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Title:

Residual lung function and ventilation-perfusion scintigraphy more than 10 years after anatomic lung resection for congenital pulmonary airway malformation in children

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Online Resource 1:

Dyspnea scales used at the final follow-up.

A. modified Medical Research Council dyspnea scale (mMRC)

Grade 0: Breathlessness only with strenuous exercise

Grade 1: Breathlessness when hurrying on level ground or walking up a slight hill

Grade 2: Walking slower than peers on level ground because of breathlessness or needing to stop for breath when walking at one's own pace

Grade 3: Stopping for breath after about 100 m or after a few minutes on level ground

Grade 4: Too breathless to leave the house, or breathless when dressing or undressing

(A) mMRC grades 0–4, adapted from previously published descriptions of the Medical Research Council and modified Medical Research Council dyspnea scales [16, 17].

B. Pediatric Dyspnea Scale (PDS)

1: “No trouble at all”

2: “A tiny bit”

3: “A little”

4: “Some trouble”

5: “Quite a bit”

6: “A lot”

7: “Very much trouble”

(B) PDS anchors 1–7, adapted from the original Pediatric Dyspnea Scale developed for children and adolescents hospitalized with asthma [18].

Online Resource 2:

Pulmonary function parameters and dyspnea scores at final follow-up.

Case	Age at last follow-up (years)	Ventilatory defect	TLC (L)	FEV1 / FVC (%)	Predicted FVC (L) ^a	PPO-FVC (L) ^b	Measured FVC (L)	Predicted FEV1 (L) ^a	PPO-FEV1 (L) ^b	Measured FEV1 (L)	mMRC grade (0–4)	PDS score (1–7)
1	20.5	Restrictive	4.97	96.0	5.05	3.72	3.53	4.55	3.35	3.39	2	4
2	13.5	Restrictive	1.86	81.3	1.85	0.97	1.50	1.67	0.88	1.22	1	2
3	14.2	Normal	3.61	83.6	2.55	2.01	2.74	2.31	1.82	2.29	0	1
4	11.5	Obstructive	2.63	69.8	1.96	1.55	1.72	1.73	1.37	1.20	0	1
5	10.7	Obstructive	1.91	78.3	1.56	1.15	1.38	1.40	1.03	1.08	1	2

FEV1 forced expiratory volume in 1 s, *FVC* forced vital capacity, *mMRC* modified Medical Research Council dyspnea scale, *PDS* Pediatric Dyspnea Scale, *PPO* predicted postoperative, *TLC* total lung capacity.

^aPredicted values were calculated using Global Lung Function Initiative reference equations based on age, sex, height, and ethnicity.

^bPPO-FVC and PPO-FEV1 were calculated using the segment-counting method as predicted FVC or FEV1 $\times$ (remaining segments / 19).