



CORRESPONDENCE

Long-term follow-up of thoracoscopic talc pleurodesis for primary spontaneous pneumothorax

To the Editors:

I read with interest the study by GYÖRIK *et al.* [1] of talc pleurodesis for primary spontaneous pneumothorax. The results were not surprising as they confirm previous studies. What was surprising, however, was the lack of a control group, the lack of an intention-to-treat analysis and the failure of the paper's discussion to mention these absences as a weakness.

The authors report a 95% long-term success rate for talc pleurodesis, which represents 53 out of 56 patients initially treated successfully with the technique. There were, however, 112 patients who underwent the procedure. The authors were only able to contact 63 of them; the remaining 49 apparently were not contactable because of "geographical movement."

I am troubled that an intention-to-treat analysis is not reported. Given the 53 long-term successes and 112 original treatments, I arrive at a success rate of 47%, which is half of what the authors report. Together with the lack of a control group of patients who suffered spontaneous pneumothoraces but did not undergo talc pleurodesis, I find it unclear as to what can be reliably concluded from this study.

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STATEMENT OF INTEREST

None declared.

REFERENCES

- 1 Györik S, Erni S, Studler U, Hodek-Wuerz R, Tamm M, Chhajed PN. Long-term follow-up of thoracoscopic talc pleurodesis for primary spontaneous pneumothorax. *Eur Respir J* 2007; 29: 757–760.

DOI: 10.1183/09031936.00044107

From the authors:

We agree with I. Oransky that it is always a considerable weakness to be unable to follow up all patients. We believe that the outcome of our study [1] was not affected in a major way by the missing patients, as spontaneous pneumothorax is not a chronic disease or a malignant condition. We also believe that the geographical movement in this young population is unlikely to bias the follow-up of lung function. However, we

agree with I. Oransky that effort should be directed towards good patient follow-up.

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STATEMENT OF INTEREST

None declared.

REFERENCES

- 1 Györik S, Erni S, Studler U, Hodek-Wuerz R, Tamm M, Chhajed PN. Long-term follow-up of thoracoscopic talc pleurodesis for primary spontaneous pneumothorax. *Eur Respir J* 2007; 29: 757–760.

DOI: 10.1183/09031936.00059207

To the Editors:

We read with great interest the recent article by GYÖRIK *et al.* [1], which presented their long-term experience of primary spontaneous pneumothoraces (PSPs) treated by spontaneous breathing thoracoscopy and talc pleurodesis, and would like to invoke a more conscious use of talc pleurodesis.

Talc represents the most reliable sclerosing agent for pleurodesis currently available in the clinical setting. However, we question the practice to treat all PSPs with persisting air leak of >48 h or simple recurrences with talc pleurodesis. To us, this proceeding seems a little bit like breaking a butterfly upon a wheel.

PSPs occur typically in young, thin and tall males and females aged <30 yrs [2]. Many of these are smokers, predisposing this group for developing lung cancer with a probability of 7.7% and 5.7% in males and females, respectively [3]. In our opinion, a wide use of talc pleurodesis in this young patient group unjustifiably increases the complexity and morbidity of potential later operations for lung cancer in the future. Additionally, talc has been shown to disseminate into neighbouring organs, such as pericardium, mediastinum, contralateral lung and liver [4, 5], inducing potentially carcinogenic granuloma tissue. We hypothesise that the authors applied talc in their patients to compensate for the high number of missed blebs and bullae that were not treatable during spontaneous breathing thoracoscopy, resulting in a formidably low recurrence rate of only 5%. The authors' findings have to be compared with video-assisted thoracoscopy,

which represents an established treatment modality affording identification and treatment of 90 and 100%, respectively, of all pulmonary blebs or bullae by pleural abrasion and wedge resection with similar long-term results [6], thereby avoiding the use of talc.

The British Thoracic Society guidelines also recommend that talc pleurodesis should not be considered as initial treatment for PSP requiring surgical intervention. Open thoracotomy or video-assisted thoracoscopy with wedge resection and pleuroectomy is the first-choice treatment for PSP and, indeed, secondary pneumothorax [7]. The American College of Chest Physicians has the same recommendation: the instillation of sclerosing agents is only acceptable in patients who wish to avoid surgery and for patients who present increased surgical risk [8].

As thoracic surgeons we have the responsibility to preclude potential hazards for our patients that are caused by our own actions. The light-hearted employment of talc represents, in our view, such an avoidable hazard, for which we all have to carry the can with our patients.

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STATEMENT OF INTEREST

None declared.

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From the authors:

We would like to thank V. Steger and co-workers for their interest in our recent article [1]. The technique of talc pleurodesis for primary spontaneous pneumothorax has been applied for decades in many centres in Europe without any evidence of long-term problems [2–4]. We have already discussed the question of treating primary spontaneous pneumothorax with persisting air leak for >48 h in our study. This practice at our institution has stemmed from a previous report from our hospital which showed that when an air leak persists for >48 h, the probability of spontaneous resolution of the pneumothorax is low [5]. The recurrence rate of primary spontaneous pneumothorax is ≤40% [6]. Would the cardiologist not put a stent in the coronary arteries if the risk of myocardial infarction was “only 40%”? Therefore, we think that medical thoracoscopy with talc pleurodesis or video-assisted thoracic surgery (VATS) might already be performed in the first episode of pneumothorax. We agree with V. Steger and co-workers that the use of talc pleurodesis in the young population may make potential surgery for lung cancer more difficult. However, we think that smoking cessation would be the important approach to avoid future development of cancer in the young population.

VATS, under combined general anaesthesia and epidural anaesthesia with double lumen intubation to perform abrasion pleurodesis and stapling of visualised blebs, has been recommended as the first-line approach for the management of recurrent spontaneous pneumothorax with recurrence rates of 3% [7]. The patients in our study also had a similar outcome but with a simple, fast and cheaper procedure without the need for general anaesthesia. Furthermore, the results of our study suggest that stapling or electrocoagulation of blebs does not influence the outcome of talc pleurodesis and supports the approach that talc pleurodesis is sufficient for the management of recurrent or persistent primary spontaneous pneumothorax. A recent review article [8] has also concluded that systematic treatment of emphysema like changes with blebectomy or bullectomy is not indicated and that it is the treatment of the pleura (*i.e.* pleurodesis), and not that of the lung, which should be considered the real cornerstone of recurrence prevention.

Whether medical thoracoscopic talc pleurodesis or video-assisted thoracic surgery is applied depends mainly on the availability of pulmonologists with experience in invasive procedures.

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STATEMENT OF INTEREST

None declared.

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DOI: 10.1183/09031936.00059307