

Interventional closure of atrial septal defect occluder under respiratory endoscopy for bronchopleural fistula: a report of 6 cases

C. Chen^{*a} (Dr), Y. Song^a (Prof), Y. Tang^a (Mr), K. Zhai^a (Mr)

^a Department of Thoracic Surgery, Affiliated Hospital of Zunyi Medical University, Zunyi, CHINA

* 29217036@qq.com

Background

Broncho pleural fistula is a serious complication of pulmonary resection refers to fistula formation/between bronchial and pleural levels of all causes, pneumonectomy, lobectomy is particularly common. The emergence and development of interventional treatment technology provides new possibilities for the treatment of bronchial fistula. In this study, we reported six cases of atrial septal defect using occluder treatment of bronchial fistula clinic experience.

Case report

Six patients with bronchopleural fistula admitted to the Department of Thoracic Surgery of the Affiliated Hospital of Zunyi Medical University from January 2018 to December 2020, all patients with bronchopleural fistula after lobectomy. Underlying diseases: two cases of bronchial lung cancer and four cases of tuberculosis (one case was aspergilloma and three cases were destroyed lung). Operation sites: one case of left pneuronectomy, two cases of right upper pneumonectomy, one case of right middle and lower pneumonectomy. Of which three males, three females, average age 62 years old. All patients underwent occlusion parties signed an informed consent form, were reported to the hospital ethics committee approval. Six patients, five were successfully inserted ASD occluder, one patient surgical failure. Five patients had successful surgery recovery was very satisfactory.



Figure (1)-(4): Atrial septal defect occluder occlusion of the right main bronchus fistula. (1) Preoperative bronchoscope shown right main bronchus fistula; (2) Intraoperative placed with atrial septal defect occluder will completely block the fistula;(3) 1 week after chest CT images show good fistula closure; (4) 3 months after the chest CT mediastinal window images show occluder

Conclusion

The atrial septal occluder is used to seal the bronchopleural fistula formed after lobectomy, and then the local cauterization of the mucosa around the occluder is applied to promote local granulation hyperplasia. This surgical method has good clinical effects and is worthy of popularization.

Disclosure of funding source(s): none

The authors declare that there is no conflict of interest in the publication of this article.