

Estudio de validación y utilidad del escore de gravedad de bronquiolitis del hospital SJD.

Monica Balaguer, Carme Alejandre, David Vila, Elisabeth Esteban, Josep L. Carrasco, Francisco Jose Cambra, Iolanda Jordan. Bronchiolitis Score of Sant Joan de Deu: BROSJOD Score, Validation and Usefulness. *Pediatr Pulmonol.* 2016; 9999:1–7.

Monica Balaguer, Carme Alejandre, David Vila, Elisabeth Esteban, Josep L. Carrasco, Francisco Jose Cambra, Iolanda Jordan. *Escore de Bronquiolitis de Sant Joan de Deu: BROSJOD Score, validación y utilidad. Pediatr Pulmonol.* 2016; 9999:1–7.

Se trata de un estudio sobre la escala de gravedad de Bronquiolitis de SJD, diseñada en 1999. Se plantea su validación, así como la capacidad pronóstica en evolución, necesidad de ventilación, de cuidados intensivos, estancia hospitalaria y mortalidad. Estudio prospectivo, 112 pacientes, media de edad 52,5 días (IQR: 32.75–115.25).

Previo punto de corte:

	0	1	2	3
SIBILANCIAS/ ESTERTORES	No	Sibilancias espir/crepitantes espir	Sibilancias/ crepitantes ins-espir	
TIRAJE	No	Subcostal+ intercostal inferior	Previo+supracl avicular+ aleteo nasal	Previo+interco stal superior+supr aesternal
ENTRADA DE AIRE	Sin alterac	Regular, simétrica	Asimetría	Muy disminuida
SAT o2	>95%	91-94% (>94% con FiO2<40)	<90% (<94% con FiO2 ≥40%)	
FR rpm:				
<3M	<40	40-59	69-70	>70
3-12M	<30	30-49	50-60	>60
12-24M	<30	30-39	40-50	>50
FC lpm				
<1 AÑO	<130	130-149	150-170	>170
1-2 AÑOS	<110	110-120	120-140	>140

Leve 0-5. Moderada: 6-10. Grave: 11-16

HOSPITAL SAN JUAN DE DIOS (SANT JOAN DE DEU)

Se cambia el punto de corte en:

0-6 leve, 7-9 moderado, grave 10 o más. Ver tabla original más adelante.

Se demuestra su utilidad para clasificar la gravedad, calcular la necesidad de ventilación mecánica, para la duración de estancia en cuidados intensivos y para duración de estancia hospitalaria.

Eninglés original:

Bronchiolitis Score of Sant Joan de Deu: BROSJOD Score, Validation and Usefulness. Monica Balaguer, Carme Alexandre, David Vila, Elisabeth Esteban, Josep L. Carrasco, Francisco Jose Cambra, Iolanda Jordan. *Pediatr Pulmonol.* 2016; 9999:1–7.

Sant Joan de Deu Hospital bronchiolitis score (BROSJOD) was designed in 1999.

The objective was to validate the score as a severity diagnostic tool. Secondary aims:

(i) To determine prognostic capacity in order to predict patient evolution, need for ventilation support, need for pediatric intensive care unit (PICU), hospital length of stay (LOS), and mortality; (ii) to compare the score with the WD scale.

Cut-off initial: 0–5, minor crisis; 6–10, moderate crisis; 11–16, severe crisis

TABLE 1—Bronchiolitis Score of Sant Joan de Déu Description

Wheezes/rales	0: no 1: expiratory wheezes, inspiratory rales 2: expiratory and inspiratory wheezes/rales			
Indrawing	0: no 1: subcostal, lower intercostal 2: previous + supraclavicular + nasal flaring 3: previous + upper intercostal + tracheal tug			
Air entry	0: normal 1: regular and symmetric 2: asymmetric 3: very reduced			
Oxygen saturation	Without O ₂	With O ₂		
	0: >95%	1: >94% with FiO ₂ ≤ 40%		
	1: 91–94%	2: <94% with FiO ₂ > 40%		
	2: <90%			
RR (rpm)	0	1	2	3
<3 m	<40	40–60	60–70	>70
3–12 m	<30	30–50	50–60	>60
12–24 m	<30	30–40	40–50	>50
HR (bpm)				
<1 year	<130	130–150	150–170	>170
1–2 years	<110	110–120	120–140	>140

0–5, minor crisis; 6–10, moderate crisis; 11–16, severe crisis; O₂, oxygen; FiO₂, fraction of inspired oxygen; RR, respiratory rate; HR, heart rate; rpm, respirations per minute; bpm, beats per minute.

The new optimal cut-off values for classifying the severity of bronchiolitis were: mild for values from 0 to 6, moderate for values from 7 to 9, and severe for those scoring 10 or higher

New breakpoints significantly improve classification and prediction of the state of the patient.

A significant association between BROSJOD score levels and need for IMV was found. For mild range scores 19% of patients required IMV, for moderate scores 66% and 94% for severe scores. A significant correlation between the PICU LOS and the severity of bronchiolitis predicted by the score was demonstrated ($P < 0.001$) as well as for the hospital LOS ($P < 0.001$)

This score has demonstrated a good internal consistency, inter-rater reliability, and validity. Although the initial cut-off values were intuitively defined, they were suboptimal, so more optimal cut-offs have been provided.

The results obtained encourage the use of the BROSJOD score. This score provides a valid measure of illness severity, is easily recordable, and allows observation of evolution over time and by different observers. It is a useful tool for objective communication among professionals and for the referral of patients, and it is easy for training personnel to use.