

## RESPIRATORY SYNCYTIAL VIRUS INFECTION IN NEWBORN HOSPITALIZED WITH PNEUMONIA

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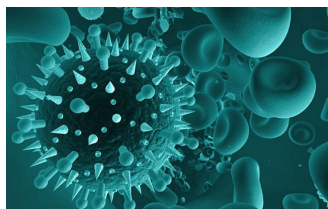
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### RISK FACTORS FOR RSV INFECTION

- prematurity
- chronic lung disease
- congenital heart disease
- immunodeficiency disorders

### NEWBORNS ADMITTED FROM HOME TO THE NICU

- JANUARY. 2014 – MAY.2017
- Lower Respiratory Tract Infection
- RSV + n=39
- RSV - n=51



### NEONATAL CHARACTERISTICS OF RSV+ AND RSV – PATIENTS

	RSV + n=39	RSV – n=51	P
Gestational age (weeks)	38	38	NS
Birth weight (grams)	3200	3290	NS
Mode of delivery (C-section)	n=14 (36%)	n=23 (45%)	NS
Gender (male)	n=15 (38,5%)	n=28 (55%)	NS
Day of admission	24	19	NS

**CLINICAL SYMPTOMS @ ADMISSION**

	RSV + n=39	RSV - n=51	p
Cough	37 (95%)	33 (65%)	p<0,05
Cold	32 (82%)	26 (51%)	p<0,05
Wheezing	32 (82%)	23 (45%)	p<0,05
Whistle	21 (54%)	11 (21,5%)	p<0,05
Respiratory distress	35 (90%)	32 (63%)	p<0,05
SO2 <95%	24 (61,5%)	16 (31%)	p<0,05

**CLINICAL COURSE**

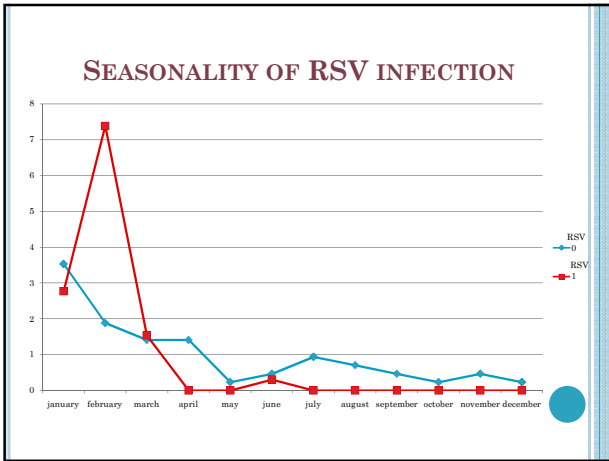
	RSV + n=39	RSV - n=51	p
Inhaled drugs	35 (90%)	26 (51%)	p<0,05
The highest FiO2	28%	21%	p<0,05
Duration of Hospitalization (days)	11	8	p<0,05
nCPAP	25 (64%)	21 (41%)	p=0,052
Duration of nCPAP (days)	5,8	5,5	NS

**NEONATAL CHARACTERISTICS OF  
RSV+ PATIENTS**

	Preterm newborns (n=14)	Term newborns (n=25)	p
Birth weight (grams)	1815	3470	p<0,05
Gestational age (weeks)	33 (28-36)	39	p<0,05
Gender (male)	7 (50%)	8 (32%)	NS
Mode of delivery (C-section)	7 (50%)	7 (28%)	NS
Day of admission	36	18	p<0,05

**CLINICAL HISTORY**

	Preterm newborns (n=14)	Term newborns (n=25)	p
Apnea	4 (28%)	1 (4%)	p<0,05
Duration of hospitalization (day)	12,5	10	p<0,05
Respiratory insufficiency	12 (86%)	13 (52%)	p<0,05
nCPAP	12 (86%)	13 (52%)	p<0,05



### CONCLUSIONS

- 70% admissions from home during neonatal period is caused by RSV infection
- Newborns RSV + infection present more often: wheezing, cough, respiratory distress, higher requirement for FiO<sub>2</sub>, therapy with inhalational drugs and longer hospitalization by 3 days vs non RSV infections.
- Among premature infants RSV + significantly more did not receive immunoprophylaxis
- Last 3 RSV seasons among newborns were shifted towards winter months: January and February

