Letter to the Editor

Prophylactic physiotherapy after thoracotomy and lung resection: is there really no benefit?

Paula Agostini a,b,* , Sally Singh b , Babu Naidu a,c , Pala Babu Rajesh c

1 Heart of England NHS Foundation Trust, Bordesley Green East, Birmingham, B9 5SS, UK
2 Coventry University, School of Health and Life Sciences, Priory Street, Coventry, CV1 5FB, UK
3 The University of Warwick, Coventry, CV4 7AL, UK

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We read with interest the recently published randomised control trial (RCT) studying the effect of prophylactic physiotherapy following thoracotomy and lung resection [1]. The incidence of postoperative pulmonary complication (PPC) in both limbs of this trial was much lower than that anticipated by the authors (4.8% in the treatment group (n = 2) and 2.9% in the control group (n = 1)), and much lower than that reported in the literature [2], or indeed than that 18.5% (n = 10) previously reported by Reeve et al. [3], using the same diagnostic criteria [4]. The explanation cited for this was the variability in the definition of PPC in the literature, possible advancements in analgesia, more emphasis on early postoperative mobility, and use of a standardised clinical pathway. Based on their current results, the authors suggest that prophylactic physiotherapy may be unnecessary. However, the article failed to achieve adequate statistical power and we would not agree with this conclusion. Unfortunately, the study was not designed to measure the effectiveness of physiotherapy given to the patients most likely to benefit (having developed PPC). We commend the authors for their efforts, as there is a general lack of high-quality research in this field. This is a challenging area of research as there is a general reluctance of surgeons to withhold interventions believed to be important and effective, such as early mobilisation and chest clearance manoeuvres. In order to establish the true benefit of physiotherapy, or similar elements of the standardised clinical care pathway, an adequately powered multicentre RCT would have to be conducted, however, this seems unlikely on ethical/equipoise grounds. Given the small trial size and low incidence of PPC, we would be concerned that this article is open to misinterpretation.

References


Reply to the Letter to the Editor

Reply to Agostini et al.

Julie Carolyn Reeve a,b,* , Kathy Stiller c , Linda Denehy b , Kathryn M. McPherson a

1 Division of Rehabilitation and Occupation Studies, Faculty of Health and Environmental Studies, AUT University, Auckland, New Zealand
2 School of Physiotherapy, Faculty of Medicine, Dentistry and Health Sciences, The University of Melbourne, Melbourne, Victoria, Australia
3 Physiotherapy Department, Royal Adelaide Hospital, Adelaide, South Australia, Australia

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We thank Agostini et al. [1] for their interest in our study [2]. Their main concern, related to our small sample size and low incidence of postoperative pulmonary complications (PPCs), is that our article will be misinterpreted as implying that prophylactic physiotherapy may be unnecessary. This is neither what we investigated nor a conclusion we stated. Our study investigated the specific question of whether routine prophylactic ‘targeted respiratory’ physiotherapy after pulmonary resection via open thoracotomy decreased the incidence of PPCs, is that our article will be misinterpreted as implying that prophylactic physiotherapy may be unnecessary. This is neither what we investigated nor a conclusion we stated. Our study investigated the specific question of whether routine prophylactic ‘targeted respiratory’ physiotherapy after pulmonary resection via open thoracotomy decreased the incidence of PPCs and we carefully worded our conclusions to reflect this. We specifically avoided terms such as...