

Use of Venturi effect for effective and uniform talc pleurodesis

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Received: 18 August 2011 / Accepted: 27 September 2011 / Published online: 11 July 2012
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Dear Editor,

We read with interest Makhija et al's [1] article about the use of Venturi effect for the effective and rapid technique to ensure uniform talc pleurodesis. In our centre we also use the Venturi effect of the jet ventilator, and it does produce more uniform and fine distribution of the talc compared to the conventional method of manual insufflation. The difference between our technique and that reported is that while the authors use negative suction pressure to insufflate the talc, we use positive pressure. We take the conventional insufflator, disconnect the rubber component, and in its place connect the tubing which comes directly from the jet ventilator (Fig. 1). The air scatters the talc in the insufflator cavity and carries it on its way into the chest, much as a nebulizer does. We place a piece of gauze around the tip of the insufflator as it enters the port to prevent talc from escaping outside the chest, while at the same time it is not airtight so as to cause a tension in the pneumothorax. An unscrubbed assistant then gives repeated bursts of the jet ventilator. In our experience, a pressure of 5 psi (about 35 kPa) is sufficient to cause uniform distribution while at the same time safely low to prevent tension or shift of mediastinum to the opposite side. We believe that this method is quicker and cheaper, as it needs no further pieces in the circuit, which is the case with the authors, where the talc is placed in a separate chamber to be sucked away by the negative

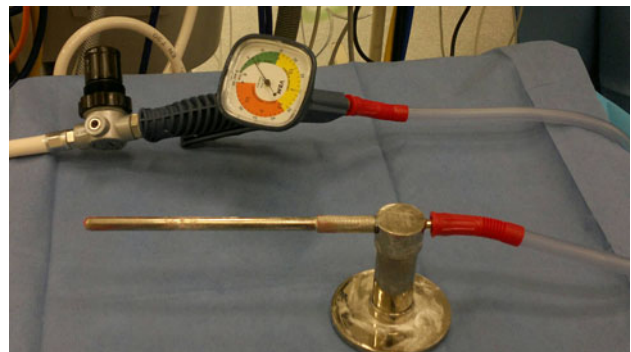


Fig. 1 The setup which we use for spreading the talc, showing the atomiser connected by a suction tubing to the jet ventilator

pressure created by the air as it passes by. There has been no comparative trials to determine if spreading the talc is better with positive than with negative pressure, though we believe that positive pressure may result in a more effective and uniform spreading of the talc.

Reference

1. Makhija Z, Deshpande R, Marrinan M. Effective and rapid technique to ensure uniform talc pleurodesis. *General Thorac Cardiovasc Surg.* 2010;58:595–7.

This comment refers to the article available at doi:
[10.1007/s11748-009-0548-4](https://doi.org/10.1007/s11748-009-0548-4)

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