142 - INCIDENCE OF PRESSURE ULCERS ON HOSPITALIZED PATIENTS: LITERATURE REVIEW

LUCILA CORSINO DE PAIVA; DANIELE VIEIRA;
ENELUZIA LAVYNNYA CORSINO DE PAIVA CHINA;
RODRIGO ASSIS NEVES DANTAS;
GILSON DE VASCONCELOS TORRES.
Post-Graduate Program in Nursing / UFRN, Natal / RN, Brazil
lucila@ufrnet.br

INTRODUCTION

The pressure ulcers (PU) are considered chronic wounds, from areas submitted to a constant ischemic process and, consequently, tissue death, which presence in institutionalized patients is a parameter for assistance evaluation (MENEGHIN; LOURENÇO, 1988, WHITTINGTON et al., 2000, SCHOLS et al., 2004).

The PU are classified in levels of I to IV, according to the damage observed in tissues, considering its structures, and may involve the skin, subcutaneous tissue, muscle, cartilage and bone (BERGSTROM; ALMANN; CARLSON, 1992).

For appropriate prevention and treatment of PU, it is recommended to assess the incidence and prevalence of the problem and the accession to the internationally recommended guidelines, such as assistance protocols (CUDIGAN; AYELLO; SUSSMAN, 2001; REED; BLEGEN; GOODE, 1998).

According to Backes, Guedes and Rodrigues (1999), all patients confined to bed for long periods, with motor and sensory dysfunction, with the use of sedatives, presence of edema, muscle atrophy and pad reduction, are prone to develop PU.

To Declair (2003), in the United States, around 2.1 million patients develop PU per year, the equivalent of a hospital cost of 4 to 7 thousand US dollars annually. Allman et al. (1986) reported that, in studies conducted in Europe, Canada and South Africa, from 3% to 11% of hospitalized patients present PU.

In Brazil, studies on the PU occurrence in critics patients are few and only consider the assessment of the PU presence, while the patient is in the ICU. However, these patients, depending on the severity and risk to PU, can manifest the problem since the admission to the hospital discharge (FERNANDES; TORRES, 2006; ROGENSKI, 2002).

This study was designed to conduct a literature review on the incidence of pressure ulcers in hospitalized patients in the database of Latin American and Caribbean Literature on Health Sciences (LILACS), between 2000 and 2006.

METHODOLOGY

This is a study of literature review conducted in the database of LILACS until october/2007, being used as descriptors: “pressure ulcer” and “incidence”. It were found 09 scientific productions published in the period of 2000 to 2006 and were selected 06 items. As a criterion for inclusion, we used the researches that focused in its context, data on the incidence of pressure ulcers in hospitalized patients, as Table 1.

Table 1. Main characteristics of the selected articles to the research.

AUTHORS	STUDY FOCUS	PLACE	PUBLICATION (YEAR)
Cunha et al.	Compare the PU frequency on undernourished and not-undernourished necropsy adults	Medicine School of Triângulo Mineiro University Hospital	São Paulo Medicine School Clinical Hospital Magazine (2000)
Rodrigues Júnior and Amaral	Assessing the impact of sedation on incide nce of complications and mortality in critical patients during hospitalization in the intensive care unit	Surgical Intensive Care Unit of São Paulo Federal University	São Paulo Medical Journal (2004)
Rogenski and Santos	Study the PU incidence	USP Univer sity Hospital	Nursing Latin America Magazine (2005)
Nogueira, Caliri and Haas	Characterize the victims of marrow injury and these patients’ PU	Riberão Preto Clinical Hospital	Nursing Latin America Magazine (2006)
Costa et al.	Evaluate the epidemiological distribution, the treatment and complications of PU	Clinical Hospital of USP Medicine School	Brazilian Orthopaedic Acta (2005)
Barrientos et al.	Knowing the impact of a protocol for PU prevention in intensive care units	Clinical Hospital of Pontific Catollic University of Chile	Intensive Therapy Chilean Magazine (2005)

RESULTS

In a research developed in the Clinical Hospital of University of São Paulo (USP), the overall incidence was 39.8%. Being 42.6% of the medical clinics unit, 36.5% in the surgical clinic, 41.0% in the ICU, 26.6% in semi-intensive, 41.5% in the open unit and 38.1% in the closed unit. In statistical analysis, comparing the medical clinics, surgical unit and the ICU ($p = 0.694$) and the semi-intensive, open and closed units ($p = 0.612$), was not found significant difference (ROGENSKI; SANTOS, 2005).

According quantitative study of the Ribeirão Preto Clinical Hospital, with victims of traumatic injury of the spinal cord (TISC), the PU occurred in 42.5% of patients and the region locations were, most often, sacral (36.9%) and calcaneous (17.4%) (NOGUEIRA; CALIRI; HAAS, 2006).

In another study on patients with medullary lesion, was found a PU incidence of 55.6%, being 67.5% in grade IV ulcers, 10.4% grade III and 22.1% grade I, the most affected regions were sacral and trochanteric, both with 32.5%, and isquiatic (15.6%) (COSTA et al., 2005).

Rodrigues Junior and Amaral (2004), in research on the influence of sedation in morbi-mortality of patients in intensive care developed in the Surgical ICU of São Paulo Federal University, found an incidence of PU in sedated patients of 7.2% and without sedation of 1.0%, with statistically significant difference (p-value = 0.0323).

Cunha et al. (2000) researched the occurrence of PU in undernourished necropsy adults and noted that the pressure

ulcers showed similar frequency between undernourished (11.6%) and non-undernourished (11.5%).

In a descriptive study developed with hospitalized patients in the Clinical Hospital of Pontific Catholic University of Chile, cared through an assistance protocol, it was noted an incidence of PU to 3.7%, being 2.8% in the cardiovascular recovery unit and 0.9 % in the coronary unit (BARRIENTOS et al. , 2005).

DISCUSSION

Though Brazil has not accurate statistics, Costa (2003) reports that the PU incidence in the ICU patients ranged from 10.6% to 44.1%.

In the study of Blanes et al (2004), conducted at the São Paulo Hospital, 33.4% of PU were in clinical units, followed closely by emergency units (28.2%) and the remaining 38.4% was also distributed in the ICU (19.2%) and surgical (19.2%).

The PU incidence in ICU patients is much higher than in other hospital units, being this fact linked to several risk factors. Some studies on the incidence of PU in Brazil, such as Paranhos; Santos (1999), Petrolino (2002), Costa (2003), Cardoso (2004), Fernandes (2005) and Fernandes and Torres (2006), show that this occurrence is around 10.6% to 55.0%.

In the study of Costa (2003), on the PU incidence in ICU, it eas found an incidence of 37.7%. While Rogenski (2002), found an PU incidence in patients admitted in the University Hopsital ICU of 41.02%, while in semi-intensive unit was 29.63%, and in the whole hospital was 39.8%. Petrolino (2002), researching in a private hospital found 10.62%. Fernandes and Torres (2006) and Fernandes (2005) found incidence of 50.0% in a private hospital in Natal/RN, considered very high when compared with the studies of Costa (2003), Petrolino (2002) and Rogenski (2002) .

CONCLUSIONS

According to the scientific articles searched, we can observe that the hospital general incidence ranged from 1.0% to 55.6%, being higher in ICU (7.2% to 41.1%). The major indexes were identified in patients with marrow injury, ranging from 42.5% to 55.6%, showing that the impaired mobility is a major risk factor for PU.

Victims of marrow injury are critical patients with serious medical conditions, are once more subject to multiple organic failure, infectious processes, several invasive procedures, mechanical respiratory assistance and greater need for manipulation, favoring complications, leading to a greater time in the hospital for their need for specialized assistance, being this framework proper to the emergence of PU.

Moreover, in some articles we found different incidences among the different hospital units on the indexes shown in these sectors.

However, in only two articles examined, we have observed the incidence values in various hospitals, fact that deserves special attention to the increase of studies involving the PU indexes in the hospital as a whole and not just in the greater complexity sectors.

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Av. Deodoro da Fonseca, 736, Cidade Alta, Natal-RN, Brazil
Postcod: 59025-600, Phone (84) 32216395 . E-mail: lucila@ufrnet.br

INCIDENCE OF PRESSURE ULCERS ON HOSPITALIZED PATIENTS: LITERATURE REVIEW

ABSTRACT

The pressure ulcers (PU) are considered chronic wounds, from areas submitted to a constant ischemic process and, consequently, tissue death, which presence in institutionalized patients is a parameter for assistance evaluation. In the United States, around 2.1 million patients develop PU per year. in Europe, Canada and South Africa, from 3% to 11% of hospitalized patients present PU. In Brazil, studies on the PU occurrence in critical patients are few and only consider the assessment of the PU presence, while the patient is in the ICU. This study was designed to conduct a literature review on the incidence of pressure ulcers in hospitalized patients in the LILACS database, between 2000 and 2006. So, a research was developed in scientific articles papers until until october/2007, being used as descriptors: “pressure ulcer” and “incidence”. According to the scientific articles searched, we can observe that the general incidence ranged from 1.0% to 55.6%, being the major indexes identified in patients with marrow injury. As for the sedated and not sedated patients, an article researched showed statistically significant difference (p-value = 0.0323). In the case of patients assisted by an assistance protocol, there was a low incidence (3.7%), justifying the fundamental importance of systematic protocols implementation for evaluation the risk of PU development. According to the scientific articles searched, we can observe that the hospital general incidence ranged from 1.0% to 55.6%, being higher in ICU (7.2% to 41.1%). The major indexes were identified in patients with marrow injury, ranging from 42.5% to 55.6%, showing that the impaired mobility is a major risk factor for PU.

KEYWORDS: Pressure Ulcer, Incidence, Hospital.

IMPACT DE L'ULCERATION DE LA PRESSION SUR LES PATIENTS HOSPITALIZADOS: EXAMEN DE LA LITTERATURE

RÉSUMÉ

Les ulcères de pression (UP) sont considérés plaies chroniques, des zones soumises à des processus ischémique constante et, par conséquent, le tissu mort, chez des patients dont la présence y est institutionnalisé dans le paramètre d'évaluation de l'aide. Aux États-Unis, environ 2,1 millions de patients par an UP. En Europe, le Canada et l'Afrique du Sud, de 3% à 11% des patients hospitalisés présentant UP. Au Brésil, des études de la survenue d'UP chez les patients critiques sont rares et considérées seulement l'évaluation de la présence de l'UP alors que le patient est dans l'ICU. Cette étude avait pour but de réaliser un examen de la documentation sur l'incidence de la pression des ulcères chez les patients hospitalisés dans la base de données LILACS entre 2000 et 2006, des opérations de recherche menées dans les articles scientifiques jusqu'à October/2007, soient utilisés comme descripteurs: l'ulcère Pression et de l'incidence. Selon les documents recherchés, on constate aussi que l'incidence globale variait de 1,0% à 55,6%. Étant les principaux indices identifiés dans le cas des patients souffrant de dommages moelle, allant de 42,5% à 55,6%. Quant à la sédation des patients, et non sédatifs, d'un article fouillé présenté de différence statistiquement significative (p = 0,0323). Dans le cas des patients desservis par le protocole de l'assistance il ya eu une faible incidence (3,7%), ce qui justifie l'importance fondamentale de la mise en œuvre de protocoles d'évaluation systématique du risque de développement de PU. Selon les documents recherchés, nous pouvons observer que l'hôpital général de l'incidence variait de 1,0% à 55,6%, et le plus élevé dans ICU (7,2% à 41,1%). Les principaux indices ont été identifiés chez les patients atteints de moelle dommages, allant de 42,5% à 55,6%, montrant que les personnes à mobilité réduite est un facteur de risque majeur pour PU.

MOTS CLES: ulcères de pression, de l'impact, Hospital.

INCIDENCIA DE ÚLCERA DE PRESIÓN EN PACIENTES HOSPITALIZADOS: REVISIÓN DE LITERATURA

RESUMEN

Las úlceras de presión (UP) son consideradas heridas crónicas, oriundas de áreas sometidas al proceso isquémico constante y, por lo tanto, la muerte del tejido, cuya presencia en los pacientes institucionalizados si constituye en parámetro para la evaluación de la asistencia. En Estados Unidos, alrededor de 2,1 millones de pacientes desarrollan UP por año. En Europa, Canadá y África del Sur, entre 3% y 11% de los pacientes hospitalizados presentan UP. En Brasil, los estudios de la ocurrencia de UP en pacientes críticos son raros y habían considerado solamente la evaluación de la presencia de UP mientras el paciente está en UTI. Este estudio objetivó una revisión de literatura de la incidencia de la úlcera de presión en los pacientes hospitalizados en la base de datos LILACS entre 2000 y 2006, para esto, fue realizada una investigación en artículos científicos hasta octubre/2007, siendo utilizado como descriptores: úlcera de presión y incidencia. Según los artículos científicos buscados, podemos observar que la incidencia general varió de 1,0% a 55,6%. Siendo los índices más grandes identificados cuando se trata de pacientes con lesión medular, variando de 42,5% a 55,6%. En lo que dice respecto a los pacientes sedados y a los no sedados, un artículo buscado presentó diferencia estadística significativa (p-valor = 0,0323). En el caso de los pacientes atendidos atraves del protocolo de asistencia se verificó baja incidencia (3,7%), justificando la importancia básica de poner en práctica los protocolos sistematizados para la evaluación del riesgo de desarrollo de UP. Según los artículos científicos buscados, podemos observar que la incidencia general del hospital varió de 1,0% a 55,6%, siendo más grande en UTI (7,2% 41,1%). Los más grandes índices identificados habían estado entre los pacientes con lesión medular, variando de 42,5% a 55,6%, divulgando que la movilidad dañada es un importante factor del riesgo para UP. PALABRAS-CLAVE: Úlcera de presión, incidencia, hospital.

INCIDÊNCIA DE ÚLCERA DE PRESSÃO EM PACIENTES HOSPITALIZADOS: REVISÃO DE LITERATURA

RESUMO

As úlceras de pressão (UP) são consideradas feridas crônicas, oriundas de áreas submetidas ao constante processo isquêmico e, conseqüentemente, morte tecidual, cuja presença nos pacientes institucionalizados se constitui em parâmetro para a avaliação da assistência. Nos Estados Unidos, em torno de 2,1 milhões de pacientes desenvolvem UP por ano. Na Europa, Canadá e África do Sul, de 3% a 11% dos pacientes hospitalizados apresentam UP. No Brasil, estudos de ocorrência de UP em pacientes críticos são raros e consideraram somente a avaliação da presença da UP enquanto o paciente está na UTI. Este estudo teve por objetivo realizar uma revisão de literatura sobre incidência de úlcera de pressão em pacientes hospitalizados na base de dados do LILACS entre 2000 e 2006, para isso foi realizada uma pesquisa em artigos científicos até outubro/2007, sendo utilizados como descritores: úlcera de pressão e incidência. Segundo os artigos científicos pesquisados, podemos observar que a incidência geral variou de 1,0% a 55,6%. Sendo os maiores índices identificados nos casos de pacientes com lesão medular, variando de 42,5% a 55,6%. No que diz respeito a pacientes sedados e não sedados, um artigo pesquisado apresentou diferença estatística significativa (p-valor = 0,0323). No caso de pacientes atendidos através de protocolo de assistência verificou-se uma baixa incidência (3,7%), justificando a fundamental importância de implementação de protocolos sistematizados para avaliação do risco de desenvolvimento de UP. Segundo os artigos científicos pesquisados, podemos observar que a incidência geral hospitalar variou de 1,0% a 55,6%, sendo maior em UTI (7,2% a 41,1%). Os maiores índices identificados foram nos pacientes com lesão medular, variando de 42,5% a 55,6%, revelando que a mobilidade prejudicada é um importante fator de risco para UP.

PALAVRAS-CHAVES: Úlcera de Pressão, Incidência, Hospital.