**Supplementary Table 1**. Clinical and demographic data of patients with chronic hyperthrophic tonsillar diseases with HBoV1 detected in adenoid plus co-detection of other respiratory viruses.

Features	HBoV1 alone	HBoV1 + 1	HBoV + 2	HBoV + 3	HBoV + 4
	N (%)	virus	viruses	viruses	viruses
		N (%)	N (%)	N (%)	N (%)
Patients	6 (13.6%)	15 (34.0%)	18 (40.9)	4 (9.1%)	1 (2.2%)
Masculine gender	5 (83.3%)	8 (53.3%)	12 (66.6%)	3 (75%)	1 (100%)
Age (median of years)	5.0	4.0	4.0	4.0	5.0
0-50% airway obstruction	0 (0.0%)	1 (6.6%)	1 (5.5%)	1 (25%)	0 (0.0%)
50-75% airway obstruction	3 (50.0%)	4 (26.6%)	7 (38.8%)	3 (75%)	0 (0.0%)
75-100% airway obstruction	3 (50.0%)	10 (66.6%)	10 (55.5%)	0 (0.0%)	1 (100%)
Sleep apnea	5 (83.3%)	10 (66.6%)	11 (61.1%)	2 (50.0%)	1 (100%)
Secretory otitis media	3 (50.0%)	2 (13.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Allergies	2 (33.3%)	3 (20.0%)	6 (33.3%)	0 (0.0%)	1 (100%)

**Supplementary Table 2**. Clinical and demographic data of patients with chronic hypertrophic tonsillar diseases with HBoV1 detected in palatine tonsils plus co-detection of other respiratory viruses.

Features	HBoV1 alone N (%)	HBoV1 + 1 virus	HBoV + 2 viruses	HBoV + 3 viruses	
Patients	2 (22 10/ )	N (%)	N (%) 3 (23.1%)	N (%) 2 (15.4%)	
	3 (23.1%)	5 (38.4%)	` /	, ,	
Masculine gender	1 (33.3%)	1 (20.0%)	2 (66.6%)	2 (100%)	
Age (median of years)	6.0	4.0	4.0	4.5	
Recurrent tonsillitis	2 (66.6%)	2 (40.0%)	0 (0.0%)	2 (100%)	
Tonsillar hypertrophy	2 (66.6%)	4 (80.0%)	3 (100%)	2 (100%)	
Sleep apnea	2 (66.6%)	5 (100%)	3 (100%)	1 (50.0%)	
Secretory otitis media	0 (0.0%)	0 (0.0%)	1 (33.3%)	0	
Allergies	1 (33.3%)	0 (0.0%)	0 (0.0%)	1 (50.0%)	

**Supplementary Table 3**. Clinical and demographic data of patients with detectable HBoV1 VP1 or NP1 mRNAs in adenoids.

	Hypertrophic Patients		Control Patie	nts
	mRNA +	mRNA -	mRNA +	mRNA -
Patients	12	32	0	4
Masculine gender	9 (75.0%)	20 (62.5%)	-	3 (75.0%)
Age (median of years)	4.0	4.0	-	2.0
Viral co-infection	38 (86.4%)	69 (53.1%)	-	2 (50.0%)
Viral load (median copies/g)*	$2.3x10^7$	$6.6 \times 10^5$	-	$4.1 \times 10^4$
High viral load (>10 <sup>6</sup> )*	10 (83.3%)	13 (40.6%)	-	0 (0.0%)
Detection in several sites*	8 (66.6%)	7 (21.8%)	-	1 (25%)
HBoV1 shedding in NPS*	6 (50.0%)	6 (18.7%)	-	1 (25%)
0-50% airway obstruction	1 (8.3%)	2 (6.2%)	-	-
50-75% airway obstruction	5 (41.6%)	12 (37.5%)	-	-
75-100% airway obstruction	6 (50.0%)	18 (56.2%)	-	-
Sleep apnea	7 (58.3.9%)	22 (68.7%)	-	-
Secretory otitis media	0 (0.0%)	5 (15.6%)	-	-
Allergies	4 (33.3%)	8 (25.0%)	-	-

<sup>\*</sup> p<0.05.

Supplementary Table 4. Clinical and demographic data of patients with detectable HBoV1 VP1 or NP1 mRNAs in palatine tonsils.

	Hypertrophic Patients		<b>Control Patients</b>	
	mRNA +	mRNA -	mRNA +	mRNA -
Patients	1	12	-	-
Masculine gender	1 (100%)	5 (41.6%)	-	-
Age (median of years)	5.0	4.0	-	-
Viral co-infection	1 (100%)	9 (75.0%)	-	-
Viral load (median copies/g)	$2.2x10^9$	$8.4 \times 10^4$	-	-
High viral load (>10 <sup>6</sup> )	1 (100%)	2 (16.6%)	-	-
Detection in several sites	1 (100%)	6 (50.0%)	-	-
HBoV1 shedding in NPS	0 (0.0%)	1 (8.3%)	-	-
Recurrent tonsillitis	1 (100%)	5 (41.6%)	-	-
Tonsillar hypertrophy	1 (100%)	10 (83.3%)	-	-
Sleep apnea	1 (100%)	10 (83.3%)	-	-
Secretory otitis media	0 (0.0%)	1 (8.3%)	-	-
Allergies	1 (100%)	1 (8.3%)	-	-

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Supplementary Table 5. Frequency of mRNA detection in adenoids (AD), palatine tonsils (PT) and nasopharyngeal secretions (NPS) from patients with single HBoV1 infection and in those co-infected by one to four additional respiratory viruses.

	AD		PT		NPS	
Viruses Detected	mRNA +	mRNA -	mRNA +	mRNA -	mRNA +	mRNA -
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Only HBoV	1 (8.3)	5 (15.6)	0 (0.0)	3 (25.0)	0 (0.0)	3 (20.0)
HBoV + HAdV	2 (16.7)	6 (18.8)	0 (0.0)	3 (25.0)	0(0.0)	3 (20.0)
HBoV + HRV	0 (0.0)	1 (3.1)	0 (0.0)	1 (8.3)	0(0.0)	1 (6.7)
HBoV + HEV	0 (0.0)	4 (12.5)	0 (0.0)	0 (0.0)	0(0.0)	2 (13.3)
HBoV + HRSV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HMPV	0 (0.0)	0 (0.0)	0 (0.0)	1 (8.3)	0 (0.0)	0 (0.0)
HBoV + FLU	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HAdV + HRV	2 (16.7)	3 (9.4)	0 (0.0)	0 (0.0)	1 (25.0)	2 (13.3)
HBoV + HAdV + HEV	2 (16.7)	3 (9.4)	0 (0.0)	3 (25.0)	0(0.0)	2 (13.3)
HBoV + HAdV + HRSV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	1 (25.0)	0 (0.0)
HBoV + HAdV + HMPV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
HBoV + HRV + HEV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	1 (25.0)	1 (6.7)
HBoV + HRV + HRSV	0 (0.0)	0(0.0)	0 (0.0)	0 (0.0)	0(0.0)	1 (6.7)
HBoV + HRV + HCoV	1 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)	1 (25.0)	0 (0.0)
HBoV + HEV + HMPV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HEV + HPIV	1 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
HBoV + HMPV + HPIV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0 (0.0)
HBoV + FLU + HPIV	1 (8.3)	0(0.0)	0 (0.0)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HAdV + HRV + HRSV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0 (0.0)
HBoV + HAdV + HEV + HRSV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0 (0.0)
HBoV + HAdV + HEV + HMPV	0 (0.0)	1 (3.1)	0 (0.0)	0 (0.0)	0(0.0)	0 (0.0)
HBoV + HAdV + HEV + HCoV	1 (8.3)	0(0.0)	0 (0.0)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HAdV + HEV + HPIV	0 (0.0)	0 (0.0)	1 (100)	0 (0.0)	0(0.0)	0(0.0)
HBoV + HEV + FLU + HPIV	0 (0.0)	0 (0.0)	0 (0.0)	1 (8.3)	0 (0.0)	0 (0.0)
					0 (0.0)	0 (0.0)
HBoV + HAdV + HEV + HRSV + HPIV	1 (8.3)	0 (0.0)	0 (0.0)	0 (0.0)		
TOTAL	12 (27.3)	32 (72.7)	1 (7.7%)	12 (92.3)	4 (21.0)	15 (79.0)