CHARACTERIZATION OF ADVERSE EVENTS IN THE SERVICE OF PLASTIC AND RECONSTRUCTIVE SURGERY IN HOSPITAL INSTITUTIONS OF BARRANQUILLA, 2016-2017

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INTRODUCTION

Adverse Events (AEs) are unintentional damages caused to a patient in the course of medical care. Up to 70% of patients with AEs suffer mild or transitory disabilities as a result, but in 3% of cases the disabilities were permanent and in 14% of patients they contribute to death. Although there is no data at this level of detail in Plastic Surgeries (Esthetic or Reconstructive), there is no reason to think that they are different, taking into account that the incidence of AEs in these surgeries is of the order of 0.3% to 0.8%. Although the definition of AEs implies the presence of "unintentional" damage, i.e. "accidental", it has been considered that, in retrospect, between 37% and 51% of AE's are potentially preventable. The study of the frequency and causes of AEs contributes to improve their prevention.

OBJECTIVES

To characterize the adverse events in the plastic and reconstructive surgery service in health institutions in Barranquilla, using the IHI's Global Trigger Tool (GTT)

METHODS

Twenty records were randomly selected for each month and Hospital, according to the GTT methodology, from the total clinical records of patients who underwent any plastic and/or reconstructive surgery in any of four (4) selected Hospitals in Barranquilla, Colombia, between January 1, 2016 and December 31, 2017. The records obtained were systematized using the GTT methodology to automatically detect triggers that would reveal Adverse Events (AEs). Trigger records were reviewed by a physician to determine the presence of AEs and to classify the severity of the damage, rated according to the National Coordinating Council for the Reporting and Prevention of Medication Errors (NCC MERP) on a scale from E to I. The identified AEs were characterized. Univariate and multivariate risk analyses related to age, sex and type of surgery were also performed.

RESULTS

A total of 439 triggers were detected in 437 patients, among the 1 920 medical records reviewed. 64 AEs were detected in the same number of patients using the Global Trigger Tool (GTT) as a screening method, resulting in an incidence of 33,4 AEs / 1 000 records reviewed. The main AE identified were surgical complications (26,6%), followed by hematomas (20,3%) and post-surgical bleeding (17,2%).
The relative risk was higher for males and the Plastic / Reconstructive Surgery (PRS) group. Univariate risk analysis resulted in a risk close to 2 times in patients under 45 years, 2,5 times in men and almost 4 times in those undergoing PRS. Logistic regression analysis showed a statistically significant association for the type of procedure only.

EA	n	%
Surgical complications	17	26,56%
Hematoma	13	20,31%
Post surgical bleeding	11	17,19%
Oversedating	6	9,38%
Post surgical haemorragic	3	4,69%
Surgical wound infection	3	4,69%
Poor anticoagulation management	2	3,13%
PTE	2	3,13%
Alergic reactions	2	3,13%
DVT	1	1,56%
Trauma by fall	1	1,56%
Failure of medical equipement	1	1,56%
Surgery accident	1	1,56%
Anesthetic depression	1	1,56%
Total	**64**	**100,00%**

Variable		p	n	RR (IC)	OR (IC)
Age					
	< 45 years	1.526	56	1,807 (0,854 - 3,823)	1,838 (0,869 - 3,888)
	>= 45 years	394	8		
Sex					
	Masculino	216	15	2,415 (1,33 - 4,385)	2,521 (1,388 - 4,577)
	Femenino	1.704	49		
Group of Procedure					
	CxPR	567	40	3,977 (2,022 - 7,821)	4,203 (2,509 - 7,042)
	PEMI	808	11		
	CxPE	545	13		

CONCLUSIONS

Institutions should perform screening similar to that developed during this study using computer tools that could detect triggers that lead to the discovery of AEs.
Complementing electronic clinical records with fields that automatically detect such triggers would facilitate their study and understanding.

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