOperative Registered Nurses (AORN) Journal. 2010. Vol. 91(2); 275-283. 2. Halm, M.A., To Strip or Not to Strip? Physiological effects of chest tube manipulation. American Journal of Critical Care. 2007. Vol. 16(6): 609-612. 3. Day, T.G., et al. Is manipulation of mediastinal chest drains useful or harmful after cardiac surgery? Interactive Cardiovascular and Thoracic Surgery. 2008. 888-890. 4. Shalli, S., et al. Chest Tube Selection in Cardiac and Thoracic Surgery. A Survey of Chest Tube-Related Complications and Their Management. Journal of Cardiac Surgery. 2009. 24; 503-509. 5. Maltais, S., et al. Active Clearance of Chest Tubes Reduces Re-Exploration for Bleeding After Ventricular Assist Device Implantation. American Society of Artificial Internal Organs (ASAIO) Journal. 2016. 62; 704-709. 6. St-Onge, S., et al. Examining the impact of active clearance of chest drainage catheters on postoperative atrial fibrillation. Journal of Thoracic and Cardiovascular Surgery. 2017. Vol. 154: 501-508. 7. Sirch, J., et al. Active Clearance of Chest Drainage Catheters Reduces Retained Blood. Journal of Thoracic and Cardiovascular Surgery. 2016. Vol. 154: 501-508. 7. Sirch, J., et al. Active Clearance of Chest Drainage Catheters Reduces Retained Blood. Journal of Thoracic and Cardiovascular Surgery. 2016. Vol. 154: 501-508. 7. Sirch, J., et al. Active Clearance of Chest Drainage Catheters Reduces Retained Blood. Journal of Thoracic and Cardiovascular Surgery. 2016. Vol. 154: 501-508. 7. Sirch, J., et al. Active Clearance of Chest Drainage Catheters Reduces Retained Blood. Journal of Thoracic and Cardiovascular Surgery. 2016. Vol. 154: 501-508.

For more information about the PleuraFlow ACT System, please contact ClearFlow Customer Service: 1-714-916-5007, or visit www.clearflow.com/education

