

## Gestion des risques: Cyberattaques, stress hospitalier

ID: 89

### Systematic review and consensus definitions for anaesthesia-related severe morbidity: The AMORI study.

P. Guckert(1), M.Bonnet(2), H.Beloeil(3), C.Boccara(4)

(1) Anesthésie-Réanimation, CHU de Rennes, Rennes, France , (2) Anesthésie, Armand Trousseau, APHP, Paris, France , (3) Anesthésie, CHU Pontchaillou, Rennes, France , (4) Anesthésie, Armand Trousseau, APHP, Paris, France

*\*Auteur présenté comme orateur*

#### Position du problème et objectif(s) de l'étude:

Anaesthesia-related severe morbidity is a marker of quality and safety of care. Several recent studies have attempted to describe and define it with some limitations: overlap with surgical complications, no formal experts' consensus, indicators without consensual definitions and/or not applicable in clinical routine practice. The aim of this study was to provide an operative consensual definition of anaesthesia-related severe morbidity.

#### Matériel et méthodes:

After conducting a systematic review of studies published in 2010-2021 that investigated anaesthesia-related severe morbidity as a primary outcome, we created a set of indicators with definitions, that was submitted to an international panel of 37 experts. Consensus was reached using a Delphi process. Experts were asked to score each of the listed indicators with definition using a scale graded from 1 to 5. Up to 3 definitions could be proposed for each indicator. Analysis of the percentage of response and comment of the first round was made by the research group. Indicators were modified accordingly for the second round.





































#### Résultats & Discussion:

Overall, 142 studies were included in the systematic review, and 68 criteria of anaesthesia-related severe morbidity were identified (Table 1). After selection, 34 indicators divided into 8 categories (cardiovascular, respiratory, sepsis, renal, neurological, medication error, digestive and others) were submitted to the experts. After 2 Delphi rounds, the 26 indicators with a consensual definition were: acute heart failure, cardiogenic shock, ARDS, pulmonary embolism and thrombosis, bronchospasm or laryngospasm, pneumonia, inhalation pneumonitis, pneumothorax, difficult or impossible intubation, atelectasis, self-extubation or accidental extubation, sepsis or septic shock, transient ischemic attack, postoperative confusion or delirium, post-puncture headache, medication error, liver failure, unplanned ICU admission, multiple-organ failure.

#### Conclusion:

This study provides a set of indicators with specific definition obtained by experts' consensus, useful in clinical practice and in research.

**Table 1 : Severe anaesthesia-related morbidity criteria extracted from the literature (N= 142 studies).**

Category	Indicators											
Mortality 	 Study Period for mortality											
	During hospital stay	D30		3 months		6 months		1 year				
Total 84 studies (59%)	10 (12%)		49 (58%)		8 (9%)		3 (4%)		3 (4%)			
Cardio-vascular 	Cardiac Arrest		SVRD		Myocardial infarction		Myocardial Injury		Hypotension		Acute heart failure	
												
Total : 90 studies (63%)	36 (25%)		32 (23%)		51 (36)%		20 (14%)		28 (20%)		25 (18%)	
Respiratory 	Unplanned reintubation	Broncho-spasm	Hypoxemia		Pneumoniae		Atelectasis	Aspiration pneumoniae		Acute respiratory failure		Pulmonary embolism
												
Total : 85 studies (60%)	23 (16%)	13 (9%)	15 (11%)		47 (33%)		18 (12%)	17 (12%)		30 (21%)		22 (16%)
Neurological 	Stroke		Transient cerebrovascular accident		Coma		Delirium		Cognitive disorder		Neurologic al deficit	
												
Total : 74 studies (52%)	50 (35%)		7 (5%)		6 (4%)		22 (16%)		15 (11%)		7 (5%)	
Renal 	Acute Renal Failure						Dialysis					
												
Total : 49 studies (35%)	45 (32%)						12 (9%)					
Infectious 	Septic Shock				Abscess				SIRS			
												
Total : 33 studies (23%)	23 (16%)				20 (14%)				6 (4%)			
Characteristics of hospital admission 	Intensive care admission						Extension of length of stay					
												
Total : 49 studies (35%)	39 (28%)						34 (24%)					
Surgical complications involving anaesthesia	Bleeding						Revision Surgery					
												
Total : 25 studies (18%)	17 (12%)						15 (11%)					

Les auteurs déclarent ne pas avoir toute relation financière impliquant l'auteur ou ses proches (salaires, honoraires, soutien financier éducationnel) et susceptible d'affecter l'impartialité de la présentation.