LETTERS TO Management of traumatic pneumothorax

To the Editor-We read the paper entitled "Management of patients admitted with pneumothorax: a multi-centre study of the practice and outcomes in Hong Kong" by Chan et al. In this study, 2% simple aspiration, 13% observation, and 84% intercostal tube drainage were applied for the initial management of 45 episodes of traumatic pneumothoraces. Although there is no consensus on the treatment protocol to be followed in traumatic pneumothorax, in recent years an increase in the frequency of invasive management has been noted, which is no doubt influenced by concomitant injuries and their treatment. When general anaesthesia and external respiratory support are needed for concomitant injury, tube thoracostomy is mandatory regardless of the size of pneumothorax,² because positive pressure mechanical ventilation can cause rapid progression in pneumothorax size by inducing lung tissue disruption and increasing air leak into the pleural space. This might lead to tension pneumothorax, which is a life-threatening condition. Enderson et al³ managed 19 of the 40 trauma patients with occult pneumothorax with tube thoracostomy and 21 patients with observation. Progression of pneumothorax was noted in eight of the 21 cases who required positive pressure ventilation, three of whom later developed tension pneumothorax. Johnson⁴ reported that tube thoracostomy was mandatory in patients who require intermittent positive pressure ventilation for traumatic pneumothorax.

Finally, we believe that tube thoracostomy can be a life-saving procedure in patients with traumatic pneumothorax, irrespective of its size, when general anaesthesia is to be given and/or positive pressure ventilation is deemed required.

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