

Supplementary Table 1.: Top 3 diagnosis and malformations of organs other than respiratory tract of each patient

	Case number	Top 3 diagnosis	malformations of organs other than respiratory tract
Tracheotomy group (n=14)	1	BPD, Laryngotracheomalacia, Congenital cytomegalovirus infection	PDA, Bilateral inguinal hernia, Umbilical hernia
	2	Congenital laryngeal stenosis (III°), Pneumonia, Hypothyroidism	Absence of thyroid, 13 pairs of ribs, 2 dactylopods of bilateral 5 th finger
	3	BPD, Bilateral vocal cord granuloma, Pneumonia	PDA, Bilateral inguinal hernia
	4	Dysfunctional epiglottis, Laryngotracheomalacia, Pneumonia	-
	5	Congenital anomaly of epiglottis, Cleft palate (III°), Abnormal ASD, Craniomalacia chromosome #13	ASD, Craniomalacia
	6	Bilateral vocal cord paralysis	-
	7	Bilateral vocal cord paralysis, Choanal atresia (left), Laryngotracheomalacia	Congenital neurogenic tumor of mediastina, Secondary ASD
	8	Bilateral vocal cord paralysis, Pneumonia, Suspected tuberous sclerosis	Multiple cerebral nodules on MRI indicating tuberous sclerosis
	9	Bilateral vocal cord paralysis, Laryngotracheomalacia, Pneumonia	Cleft palate (II°)
	10	Bilateral vocal cord paralysis, Pneumonia	-
	11	Bilateral vocal cord paralysis, Septicemia, Purulent meningitis	-

	12	Bilateral vocal cord paralysis	-
	13	Subglottic hemangioma	-
	14	Laryngeal cleft (III°), Pneumonia, CHD	Semi-absence of 7 th thoracic vertebra, Ventricular septal defect, Congenital megacolon
Non-tracheoto	1	Tracheal stenosis for unknown reason	-
my group* (n=12)	2	Laryngotracheomalacia, Tracheomalacia, Methylmalonic academia	ASD, Patent foramen ovale, Congenital macrogryria
	3	Bilateral vocal cord granuloma	-
	4	Vocal cord granuloma, Pneumonia	-
	5	Vocal cord granuloma, Pneumonia	-
	6	Bilateral vocal cord paralysis, Pneumonia, Secondary ASD	ASD
	7	Bilateral vocal cord paralysis, Pneumonia, Tracheomalacia	-
	8	Bilateral vocal cord paralysis, Floppy infant, Atrioventricular block (II°)	Low lie of ears, Kneeled chest, PDA
	9	Bilateral vocal cord paralysis, Floppy infant, Suspected chromosomal disorder	Macrogryria, Narrow forehead, Micrognathia
	10	Bilateral vocal cord paralysis, Congenital hypothyroidism, CHD	PDA, Secondary ASD
	11	Refractory respiratory failure, Suspected subglottic hemangioma, Suspected chromosomal disorder	Micrognathia, Megaloglossia and glossocoma, Compressed bridge of the nose

*Patients in this group met the indications of tracheotomy but parents did not sign the consent for operation.

Abbreviations: ASD, atrial septal defect; BPD, bronchopulmonary dysplasia; CHD, congenital heart disease; PDA, patent ductus arteriosus