Abstract

Air leaks are a common problem after pulmonary resection and can be a source of significant morbidity and mortality. The authors describe the case of a 68-year-old male patient who presented with a persistent air-leak after pulmonary resection. Watchful waiting, surgical procedures, as well as medical therapy like pleurodesis and implantation of endobronchial one-way valves on the bronchial segments identified using systematic occlusion of the bronchial segments, were all tried unsuccessfully. During that time the patient remained hospitalized with a chest tube. The instillation of methylene blue through the chest tube was used to identify the segments leading to the persistent air-leak; this enabled successful endobronchial valve placement which sufficiently reduced the size of the air-leak so that the chest tube could be removed. Nonsurgical approaches seem promising and, for some patients may be the only treatment option after all conventional treatments have failed or are considered too high risk.

Keywords

Pulmonary air-leak, Bronchoscopy, Methylene blue.