PublisherInfo				
PublisherName		BioMed Central		
PublisherLocation		London		
PublisherImprintName	\Box	BioMed Central		

Who gets decubitous ulcers?

ArticleInfo		
ArticleID	:	4316
ArticleDOI	:	10.1186/ccf-2001-73404
ArticleCitationID	\Box	73404
ArticleSequenceNumber	:	27
ArticleCategory	:	Paper Report
ArticleFirstPage	:	1
ArticleLastPage	:	3
ArticleHistory	:	RegistrationDate : 2001–12–5 Received : 2001–10–23 OnlineDate : 2001–12–5
ArticleCopyright		Biomed Central Ltd2001
ArticleGrants	:	
ArticleContext	:	1305455

Aff1 Christiana Care Health Systems, Wilmington, DE, USA

Keywords

Decubitus Ulcer, Intensive Care Unit

Context

In many cases decubitus ulcers are a preventable complication of hospital admission. They can lead to significant mortality and morbidity, increased hospital length of stay, and, in some cases, may have legal ramifications. Due to fiscal reasons and increased documentation demands, nurses have less time to spend with ICU patients. In some institutions this has lead to less hands-on care resulting in less patient positioning. This study attempts to identify risk factors for decubitus ulcers in surgical patients in the ICU so that appropriate interventions may be instituted, including primary prevention of decubitus ulcers.

Significant findings

Phase 1 included 2615 patients admitted to the surgical ICU of who 101 (3.8%) developed decubitous ulcers of grade 2 or greater. Over the time period, the incidence of ulcers increased from 0.9% to 8.9%. Phase 2 included 412 patients admitted to the surgical ICU and 33 patients (8%) developed decubitous ulcers. The most common diagnosis of those patients that developed decubitous ulcers was sepsis. Independent variables in patients with an ICU stay greater than 7 days who developed a decubitous ulcer included age, days in bed, days without nutrition, and emergency admission. The admission severity of illness scores and degree of organ dysfunction did not correlate with ulcer formation. The Cornell ulcer risk score (CURS) tool did not independently predict the risk of decubitous ulcer formation but did show that if the score did not decrease by day 8, an ulcer was likely when cohorts were compared.

Comments

Decubitous ulcers are an unfortunate complication of becoming immobile. The recent publication of quality indicators by the ACOVE Project includes a template for pressure ulcers, intensifying interest in

this area. This study tackles the issue of who is at risk of decubitous ulcer formation and admits that patient positioning and positioning technology need to be further developed. Increasing ICU days, age, malnutrition, and emergency admission should make the clinician suspicious of an impending decubitious ulcer and resources should be redirected towards this problem. It is also interesting that sepsis was a common diagnosis in those patients with decubitous ulcers and it will be interesting to see how recent developments in modulating the mediators of sepsis will affect the formation of decubitous ulcers.

Methods

The study was a prospective observational study in two phases. Phase 1 consisted of collecting numerous data on all patients who developed stage 2 decubitous ulcers or greater over a period of 4 years and 5 months (1993-1998). These data included APACHE III score, SIRS score, MODS score, nutritional status, and length of stay. Phase 1 results showed that 96% of decubitous ulcers resulted in ICU stays of greater than 7 days. Phase 2 consisted of further delineating risk factors of decubitous ulcers in this 7-day cohort. The CURS was applied to the phase 2 patients.

Additional information

References

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