Prevalence and risk factors of discomfort in infants with severe bronchiolitis

Justine Leboucher Berlendis

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PREVALENCE AND RISK FACTORS OF DISCOMFORT IN INFANTS WITH SEVERE BRONCHIOLITIS

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POUR LE DIPLÔME D'ÉTAT DE DOCTEUR EN MÉDECINE

SPÉCIALITÉ : PÉDIATRIE

Par Mme Justine LEBOUCHER (née BERLENDIS)

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TABLE DES MATIÈRES

LISTE DES ABRÉVIATIONS

BiPAP = Biphasic Positive Airway Pressure

CPAP = Continuous Positive Airway Pressure

EDIN scale = Échelle de Douleur et d'Inconfort du Nouveau-né

FiO_2 = Inspired Fraction of oxygen

HFNC = High Flow Nasal Cannula

IQR = Interquartile Range

LOS = Length of stay

m-WCAS = modified Wood's Clinical Asthma Score

NIV = Non Invasive Ventilation

NG tube = nasogastric tube

OHD = Oxygénothérapie Haut Débit

PEP = Positive Expiratory airway Pressure

PICU = Pediatric Intensive Care Unit

$PvCO_2$ = Partial venous Carbon dioxide pressure

RSV = Respiratory Syncytial Virus

SpO_2 = Oxygen saturation

SD = Standard Deviation

RÉSUMÉ

Objectifs : Déterminer la prévalence de l'inconfort chez les enfants atteints de bronchiolite sévère ayant une ventilation non invasive et identifier ses potentiels facteurs de risque.

Méthode : Nous avons conduit durant une période de 5 mois une étude rétrospective et monocentrique. Tous les nourrissons de moins de 12 mois admis en réanimation pédiatrique pendant la période d'étude avec un diagnostic de bronchiolite et aidés par une ventilation non invasive (incluant l'Oxygénothérapie Haut Débit (OHD), la CPAP (*Continuous Positive Airway Pressure*) ou la BiPAP (*Bilevel Positive Airway Pressure*)) durant leur séjour en réanimation ont été inclus. L'inconfort a été évalué en utilisant l'échelle d'EDIN (Échelle de Douleur et d'Inconfort du Nouveau-né), recueillie par les infirmières toutes les 4 à 6 heures durant l'hospitalisation.

Résultats : 91 enfants (age médian 34 jours [19-55], 52 (57%) garçons) ont été inclus dans notre étude. Trente-un (34%), 35 (39%) et 23 (25%) avaient à l'admission un support par OHD, CPAP et BiPAP respectivement. Les patients avaient un score d'EDIN médian à 2.9 (SD 2.3), 2.3 (SD 2.1) et 2.3 (SD 2.0) aux jours 1, 2 et 3 respectivement. Il n'y avait pas de différence concernant les données démographiques, biologiques et cliniques en fonction du degré d'inconfort au premier jour. Aux jours 1 et 2, les patients ayant une BiPAP avaient un score d'EDIN supérieur aux autres patients (3.3 (SD 2.5) contre 2.6 (SD 2.2) à J1, et 2.9 (SD 2.1) contre 2.3 (SD 2.2) à J2, les deux avec $p < 0.001$) (Figure 2A).

Conclusion : Les patients ayant une bronchiolite sévère sont peu inconfortables durant les trois premiers jours de réanimation. En comparaison aux patients avec OHD ou CPAP, les patients nécessitant une BiPAP semblent être plus inconfortables, alors que nous n'avons pas trouvé de corrélation entre le niveau d'inconfort et le degré de détresse respiratoire.

Mots clés : bronchiolite – douleur – inconfort – détresse respiratoire – réanimation

ABSTRACT

Objectives : To assess the prevalence of discomfort in infants with severe bronchiolitis supported by noninvasive ventilation and to identify its potential risk factors.

Methods : A single-center retrospective observational study conducted over a 5-month period. All the infants aged ≤ 12 months admitted to the Pediatric Intensive Care Unit (PICU) during the study period with a clinical diagnosis of bronchiolitis and supported by any type of noninvasive ventilation (including High- Flow Nasal Cannula (HFNC), Continous Positive Airway Pressure (CPAP) or Bilevel Positive Airway Pressure (BiPAP)) during ICU stay were included. Discomfort was assessed using the EDIN (Echelle de Douleur et d'Inconfort du Nouveau-né) scale, collected by nurses every 4 to 6 hours during PICU hospitalization.

Results : 91 infants (median age 34 days [Interquartile IQR 19-55], 52 (57%) boys) were included in our study. Thirty-one (34%), 35 (39%) and 23 (25%) were supported by HNCF, CPAP and BiPAP at admission, respectively.

Overall, patients had a median EDIN score at 2.9 (SD 2.3), 2.3 (SD 2.1) and 2.3 (SD 2.0) on day 1, 2 and 3, respectively. There was no difference in the demographic, biological and clinical data according to the degree of discomfort on day 1. On day 1 and 2, patients supported by BiPAP had a higher EDIN score compared to other patients (3.3 (SD 2.5) versus 2.6 (SD 2.2) on day 1 and 2.9 (SD 2.1) versus 2.3 (SD 2.2) on day 2, both $p < 0.001$) (Figure 2A).

Conclusion : Patients with severe bronchiolitis and supported by any type of noninvasive ventilation have a low degree of discomfort during the first three days of ICU stay. As compared to patients supported by HFNC or CPAP, patients requiring bilevel noninvasive ventilation seems to have a higher degree of discomfort, while we found no correlation between the level of discomfort and the degree of respiratory distress.

Keywords : bronchiolitis, pain, discomfort, acute respiratory failure, intensive care unit

I. BACKGROUND

Acute bronchiolitis is a common viral infection that affects a large number of children each winter in western countries[1]. The most severe forms of bronchiolitis can lead to acute respiratory failure, and therefore admission in pediatric intensive care unit (PICU). Ventilatory support is commonly used in patients with bronchiolitis admitted in PICU, especially noninvasive ventilation[2]. High flow nasal cannula (HFNC), continuous positive airway pressure (CPAP) and bilevel positive airway pressure ventilation (BiPAP) are increasingly used in patients with severe acute bronchiolitis[3]. In acute settings, noninvasive ventilation (including HFNC, CPAP and BiPAP) aims to improve gas exchange, decrease work of breathing and improve patients' comfort[4]. Its benefits have been demonstrated in both physiological[5] and clinical[6] studies. However, the use of any type of noninvasive ventilation may also constitute a factor of discomfort, especially in acute settings [7]. An inappropriate interface[8] with an excessive tightening[9], the presence of unintentional leaks, the presence of gastric dilatation[10] or the occurrence of asynchrony[11] may constitute significant sources of discomfort.

In addition, bronchiolitis is likely to cause significant discomfort in infants for several reasons: because of the symptoms of bronchiolitis (cough, fever, rhinitis, respiratory distress), because of feeding difficulties, and because of the care given to these critically ill children (mechanical ventilation, nasal suctioning, physiotherapy)[4]. As well, the PICU environment may be a source of stress in children and its parents.

In preterm infants, it has been shown that repeated pain or stress can be associated with impaired neurodevelopment, and can lead to anxiety behaviors in childhood [12]. Since bronchiolitis affect young infants, we may assume that discomfort may have the same consequences in this population.

For all these reasons, management of discomfort is crucial in patients with bronchiolitis-related respiratory failure, especially since discomfort can be responsible for noninvasive ventilation failure [13]. However, in contrast to the extensive literature on the management of patients with severe bronchiolitis, there is paucity of data on patient comfort and the potential effect of ventilatory mode. In this context, this study aims to assess the prevalence of discomfort in infants with severe bronchiolitis supported by noninvasive ventilation and to identify its potential risk factors

II. METHOD

Study design

This single-center retrospective observational study was conducted over a 5-month period from November 2019 to April 2020, in a 16-bed PICU of a tertiary pediatric center. The nurse-to-children ratio is 1:2 or 1:3 at all times in our PICU.

The study was approved by the regional research committee (Comité d'Ethique du Centre d'Investigation Clinique de Clermont-Ferrand, France, IRB 5891, September, 2021) and follows the STROBE guidelines. Parents of patients had been informed and non-opposition had been searched before data collection. No written consent was required.

Study population

All the infants aged ≤ 12 months, admitted to the PICU during the study period with a clinical diagnosis of bronchiolitis and supported by any type of noninvasive ventilation (including HFNC, CPAP or BiPAP) during ICU stay were included. The admission criteria in PICU were left at the discretion of the attending physician without any local protocol. There were no exclusion criteria.

Clinical management (local protocol)

A step-up ventilator strategy was used according to the increase in patient severity, led by physicians: 1/ HFNC, 2/ CPAP, 3/ BiPAP and 4/ invasive ventilation. CPAP and BiPAP were performed using an ICU ventilator (Evita V500™, Drager®, Germany or Servo I™ and U™, Maquet®, Solna, Sweden) with a facial or nasal interface while HFNC was started at a flow rate of 2 L/kg/min with an ICU ventilator (Evita V500™, Draeger®, Germany), or with a

specific device (Airvo 2™, Fisher and Paykel®, Auckland, New Zealand). In our pediatric center, HFNC is not commonly used in pediatric wards.

In our local practice, patients with bronchiolitis did not receive any sedative drug and the use of painkillers was based only on nurses' clinical judgment (no written protocol). EDIN (Echelle de Douleur et d'Inconfort du Nouveau-né) scale is commonly used to assess discomfort in this population (see below). An EDIN score > 8 and/or a fever > 38.5° commonly led to the use of paracetamol. In our unit, the parents were allowed and encouraged to stay with their child continuously in order to reassure their infant.

Endpoint

We used as primary endpoint the degree of discomfort. A priori, we defined the most uncomfortable patients those with a mean EDIN score superior to the 50th percentile of the entire cohort on day 1, *i.e.,* the half of patients with the most important discomfort.

Scores

To assess the severity of the respiratory distress syndrome, Wang score[14] was collected by nurses every 4 to 6 hours. It ranges from 0 (*i.e.,* no respiratory distress) to 12 (*i.e.,* high level of respiratory distress). EDIN scale[15] was collected by nurses every 4 to 6 hours during PICU hospitalization. EDIN is a neonatal pain and discomfort scale including five behavioral indicators: facial activity, body movements, quality of sleep, quality of contact, and consolability. It ranges from 0 (*i.e.,* no discomfort) to 15 (*i.e.,* high level of discomfort). An EDIN score > 8 commonly lead to the administration of analgesics.

Data collection

To describe the population, we collected demographic (age, sex and comorbidities) and clinical data during the PICU stay. Respiratory comorbidity was defined as any clinically significant neonatal lung disease, such as bronchopulmonary dysplasia. Clinical data at admission were the Wang severity score, hemodynamic and respiratory parameters, ventilatory mode and settings and medical treatment. Biological data on admission, including venous pH and venous carbon dioxide (PvCO2) were also gathered. All infants were screened for respiratory syncytial virus (RSV) at admission.

The EDIN score and the use of analgesics (including paracetamol, nalbuphine or opioids, alone or in combination) during the first three days of PICU stay were collected, as well as the feeding methods (oral or enteral) and mode of ventilation. Partial and complete enteral feeding were defined as intakes lower or higher than 100 ml/kg/day, respectively. Finally, the duration of ventilatory support and the PICU and hospital lengths of stay were analyzed.

Statistical analysis

Descriptive data were presented as number/percentages for categorical data and median (with interquartile range, IQR) or mean (with standard deviation SD) values for continuous data. Differences in categorical variables were tested using the Chi-square or Fisher's exact test. Differences in continuous variables were assessed by Mann–Whitney test or analysis of variance test after verification of the eligibility conditions. Pearson's correlation coefficient (R) and determination coefficient (R^2) were used to evaluate the correlation between the Wang and EDIN scores at admission. P values of less than .05 were considered significant. All statistical analyses were performed using Jamovi (Jamovi 1.6, Sydney, Australia).

III. RESULTS

Description of the population

A total of 91 patients were included in the study (median age 34 days [Interquartile IQR 19-55], 52 (57%) boys). Eight (9%) were born preterm (median gestational age 39 [37-40] weeks). Patients included had a median Wang score of 8 [6-9] at admission. Thirty-one (34%), 35 (39%) and 23 (25%) were supported by HNCF, CPAP and BiPAP at admission, respectively. Two patients had no respiratory support at admission but were supported during their stay. Patients' characteristics are detailed in Table 1.

Table 1: Patients' characteristics

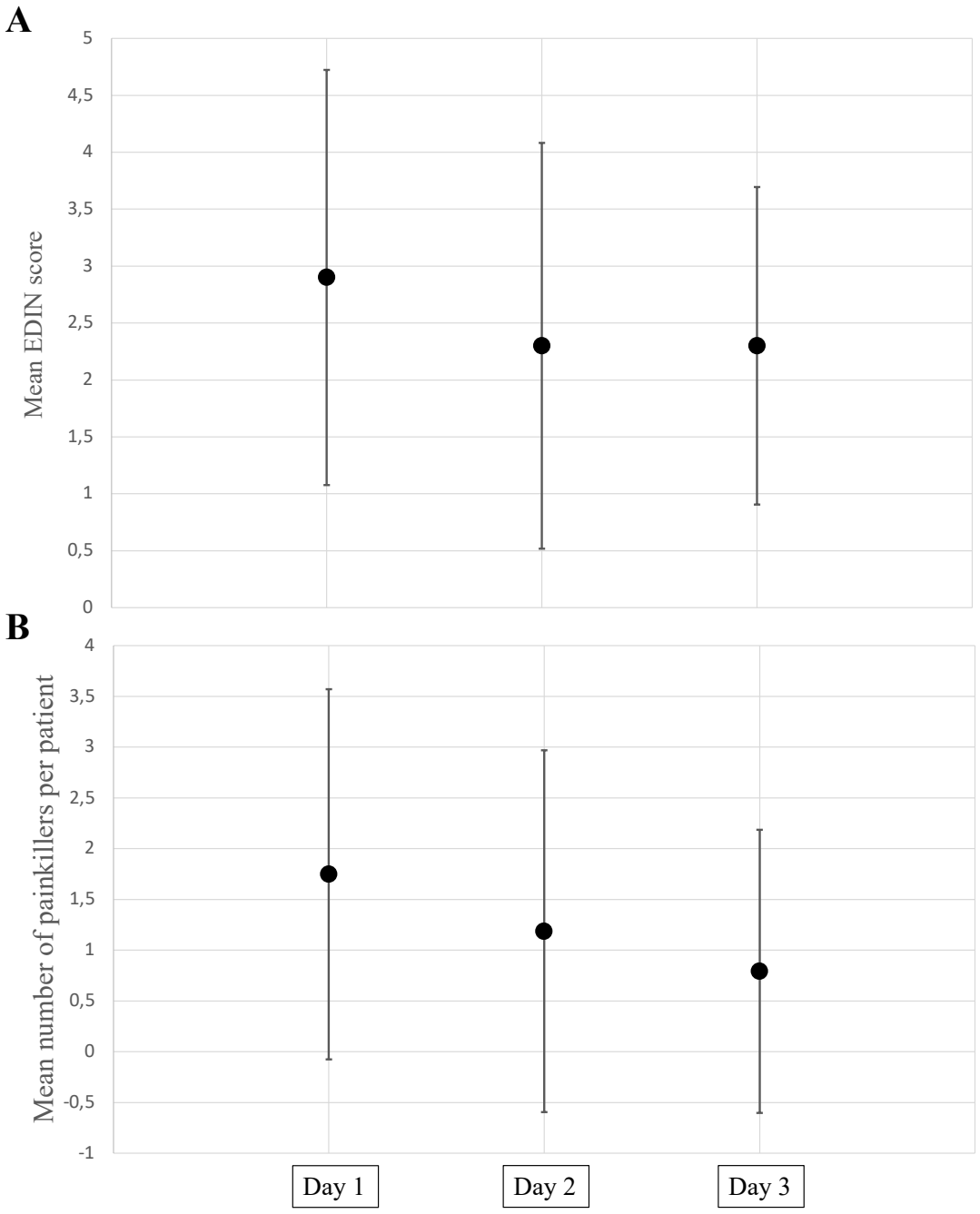
Factors	**Total N=91**
Demographic data	
Male, n (%)	52 (57%)
Age, days, median	34 [19-55]
Weight, kg, median	4.2 [3.6-4.8]
Comorbidities	
Respiratory, n (%)	1 (1)
Prematurity, n (%)	8 (9)
Type of alimentation	
Breast feeding exclusive, n (%)	41 (45)
Formula, n (%)	35 (38)
Both, n (%)	15 (17)
Clinical data at admission	
Wang score, median	8 [6-9]
Respiratory rate, breaths/min, median	43 [35-53]
Heart rate, beats/min, median	158 [143-170]
Body temperature, °C, median	37.0 [36.7-37.5]
Witnessed apnea, n (%)	26 (28)
Mode of respiratory support at admission	
None, n (%)	2 (2)
HFNC, n (%)	31 (34)
CPAP, n (%)	35 (39)
BiPAP, n (%)	23 (25)
Biological data at admission	
pH, median	7.34 [7.30-7.39]
$PvCO_2$, mmHg, median	54 [46-59]
RSV positive, n (%)	86 (93)
Equipment at admission	
Nasogastric tube, n (%)	88 (97)
Peripheral venous catheter, n (%)	83 (91)
Outcomes	
Ventilatory support duration, hours, median	59 [26-83]
PICU LOS, hours, median	88 [54-109]
Hospital LOS, days, median	7 [6-9]

Values are given as median with interquartile [IQR] or numbers (%)
BiPAP: bilevel positive airway pressure; CPAP: continuous positive airway pressure; HFNC: high flow nasal cannula; LOS: length of stay; PICU: pediatric intensive care unit; $PvCO_2$: partial venous carbon dioxide pressure; RSV: respiratory syncytial virus

Prevalence of discomfort

Overall, patients had a mean EDIN score at 2.9 (SD 2.3), 2.3 (SD 2.1) and 2.3 (SD 2.0) on day 1, 2 and 3, respectively (Figure 1A). They received 1.7 (SD 1.8), 1.2 (SD 1.8) and 0.8 (SD 1.4) doses of painkillers on day 1, 2 and 3, respectively (Figure 1B).

Figure 1 : Prevalence of discomfort on the first three days. A – Mean EDIN score. B – Use of painkillers.



Risk factors of discomfort

As shown in Table 2, there was no difference in the demographic, biological and clinical data according to the degree of discomfort on day 1. Regarding the outcome, patients with the highest degree of discomfort had a longer duration of ventilation as well as a longer ICU length of stay (68 [55-106] *versus* 57 [33-79] hours, p= 0.03, and 94 [65-122] *versus* 73 [46-101] hours, p=0.03, respectively). The hospital length of stay did not differ between the two groups.

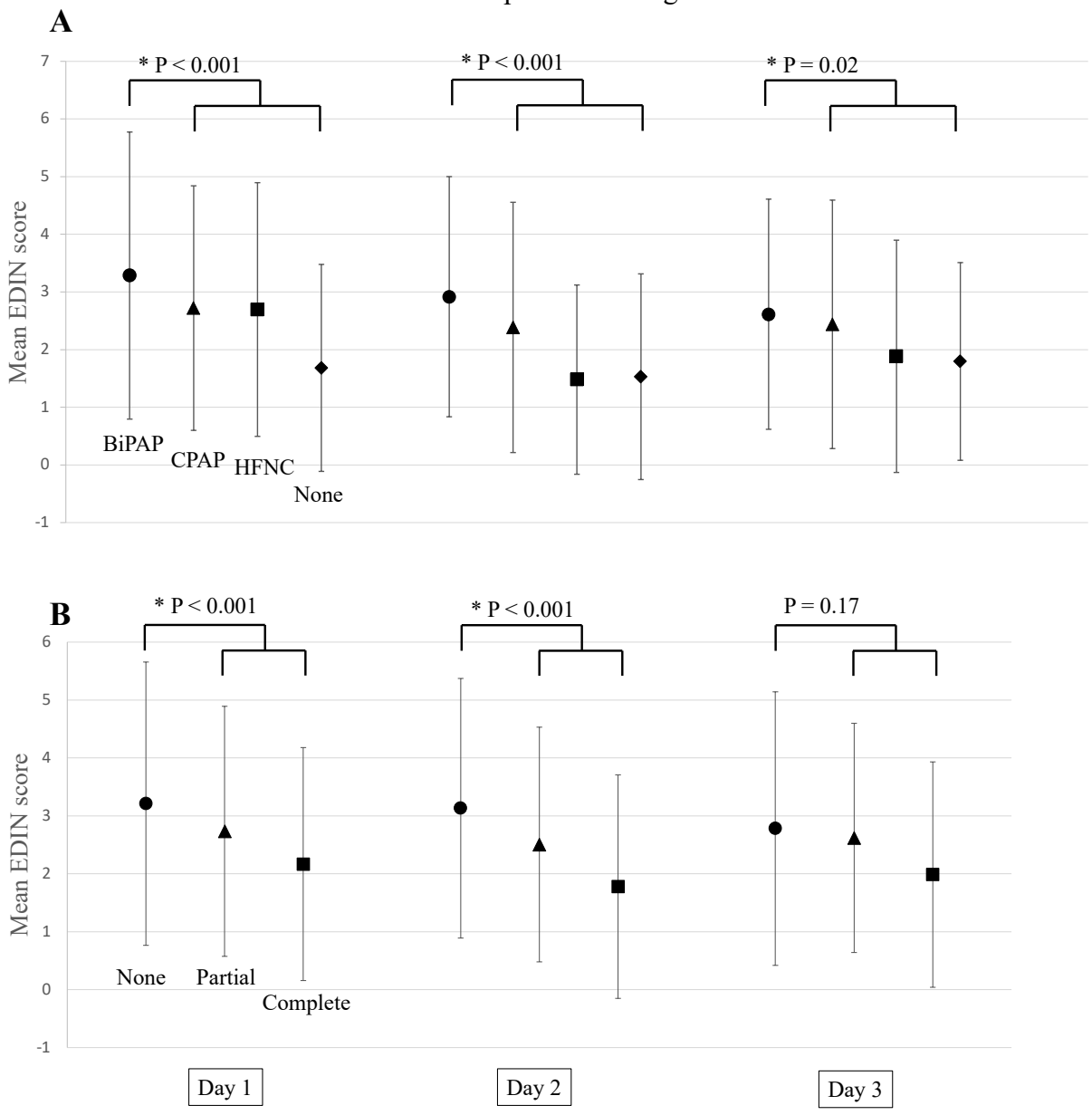
Table 2: Factors associated with a higher EDIN score on day 1

Factors	**The least uncomfortable patients N=45**	**The most uncomfortable patients N=46**	**p**
Demographic data			
Male, n (%)	27 (58)	25 (55)	0.59
Age, days, median	36 [20-53]	31 [17-54]	0.71
Discomfort			
EDIN on day 1, mean, SD	1.9 (1.9)	3.8 (2.3)	< 0.01*
Doses of painkillers per patient given on day 1, mean, SD	1.2 (1.4)	2.2 (2.1)	0.02*
Comorbidities			
Prematurity, n (%)	3 (7)	5 (11)	0.71
Clinical data at admission			
Wang score, median	6 [5-7]	7 [6-8]	0.13
Respiratory rate, breaths/min, median	49 [41-56]	50 [41-58]	0.38
Heart rate, beats/min, median	160 [144-170]	157 [142-170]	0.59
Body temperature, °C, median	37.0 [36.7-37.4]	37.0 [36.7-37.6]	0.70
Witnessed apnea, n (%)	10 (22)	15 (33)	0.27
Mode of respiratory support at admission			
None, n (%)	1 (2)	1 (2)	1
HFNC, n (%)	16 (35)	15 (33)	0.77
CPAP, n (%)	19 (42)	16 (35)	0.47
BiPAP, n (%)	9 (20)	14 (30)	0.25
Feeding within 2 hours of admission	13 (29)	8 (17)	0.2
Biological data at admission			
pH, median	7.34 [7.30-7.37]	7.33 [7.28-7.36]	0.50
$PvCO_2$, mmHg, median	54 [47-59]	50 [45-57]	0.23
Outcomes			
Ventilatory support duration, hours, median	57 [33-79]	68 [55-106]	0.03*
PICU LOS, hours, median	73 [46-101]	94 [65-122]	0.03*
Hospital LOS, hours, median	7 [5-8]	8 [6-10]	0.07

Values are given as median with interquartile [IQR] or numbers (%)
BiPAP: bilevel positive airway pressure; CPAP: continuous positive airway pressure; HFNC: high flow nasal cannula; LOS: length of stay; PICU: pediatric intensive care unit; $PvCO_2$: partial venous carbon dioxide pressure

On day 1 and 2, patients supported by BiPAP had a higher EDIN score compared to other patients (3.3 (SD 2.5) versus 2.6 (SD 2.2) on day 1 and 2.9 (SD 2.1) versus 2.3 (SD 2.2) on day 2, both $p < 0.001$) (Figure 2A). On day 1 and 2, EDIN score was lower in patients partially or completely fed as compared to other patients (2.6 (SD 2.1) versus 3.2 (SD 2.4) on day 1 and 2.2 (SD 2.0) versus 3.2 (SD 2.2) on day 2, both $p < 0.001$) (Figure 2B).

Figure 2 : Risk factors of discomfort on the first three days. A – Impact of ventilatory support on discomfort. B – Impact of feeding on discomfort.



BiPAP: bilevel positive airway pressure; CPAP: continuous positive airway pressure; HFNC: high flow nasal cannula

IV. DISCUSSION

We found that patients with severe bronchiolitis and supported by any type of noninvasive ventilation have a low degree of discomfort during the first three days of ICU admission. We did not identify any risk factor for discomfort, but we did find a significant impact of the ventilatory mode on patient comfort.

The management of comfort in patients admitted in PICU is crucial. Poor assessment of the child's comfort during hospitalization can lead to over or underdosing of analgesic treatments, with significant consequences [16]. In our clinical practice, we use EDIN to assess comfort in this population. Despite this scale has been developed and validated in the neonatal population, this method of assessment is commonly used in patients with bronchiolitis[17].

Overall, we found that infants with severe bronchiolitis had a low degree of discomfort, supporting the benefit of noninvasive ventilation to improve the comfort of patients. Importantly, we found a significant impact of the ventilatory mode on the comfort of patients. Infants supported by bilevel noninvasive ventilation had a higher EDIN mean score as compared to patients supported by other types of ventilatory support. We hypothesize that this is mainly related to a suboptimal patient-ventilator interaction in bilevel mode [10,18,19]. Indeed, the use of pressure support in assisted modes requires both inspiratory and expiratory synchrony, especially in young infants. To reduce asynchrony, the use of Neurally Adjusted Ventilatory Asist (NAVA) have been shown to be helpful in this population [20,21]. As well, we cannot exclude a certain relationship between the severity of the disease and the degree of discomfort as assessed by EDIN score in our study. Since we use BiPAP for the most severe patients in our center, we cannot exclude that those supported by BiPAP were considered more discomfortable because of their severity, despite we did not find any correlation between

severity of respiratory distress, as assessed by Wang score, and discomfort. Future studies with a larger number of patients are warranted to explore this.

Regarding outcome of patients, we found that patients with the highest degree of discomfort had a longer duration of ventilation as well as a longer ICU length of stay. This support our hypothesis that the most severe patients are also the most uncomfortable, or at least identified as such. Another explanation may be that the most uncomfortable patients could be mistakenly judged as more severe, and thus lead to unnecessary continuation of noninvasive ventilation.

This study presents some limitations that should be highlighted. First, it is a single center and retrospective study with a limited number of patients. However, since the management of severe bronchiolitis is likely homogeneous in western countries, we consider our findings as generalizable. Second, we acknowledge that using EDIN score as comfort assessment may be controversial, given its subjectivity. It is true that EDIN was measured at a point in time and not continuously. Validated methods for assessing pain and discomfort in this population are very limited. In addition, EDIN was generally measured when the nurse was providing care to the child, while the infant was awake and stimulated, and not while the child was sleeping. Third, despite we did not find any correlation between the level of discomfort and the degree of respiratory distress, we cannot exclude that the presence of signs of respiratory failure, including signs of respiratory distress and signs of hypercarbia, may impact the comfort assessment. Unfortunately, we did not assess comfort before noninvasive ventilation initiation, and we acknowledge that this would have been relevant to collect such data. Fourth, we did not collect the types and duration of procedures that are likely to cause acute discomfort, like venous punctures, nasogastric tubes insertion or nasal suctioning. Finally, we did not collect the ventilatory parameters, while they may have a strong impact on patient comfort.

V. CONCLUSION

Patients with severe bronchiolitis and supported by any type of noninvasive ventilation have a low degree of discomfort during the first three days of ICU stay. As compared to patients supported by HFNC or CPAP, patients requiring bilevel noninvasive ventilation seems to have a higher degree of discomfort, while we found no correlation between the level of discomfort and the degree of respiratory distress. Future studies with larger numbers of patients are needed to identify patients at high risk for discomfort in order to optimize their management upon admission.

THÈSE SOUTENUE PAR : LEBOUCHER Justine

TITRE :

Prevalence and risk factors of discomfort in infants with severe bronchiolitis

CONCLUSION :

Patients with severe bronchiolitis and supported by any type of noninvasive ventilation have a low degree of discomfort during the first three days of ICU stay. As compared to patients supported by HFNC or CPAP, patients requiring bilevel noninvasive ventilation seems to have a higher degree of discomfort, while we found no correlation between the level of discomfort and the degree of respiratory distress. Future studies with larger numbers of patients are needed to identify patients at high risk for discomfort in order to optimize their management upon admission.

VU ET PERMIS D'IMPRIMER

Grenoble, le : 27/08/2021

LE DOYEN

Le Doyen de l'UFR de Médecine

Pr. Patrice MORAND

Pr. Patrice MORAND

LE PRÉSIDENT DE LA THÈSE

Pr. Thierry DEBILLON

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DE GRENO[illegible]

Service de Médecin[illegible]
Réanimation [illegible]

Pr Th. DEBI[illegible]ON
Chef de Service

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APPENDIX

APPENDIX 1 : EDIN scale

Indicator	Description	Result
Facial activity	Relaxed facial activity	0
	Transient grimaces with frowning, lip purse and chin quiver or tautness	1
	Frequent grimaces, lasting grimaces	2
	Permanent grimaces resembling crying or blank face	3
Body movements	Relaxed body movements	0
	Transient agitation, often quiet	1
	Frequent agitation but can be calmed down	2
	Permanent agitation with contraction of fingers and toes and hypertonia of limbs or infrequent, slow movements and prostration	3
Quality of sleep	Falls asleep easily	0
	Falls asleep with difficulty	1
	Frequent, spontaneous arousals, independent of nursing, restless sleep	2
	Sleepless	3
Quality of contact with nurses	Smiles, attentive to voice	0
	Transient apprehension during interactions with nurses	1
	Difficulty communicating with nurses. Cries in response to minor stimulation	2
	Refuses to communicate with nurses. No interpersonal rapport. Moans without stimulation.	3
Consolability	Quiet, total relaxation	0
	Calms down quickly in response to stroking or voice, or with sucking	1
	Calms down with difficulty	2
	Disconsolate. Sucks desperately	3

Debillon T. et al, Development and initial validation of the EDIN scale, a new tool for assessing prolonged pain in preterm infants. Archives of Disease in Childhood - Fetal and Neonatal Edition. 1 juill 2001;85(1):36F - 41.

APPENDIX 2 : Wang score

Indicator	Description	Score
Respiratory rate (breath/min)	< 30	0
	31 - 45	1
	45 – 60	2
	> 60	3
Wheezing	None	0
	Terminal expiration or only with stethoscope	1
	Entire expiration or audible on expiration without stethoscope	2
	Inspiration and expiration without stethoscope	3
Retractions	None	0
	Intercostal only	1
	Tracheosternal	2
	Severe with nasal flaring	3
General condition	Normal	0
	Irritable, lethargic, poor feeding	3

Classification :

- Score from 0 to 3: bronchiolitis without severity criteria.
- Score from 4 to 7 : bronchiolitis of moderate severity.
- Score from 8 to 12 : severe bronchiolitis.

"Observer Agreement for Respiratory Signs and Oximetry in Infants Hospitalized with Lower Respiratory Infections" Wang et al

SERMENT D'HIPPOCRATE

Le serment d'Hippocrate

Texte revu par l'Ordre des médecins en 2012

« Au moment d'être admis(e) à exercer la médecine, je promets et je jure d'être fidèle aux lois de l'honneur et de la probité.

Mon premier souci sera de rétablir, de préserver ou de promouvoir la santé dans tous ses éléments, physiques et mentaux, individuels et sociaux.

Je respecterai toutes les personnes, leur autonomie et leur volonté, sans aucune discrimination selon leur état ou leurs convictions. J'interviendrai pour les protéger si elles sont affaiblies, vulnérables ou menacées dans leur intégrité ou leur dignité. Même sous la contrainte, je ne ferai pas usage de mes connaissances contre les lois de l'humanité.

J'informerai les patients des décisions envisagées, de leurs raisons et de leurs conséquences.

Je ne tromperai jamais leur confiance et n'exploiterai pas le pouvoir hérité des circonstances pour forcer les consciences.
Je donnerai mes soins à l'indigent et à quiconque me les demandera.
Je ne me laisserai pas influencer par la soif du gain ou la recherche de la gloire.

Admis(e) dans l'intimité des personnes, je tairai les secrets qui me seront confiés. Reçu(e) à l'intérieur des maisons, je respecterai les secrets des foyers et ma conduite ne servira pas à corrompre les mœurs.

Je ferai tout pour soulager les souffrances. Je ne prolongerai pas abusivement les agonies. Je ne provoquerai jamais la mort délibérément.

Je préserverai l'indépendance nécessaire à l'accomplissement de ma mission. Je n'entreprendrai rien qui dépasse mes compétences. Je les entretiendrai et les perfectionnerai pour assurer au mieux les services qui me seront demandés.

J'apporterai mon aide à mes confrères ainsi qu'à leurs familles dans l'adversité. Que les hommes et mes confrères m'accordent leur estime si je suis fidèle à mes promesses ; que je sois déshonoré(e) et méprisé(e) si j'y manque. »

SECTEUR SANTÉ
Université Grenoble Alpes