

[PICTURES IN CLINICAL MEDICINE]

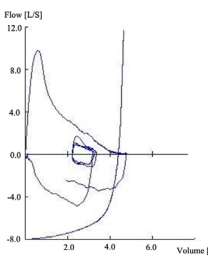
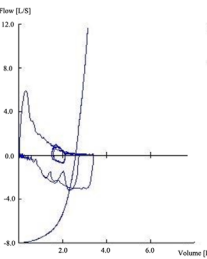
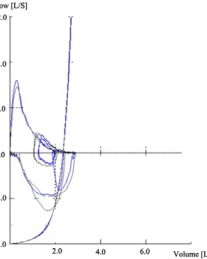
Visible Bronchial Obstruction after Hematopoietic Stem Cell Transplantation

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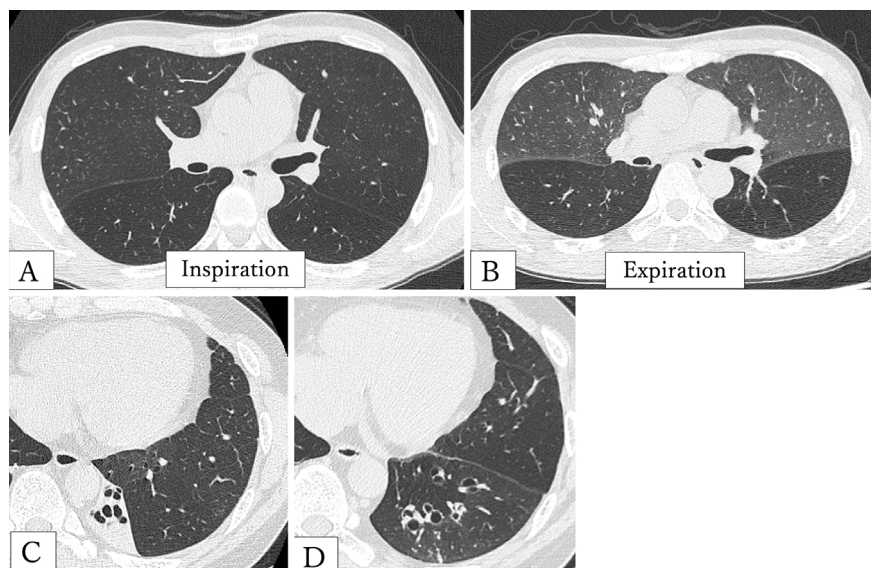
Key words: bronchoscopy, bronchial obstruction, graft versus host disease

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	26 months before (Before allo-HSCT)	14 months before	On admission
			
VC (%VC)	4.74 L (105.5%)	3.52 L (78.2%)	3.13 L (70.1%)
FVC (%FVC)	4.77 L (108.0%)	3.40 L (77.0%)	2.84 L (64.8%)
FEV ₁ (%FEV ₁)	3.32 L (86.4%)	1.72 L (44.7%)	1.68 L (44.3%)
FEV ₁ /FVC	69.6%	50.4%	59.2%

Picture 1.

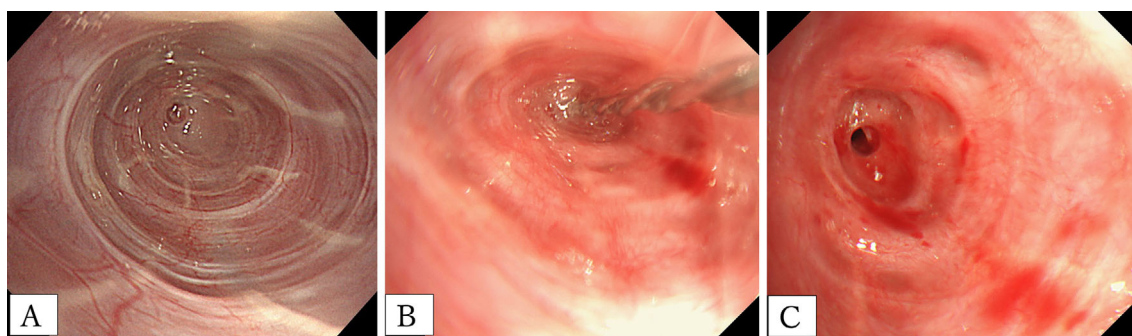


Picture 2.

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Picture 3.

A 42-year-old man developed progressive dyspnea and a decreased respiratory function following allogeneic hematopoietic stem cell transplantation (allo-HSCT) for acute lymphoblastic leukemia 2 years prior (Picture 1). Respiratory computed tomography nine months after allo-HSCT showed air trapping in both lower lobes (Picture 2A, B). As there were no other obvious causes, such as infections, bronchial obstruction syndrome was diagnosed. The patient developed left lower lobe atelectasis and was admitted for a further investigation (Picture 2C). Bronchoscopy revealed obstructions of almost all bronchi in both lower lobes (Picture 3A). Transbronchial dilation utilizing a brush improved the obstruction and atelectasis (Picture 2D, 3B, C). However, the atelectasis reappeared two months later. Bronchiolitis obliterans can occur after allo-HSCT and typically affects small airways (1). This relatively central, bronchoscopically

visible obstruction that can result in restrictive ventilatory impairment, air trapping of both lower lobes, and left lower lobe atelectasis should be recognized as a rare complication after allo-HSCT.

The authors state that they have no Conflict of Interest (COI).

Reference

1. Au BKC, Au MA, Chien JW. Bronchiolitis obliterans syndrome epidemiology after allogeneic hematopoietic cell transplantation. *Biol Blood Marrow Transplant* **17**: 1072-1078, 2011.

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