

ETUDE NICO

Accidents des curares

Lésions dentaires

IOT difficile

~~IOT~~ / IOT

Inhalation !

Inhalation !

Surveillance ?!

Lésions VAS

Surveillance ?!

Décubitus

A quoi je sers
alors ?!

A quoi je sers
alors ?!

Instabilité Hémodynamique

JAMA | **Original Investigation** | **CARING FOR THE CRITICALLY ILL PATIENT**

Effect of Noninvasive Airway Management of Comatose Patients With Acute Poisoning A Randomized Clinical Trial

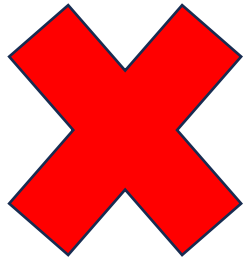
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21 Centres dont 1 Rea, 20 SAU dont 16 avec inclusions SMUR possibles



In TARGET

- Suspicion **clinique** d'intoxication médicamenteuse
- Glasgow score < 9



-Indication immédiate d'IOT

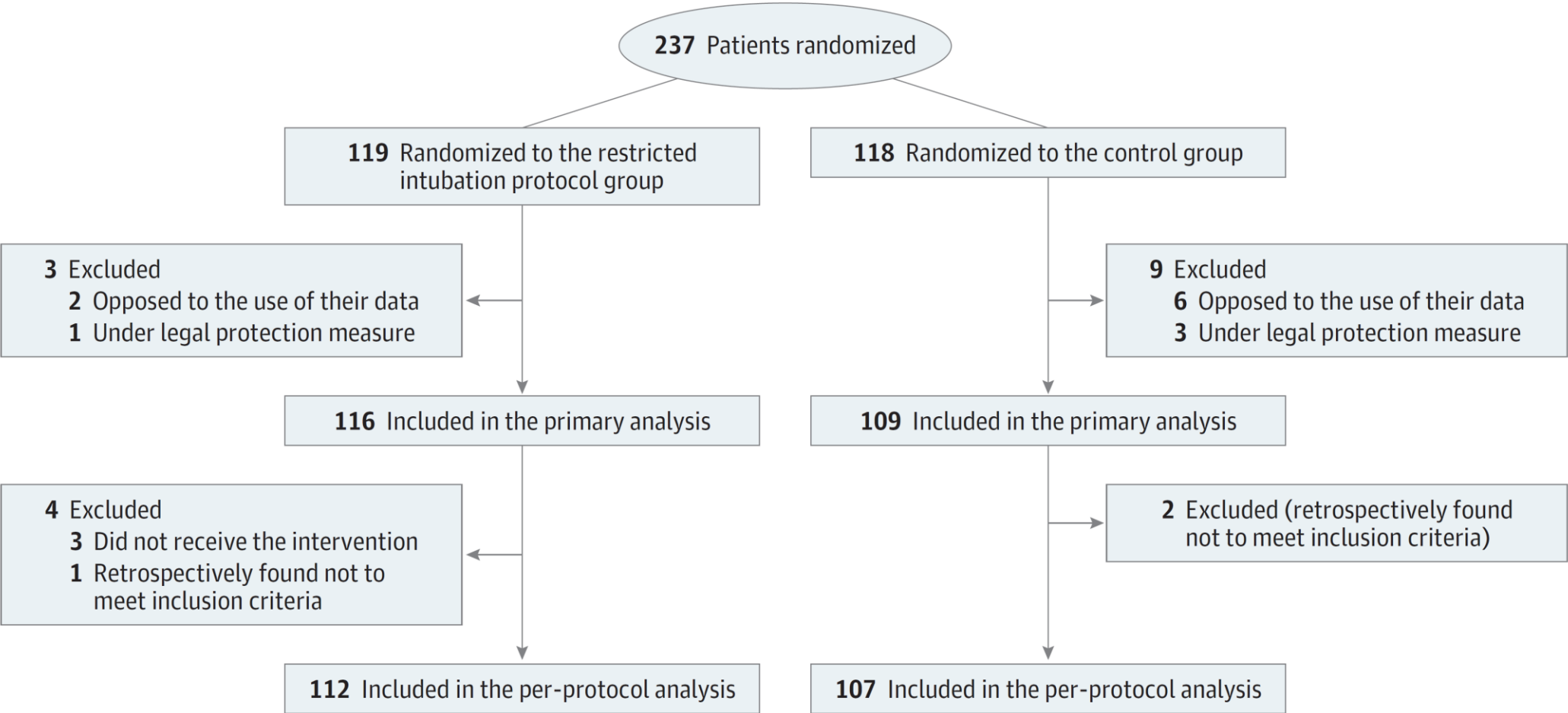
- détresse respiratoire / SpO₂ <90% sous O₂
- Convulsion /
- Choc / PAS <90 mmHg

-Cardiotrope

-Mono-intoxication accessible à un antidote fonctionnel

Randomisation / enveloppes 1:1

Figure 1. Recruitment, Randomization, and Analysis of Patients From the NICO Trial



The number of patients screened but not fulfilling all inclusion criteria and no exclusion criteria was not collected. NICO indicates Non-invasive Airway Management of Comatose Poisoned Emergency Patients.

Table 1. Characteristics of the Patients at Baseline in the NICO Trial

Characteristic	No. (%)	
	Restricted intubation (n = 116)	Control (n = 109)
Sex		
Female	46 (39.7)	39 (35.8)
Male	70 (60.3)	70 (64.2)
Age, median (IQR), y	33 (25-49)	34 (26-49)
Site of inclusion		
Emergency department	73 (62.9)	66 (60.6)
Prehospital	43 (37.1)	42 (38.5)
Intensive care unit	0	1 (0.9)
Heart rate, bpm	85 (18) [n = 114]	85 (20) [n = 107]
Heart rate >100	24 (21.1)	20 (18.7)
Blood pressure, mm Hg	n = 115	n = 106
Systolic, mean (SD)	113.6 (14.8)	117.9 (18.9)
Systolic ≤100	21 (18.3)	18 (17.0)
Diastolic, mean (SD)	70.3 (13.3)	70.6 (14.2) [n = 107]
Respiratory rate, mean (SD), breaths per min	17.2 (4.3) [n = 73]	16.8 (4.4) [n = 72]
Respiratory rate ≤12	13 (17.8)	10 (13.9)

33/34 ans

38% inclus en pré-hospitalier

Median Glasgow Coma Scale score, median (IQR)

6 (3-7)

6 (3-7)

Glasgow coma scale score = 3

38 (33)

28 (23)

Estimated body mass index ^a	25 (5) [n = 98]	24 (4) [n = 102]
Toxin ^b		
Alcohol	79 (68.1)	71 (65.1)
Benzodiazepines	45 (38.8)	44 (40.4)
Neuroleptic	25 (19.0)	31 (28.4)
GHB/GBL	14 (12.1)	11 (10.1)
Crack/cocaine	13 (11.2)	6 (5.5)
Opioid/heroine	11 (9.5)	13 (11.9)
Amphetamines	9 (7.8)	11 (10.1)
Cannabinoid	9 (7.8)	6 (5.5)
Selective serotonin reuptake inhibitor	6 (5.2)	9 (8.3)
Tricyclic antidepressant	6 (5.2)	9 (8.3)
Paracetamol	5 (4.3)	4 (3.7)
Other	9 (7.8)	11 (10.1)
Intubation	19 (16.4)	63 (57.8)

Abbreviations: bpm, beats per minute; GHB, γ-hydroxybutyric acid; GBL, γ-butyrolactone; NICO, Non-invasive Airway Management of Comatose Poisoned Emergency Patients.

^a Calculated as weight in kilograms divided by height in meters squared.

^b Toxins involved were either suspected, reported by the patient or a relative, or proven by biological analysis. The sum of percentages exceeds 100% because several toxins may be involved.

OBJECTIF PRINCIPAL :

Comparer, entre la prise en charge sans acte invasif et la pratique en routine, un résultat hiérarchique composite de la mortalité et de la morbidité hospitalière arrêtée à 28 jours, chez des patients dans le coma présentant une intoxication.

CRITÈRE DE JUGEMENT PRINCIPAL :

Critère composite hiérarchique (arrêté à 28j) :

1. décès l'hôpital,
2. durée du séjour en réanimation,
3. durée du séjour à l'hôpital

OBJECTIFS SECONDAIRES

- Comparaison entre les groupes de chaque composante des critères d'évaluation composite
- Évènements indésirables à l'hôpital
- Coûts hospitaliers totaux

CRITÈRES SECONDAIRES

- Décès à l'hôpital (arrêté à 28 jours)
- Durée du séjour à l'hôpital (arrêté à 28 jours)
- Proportion de patients avec ventilation mécanique à J28
- Durée de la ventilation mécanique jusqu'à la sortie de l'hôpital ou à J28
- Proportion d'admission en réanimation
- Proportion de pneumonie précoce
- Évènements indésirables dus à l'intubation : hypoxémie, traumatisme dentaire, régurgitation, arrêt cardiaque, score de difficulté d'intubation (IDS) ≥ 5 , hypotension ou intubation œsophagienne
- Coûts hospitaliers totaux et analyse des conséquences des coûts (arrêté à 28 jours)

Dans le groupe intervention :



- IOT « **découragée** », surveillance en SAU encouragée
- IOT possible sur décision médicale, avec critères préétablis de :

- **SpO2 < 90 % même sous O2**
- **PAS < 90 mmHg persistant après remplissage 1 L**
- **Vomissements**
- **Convulsion(s)**

Durée de l'intervention : 4 H ou retour à GCS < 8H si plus précoce

Table 2. Components of the Primary Outcome and Secondary Outcomes^a

Outcome	No. (%)		Value (95% CI)	Absolute difference, percentage points (95% CI) ^b
	Restricted intubation (n = 116)	Control (n = 109)		
Components of the primary outcome				
In-hospital death	0	0	NC	NC
Intensive care unit admission	46 (39.7)	72 (66.1)	OR = 0.23 (0.12 to 0.44)	-29.2 (-41.0 to -17.4)
Median length of intensive care unit stay (IQR), h	0 (0 to 18.5)	24.0 (0 to 57.0)	RR = 0.39 (0.24 to 0.66)	
Median length of hospital stay (IQR), h	21.5 (10.5 to 44.5)	37.0 (16.0 to 79.0)	RR = 0.74 (0.53 to 1.03)	
Mechanical ventilation	21 (18.1)	65 (59.6)	OR = 0.12 (0.06 to 0.24)	-42.5 (-54.1 to -30.9)
Additional secondary outcomes				
Median length of mechanical ventilation (IQR), h	0 (0 to 0)	6.0 (0 to 21.0)	RR = 0.21 (0.11 to 0.38)	
Occurrence of pneumonia	8 (6.9)	16 (14.7)	OR = 0.43 (0.18 to 1.05)	-7.8 (-15.9 to 0.3)
Adverse event from intubation ^c	7/113 (6.0) [n = 113]	16/107 (14.7) [n = 107]	OR = 0.37 (0.15 to 0.95)	-8.6 (-16.6 to -0.7)
Systolic blood pressure <90 mm Hg	3 (2.7)	2 (1.9)		
Peripheral oxygen saturation <90%	2 (1.8)	4 (3.7)		
Vomiting	2 (1.8)	0		
Difficult intubation with IDS ≥5	1 (0.9)	14 (13.1)		
Dental trauma	0	2 (1.9)		
Cardiac arrest	0	0		
Esophageal intubation	0	4 (3.7)		
First pass failure	1/113 (0.9)	14/107 (13.1)	OR = 0.06 (0.01 to 0.46)	-12.2 (-18.8 to -5.6)

Abbreviations: IDS, Intubation Difficulty Scale; NC, not calculated; OR, odds ratio; RR, rate ratio.

^a All outcomes were truncated at 28 days.

^b Differences were computed with a generalized mixed linear model with the center as random effect.

^c The sums of different numbers of adverse events may exceed the number of patients with adverse events because more than 1 adverse event can occur in a patient.

Figure 2. Distribution of Wins, Ties, and Losses for Patients

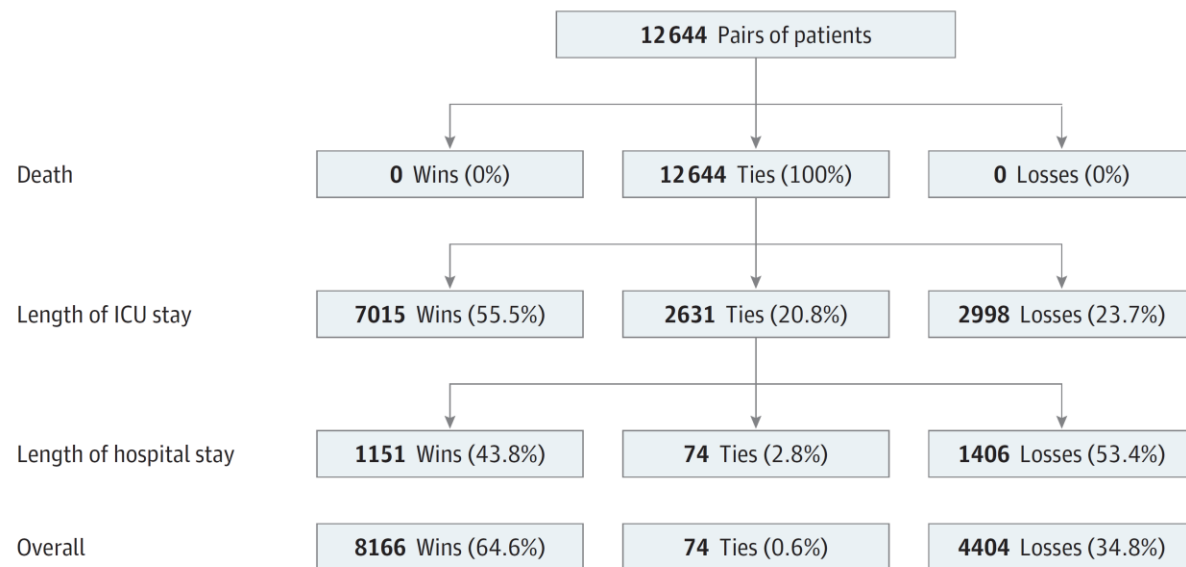


Table 3. Primary Outcome^a

	Statistic (95% CI)	P value ^b
Primary analysis		
Win ratio	1.85 (1.33-2.58)	<.001
Stratified win ratio ^c	1.83 (1.29-2.60)	.001
Win odds	1.85 (1.33-2.56)	<.001
Stratified win odds ^c	1.82 (1.29-2.58)	.001
Per-protocol population		
Win ratio	1.91 (1.37-2.68)	<.001
Stratified win ratio ^c	1.89 (1.32-2.72)	.001
Win odds	1.90 (1.36-2.66)	<.001
Stratified win odds ^c	1.88 (1.31-2.69)	.001

^a Hierarchical composite of death, length of intensive care unit stay, and length of hospital stay through 28 days. The win ratio denotes the ratio of the total number of wins to the total number of losses. The win odds represents the ratio of the proportion of wins plus 0.5 the proportion of ties to the proportion of losses plus 0.5 the proportion of ties.

^b See the eMethods in [Supplement 3](#) for a description of the P value calculation.

^c The 5 centers that had fewer than 5 patients were not included in the stratification (n = 13 patients in total in the primary analysis and 12 patients in total in the per-protocol analysis).

Limites de l'étude Nico ??????



**Yonathan, tu nous mens !
Tout ça c'est pour passer à la TV/radio ...**

1. Les enveloppes étaient manipulées !
2. Durée de Réa : forcément si on les intube pas...
3. Dans la vraie vie nos SAU sont des camps de réfugiés ! On les surveillera pas aussi bien !
4. On est meilleurs que ça : on ne se laisse pas dicter notre conduite par le Glasgow, nous !!!



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* Image bizarre de PLS crée par ChatGPT 4

Merci de votre attention