



The Association between the Development of Pressure injury and the Operative Positioning in a Medical Center : a Cohort Study

Shu-ling, Wang¹ Fu-Lien, Chuang² Li-Hua, Lin³ Shing-Fen, Wu⁴ Yi-Chen Tang⁵ Jin-Shiung Cheng⁶

Abstract

Introduction

Pressure injury is one of the common problems in the surgical patients, regardless of medical quality or medical, social costs considerations is a topic worthy of attention.

Purpose

This study aims to investigate the occurrence rate, area, grades of the pressure injury in the surgical patients in our hospital with the four different operative positioning.

method

We designed a retrospective cohort study using the data in the period of rate of Pressure injury are the surgical patients from a medical center (total number of surgeries: 25,649).data of pressure injury area and grading are focused on the patients with the development of pressure injury during operation (Total number of surgeries: 1,126).

Results

The development rate of pressure injury is 4.4%, with the most of first grade (83.5%), followed by the second grade (15.8%), and Surgery patients have pressure injury to men (63.6%) and general anesthesia (99.1%) accounted for the majority , Four kinds of surgery supine to prone highest incidence of pressure injury (16.6%), The degree of pressure injury at a ratio of more than two highest occurrence of side (34.1%) Supine and lateral pressure injury area produced significantly greater than prone.

Table 1. Characteristics of Pressure injury patient

Variables	n	%	mean	SD
Age (yr) (N=568)	568		58.7	17
sex				
Female	207	36.4		
Male	361	63.6		
Anesthesia				
spinal	5	0.9		
general	563	99.1		
Intraoperative position				
Supine	346	60.9		
Lateral	82	14.4		
Prone	123	21.7		
Lithotomy	17	3		
Pressure Injury Stages				
stagel	474	83.5		
Stage 2	90	15.8		

Table 2 .The relationship between position and pressure injury

	Intraoperative position(N=24727)				x ²	p
	Supine	Lateral	Prone	Lithotomy		
pressure injury						
NO	18698 97.90%	1337 95.40%	522 83.40%	3599 99.70%	669.3	<0.05
YES	392 2.10%	64 4.60%	104 16.60%	11 0.30%		

Table 3. The relationship between position and pressure injury grading

	Intraoperative position(N=1126)				x ²	p
	Supine	Lateral	Prone	Lithotomy		
Pressure Injury Stages					42.93	<0.05
stagel	n 536 % 85.40%	n 135 % 65.90%	n 216 % 79.40%	n 21 % 100.00%		
Stage 2	n 92 % 14.60%	n 70 % 34.10%	n 56 % 20.60%	n 0 % 0.00%		

conclusions

The current study result could serve as the reference for the development of nursing management for the perioperative occurrences of pressure injury, also can improve the quality of patient care by providing further evidence-based research result.

Key word: Pressure Injury, Positioning

Correspondence to E-mail address: llhlin74068@gmail.com

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