Online supplement: Linking clinical phenotypes of chronic lung allograft dysfunction to changes in lung structure

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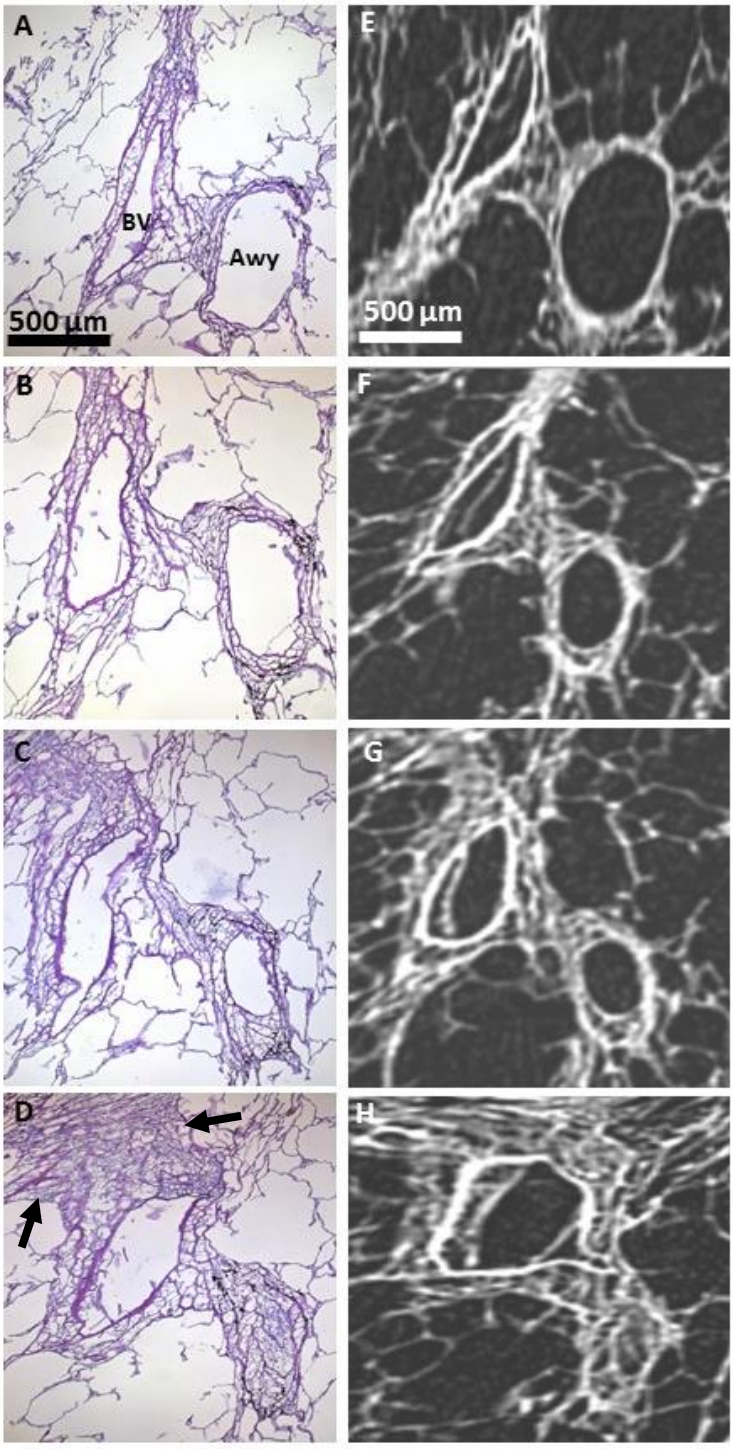
Table 1

Additional patient information

	BOS	RAS
number of lungs	8	8
Donor history		
Age (Y)	34±4	40±6
Height (cm)	170±3	173±7
Weight (kg)	69±5	78±11
Gender mismatch, n	0	1
smoking, n	1	1
Acute rejection and LB		
Patients with ever A-rejection,n	5	7
Patients with ever A≥2 rejection, n	3	2
# AR per patient	1,4±0,5	1,5±0,4
Patients with ever LB, n	4	5
Patients with ever LB≥2 rejection, n	0	2
# LB per patient	0,5±0,2	1,1±0,4
persistent colonization		
Pseudomonas Aeruginosa, n	3	4
Aspergillus Fumigatus, n	0	2
Immuunsuppression		
FK, n	8	8
AZA/MMF/none, n	3//5//0	3//4//1
CMV D/R, n		
D+/R-	1	1
D+/R+	4	2
D-/R+	0	0
D-/R-	2	4
unknown	1	1

Additional patients information which shows the distribution of known risk factors for CLAD between the BOS and RAS group. Persistent colonization was defined as the presence of a micro-organism ≥2 times in bronchoalveolar lavage or sputum despite treatment, at least 3 weeks apart. AR: Acute rejection, LB: Lymphocytic bronchiolitis, FK: tacrolimus, AZA: azathioprine, MMF: Mycophenolate mofetil, CMV: cytomegalovirus, D: donor, R: receptor.

Additional figure 1



Serial microCT and histopathology images of representative constrictive bronchiolitis lesion within RAS lungs. The H&E images are shown in panel A-D, while the corresponding microCT sections are shown in panel E-H. The open airway (Awy) as shown in panel A, progressively fills up with scar tissue (B-C), until the lumen is completely obliterated (panel D). The airway and blood vessel remain of similar size throughout the lesion. The online supplemental movie of the serial microCT images illustrates that this constrictive airway later on disappears in a zone of heavy fibrosis. The start of this fibrotic zone is already clear in figure D (arrow).

Movie 1: airway narrowing as seen on consequential microCT images. The airway, which is surrounded by strands of fibrosis, progressively narrows until the airway lumen has completely disappeared.

Movie 2: reconstruction of airway tree in a larger lung tissue core (3 cm). The areas within the airway tree which have a red color are in fact regions with clear evidence of obstructions on microCT. This movie clearly indicates that even within the same airway tree, a lot of obstruction can occur in very close proximity.