

97 - INTRINSIC AND EXTRINSIC RISK FACTORS PRESENT ON THE OCCURRENCE OF PRESSURE ULCER IN HOSPITALIZED PATIENTS

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INTRODUCTION

Pressure Ulcers (PUs) are defined by the National Pressure Ulcer Advisory Panel (NPUAP, 2004) as localized areas of necrotic tissue that tend to develop when a tissue is compressed between a bone prominence and an external surface for a long time. Gradually, installs an ischemic process that results in a skin lesion observed in four stages of development, dependent on the maintenance of the factors predisposing to its appearance (BLANES et al., 2004).

The PUs are usually caused by factors predisposed to the development of lesions, displayed here in two groups: intrinsic factors inherent in the clinical presentation of the patient, such as age, tissue perfusion, nutritional status, and associated diseases; and extrinsic factors, regarding the exposure of the patient, such as friction, shear, humidity and pressure, being this the main causal factor of the development of the lesion (MORO et al., 2007).

According to Lindgren et al. (2005), the development of a pressure ulcer is a complex phenomenon that involves many factors related to the patient and the external environment, and the immobility is the risk factor of major importance in hospitalized patients. Associated with this, are the scarcity of resources, materials, professional and conduct or omission of the team.

These lesions are a serious problem for both the patient as for the family and institution and, therefore, can cause pain, discomfort and suffering, in addition to increased morbidity and mortality, raising the costs of treatment (CARDOSO; CALIRI; HASSI, 2004).

This way, it is essential that health professionals act with the aim of preventing the emergence of wounds. With a good knowledge of the etiology of the disease, its causes, risk factors, the reality in the institution and with technical skills, it is assumed that the management of patients with ulcer is optimized, influencing the life quality of these patients (MORO et al., 2007).

Thus, this study aimed to identify the intrinsic and extrinsic risk factors in the occurrence of pressure ulcer in patients hospitalized in a public hospital and in another private one.

METHODOLOGY

It is a descriptive and integrative study, with a longitudinal design and quantitative approach, with retrospective data from two dissertations defended in the Postgraduate Program of Nursing with patients hospitalized in the ICU, medical clinics, surgical and neurology wards of a public hospital and two Intensive Care Units (ICU) from a private hospital, both located in Natal / RN.

The study population consisted of 52 patients bedridden, of both sexes who were interned in the above sectors of these, 12 patients were from the public hospital and 40 from the private and who consented to participate or had their participation allowed by the legal representative with the signing of the Free and Informed Consent Term (FICT). The research was assessed by the Commission on Ethics in Research/UFRN, obtaining assent (Opinions No 135/07 and No. 100/04) respecting the normalization of Resolution 196/96 (BRASIL, 1996).

It was used as a data source the records of patients, a structured formulary on risk assessment for PUs.

Data were collected during the period from December 2007 to February 2008 (in the public hospital) and April and May 2005 (in the private hospital), transferred to the spreadsheet Microsoft Excel 2000 XP, and exported and analyzed in the Statistical Package for Social Science (SPSS) version 15.0 Windows.

RESULTS

Of the total of 52 bedridden patients, 27 developed PUs (51.9%), of which 77.8% were elderly, 59.3% male and 40.7% female.

As for Intrinsic factors (Table 1), from the total of 27 patients with PUs, 74, 1% had amended superficial sensitivity, the vast majority (96.3%) had change in the texture of the skin, the edema was present in 70.4 % Of patients with ulcer, showing statistical significance ($p = 0002$), whereas 25.9% of swelled patients did not develop PUs, the largest portion of those surveyed in PUs (81.5%) had a change in humidity of the skin.

Among the total of 23 patients who had changes in body temperature, 65.2% developed the injury.

Regarding total impaired physical mobility, of the 27 respondents who developed PUs, 96.3% had such incapacity.

Table 1. Distribution of intrinsic risk factors identified in patients according occurrence or not of PUs. Natal, 2007.

INTRINSIC RISK FACTOR (IF)	PATIENTS				TOTAL	
	With PUs		Without PUs		PATIENTS	
	N.	%	N.	%	N.	%
Amended superficial sensitivity	20	38,5	20	38,5	40	76,9
Change of Skin Turgor	18	34,6	15	28,8	33	63,5
Change of Skin Texture	26	50,0	22	42,3	48	92,3
Bone Prominence Evidenced	16	30,8	13	25,0	29	55,8
Edema	19	36,5	7	13,5	26	50,0
Change of Skin Humidity	22	42,3	18	34,6	40	76,9
Change of Body Temperature	15	28,8	8	15,4	23	44,2
Total Impaired Physical Mobility	26	50,0	24	46,2	50	96,2

Regarding the extrinsic risk factors, of 51.9% of patients with PUs, 81.5% had pressure force in the body ($p = 0024$), the shear and friction force, concerning the skin's adherence to the individual skin to the surface of the mattress was present in 92.6% of those surveyed, showing statistical significance ($p = 0025$). Among the 5 patients who had total restriction of movement, 100% developed PUs ($p = 0024$). Considering the total of 51.9% of those surveyed who developed PUs, 100% were inadequately mobilized ($p = 0031$) and 92.6% of respondents had inadequate bed linen. **DISCUSSION**

The PUs represent a major complication that affects hospitalized critical patients. Patients are those with critical medical conditions or serious need for more frequent and stringent controls, along with therapies of greater complexity of character invasive or not (BLANES et al., 2004).

The results of our study stress a population of patients with PUs predominantly elderly (77.8%), as a consequence, with increased susceptibility to develop lesions of the skin due to changes caused by aging characteristics.

Some studies, such as Cardoso's (2004) and Costa and Lopes (2003), show that the development of PUs is a product resulting from the influence of various risk factors such as tissue perfusion, gender, age, mobility, level of consciousness, the excessive humidity, nutrition, hydration, the friction, the shear and some chronic diseases and cardiovascular disorders, which are more common and important in the genesis of PUs.

Results similar to ours are described by Fernandes and Torres (2006) and Anthony, Reynolds and Russell (2004) which identified factors such as friction and shear, decreased mobility, decreased sensory perception, increased humidity, as being at risk in patients with PUs.

The edema, according to Smeltzer and Bare (2005), hampers and hinders the supply of nutrients to the cell, resulting, however, in a poor nutritional support to the subcutaneous tissue as a major risk factor for occurrence of PUs.

One important factor is the skin's exposure to excessive humidity, making it more vulnerable to maceration and weakening of its upper layers (COONEY JUNIOR, 1997). Agreeing with the results of current research, where the 27 patients with PUs, the majority (81.5%) showed changes in humidity of the skin.

The excessive pressure is a risk factor for occurrence of PUs, highlighted in studies by Cardoso (2004), Costa and Lopes (2003) and Paiva et al. (2008) that emphasize the role of shear and friction force, observed by the displacement of skin tissue and can, thus, distort and harm tissues and, consequentially, harm muscles, blood vessels and contribute to tissue necrosis. These authors emphasize the importance of lifting the headboard of bed at an angle of 30 degrees and repositioning the patient every two hours as a strategy for preventing PUs.

CONCLUSION

Of the surveyed, about half developed PUs, of these, most were elderly (77.8%) and 59.3% were male. Almost all had change in the texture of the skin (96.3%), edema (70.4%) and change in the humidity of the skin (81.5%). As for extrinsic factors, 92.6% had the force of friction and shear and 81.5% had pressure force in the body.

The multicausality identified on the emergence of PUs references us to the importance of searching for information about the influence of the multiplicity of factors and conditions that increase the risk of PUs, based on holistic design to fully assist with quality, with a view of contributing to the prevention and reduction of its complications, resulting in improved life quality and reducing the costs of treatment.

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INTRINSIC AND EXTRINSIC RISK FACTORS PRESENT ON THE OCCURRENCE OF PRESSURE ULCER IN HOSPITALIZED PATIENTS

ABSTRACT

Pressure Ulcers (PUs) are defined by NPUAP as localized areas of necrotic tissue that tend to develop when a tissue is compressed between a bone prominence and an external surface for a long time. The PUs is configured as are a serious problem for both the patient as for the family and institution and, therefore, can cause pain, discomfort and suffering, in addition to increased morbidity and mortality, raising the costs of treatment. This study aimed to identify the intrinsic and extrinsic risk factors intrinsic and extrinsic in the occurrence of PUs in hospitalized patients. It is a descriptive study, with a longitudinal design and quantitative approach, with hospitalized patients in two hospitals, one public and one private, both located in Natal/RN. The population was made up of 52 patients bedridden. The research was assessed by the Commission on Ethics in Research/UFRN. Of the total of 52 bedridden patients, 51.9% developed PUs; of those, 77.8% were elderly, 59.3% male, 74.1% had amended

superficial sensitivity, 96.3% had change in the texture of the skin, 70.4% edema, 81.5% showed changes in skin humidity, 65.2% had changes in body temperature and 96.3% had total impaired physical mobility, 81.5% had the pressure force in the body, 92.6% had force of friction and shear. Among the 5 with total restriction of movement, 100% developed PUs, 100% were inadequately mobilized and 92.6% had inadequate bed linen conditions. The multicausality identified on the emergence of PUs references us to the importance of searching for information about the influence of the multiplicity of factors and conditions that increase the risk of PUs, with a view of contributing to the prevention and reduction of its complications, resulting in improved life quality.

Keywords: Pressure Ulcers, Risk Factors, Hospital Assistance.

FACTEURS DE RISQUE INTRINSÈQUES ET EXTRINSÈQUES COMPOSITION D'APPARITION DE PLAIES DE PRESSION DANS LES HÔPITAUX

RESUMÉ

Par des plaies de pression (UP) sont définis par NPUAP comme des zones de tissus nécrotiques développer que si un tissu est comprimé entre un os d'importance et d'une surface externe pendant une longue période. L'ASI est configuré comme un problème à la fois pour le patient et pour la famille et de l'institution, mai causer de la douleur, l'inconfort et la souffrance, en plus d'une augmentation de la morbidité et la mortalité, une augmentation des coûts (Cardoso, 2004). Cette étude visait à identifier les facteurs de risque intrinsèque et extrinsèque dans l'accident de l'UP les patients hospitalisés. Il s'agit d'une étude descriptive, avec un design longitudinal et approche quantitative, avec des patients hospitalisés dans deux hôpitaux, l'un public et un privé, tous deux situés dans le Natal / RN. La population était composée de 52 patients alités. La recherche a été évaluée par la Commission sur l'éthique dans la recherche / UFRN. Sur le montant total de 52 patients alités, 51,9%, en hausse développé, et les personnes âgées 77,8%, 59,3% de sexe masculin, 74,1% avaient changé la sensibilité superficielle, 96,3% le changement dans la texture de la peau, 70,4%, de l'enflure, 81,5% ont montré des changements dans la peau d'humidité, 65,2% étaient des changements de la température corporelle et 96,3% du total des facultés de mobilité physique, 81,5% ont force de pression dans le corps, 92,6% La force de cisaillement et de friction. Parmi les 5 avec un total de restriction de mouvement, 100% développé UP, 100% ne sont pas suffisamment mobilisés et 92,6% avaient des conditions de la litière insuffisante. Le multicausality l'émergence de l'UP fait référence à l'importance de la recherche d'informations sur l'influence de la multiplicité des facteurs et des conditions qui augmentent le risque UP, en vue de contribuer à la prévention et la réduction des complications, ce qui entraîne une amélioration de la qualité de vie.

Mots clés: ulcère de pression, les facteurs de risque, Hôpital de secours.

FACTORES DE RIESGO INTRÍNECAS Y EXTRÍNECAS COMPOSICIÓN DE OCURRENCIA DE LAS LLAGAS POR PRESIÓN EN PACIENTES HOSPITALIZADOS

RESUMEN

En las úlceras por presión (UP) se definen por NPUAP como zonas de tejido necrótico que se desarrollan cuando un tejido es comprimido entre una prominencia ósea y una superficie externa por un largo tiempo. La UPS se configura como un problema tanto para el paciente y para la familia y la institución, puede causar dolor, incomodidad y sufrimiento, además de un aumento de la morbilidad y la mortalidad, el aumento de los costes (Cardoso, 2004). Este estudio tuvo como objetivo identificar los factores de riesgo intrínsecos y extrínsecos en la aparición de la UP en pacientes hospitalizados. Es un estudio descriptivo, longitudinal con un diseño y enfoque cuantitativo, con los pacientes hospitalizados en dos hospitales, uno público y uno privado, ambos con sede en Natal / RN. La población se componía de 52 pacientes en cama. La investigación fue evaluado por la Comisión de Ética de la Investigación / UFRN. Del total de 52 pacientes en cama, 51,9%, HASTA desarrollados, los ancianos y el 77,8%, 59,3% hombres, 74,1% había cambiado la sensibilidad superficial, el 96,3% de variación en la textura de la piel, 70,4%, hinchazón, el 81,5% mostró cambios en la piel la humedad, el 65,2% fueron cambios en la temperatura corporal y el 96,3% total afectada la movilidad física, el 81,5% tenían la fuerza de la presión en el cuerpo, 92,6% De rotura y la fuerza de fricción. Entre los 5 con total restricción de la circulación, 100% desarrollado UP, 100% fueron insuficientemente movilizados y el 92,6% había condiciones de la insuficiencia de ropa de cama. La multicausalidad de la aparición de la UP se refiere a la importancia de la búsqueda de información acerca de la influencia de la multiplicidad de factores y condiciones que aumentan el riesgo de UP, con el fin de contribuir a la prevención y la reducción de las complicaciones, resultando en una mejora de la calidad de vida.

Palabras clave: úlcera de presión, factores de riesgo, Hospital del Socorro.

FATORES DE RISCOS INTRINSECOS E EXTRINSECOS PRESENTES NA OCORRÊNCIA DE ÚLCERA DE PRESSÃO EM PACIENTES HOSPITALIZADOS

RESUMO

Úlceras por pressão (UP) são definidas pelo NPUAP como áreas de tecido necrótico que se desenvolvem quando um tecido é comprimido entre uma proeminência óssea e uma superfície externa por tempo prolongado. As UPs se configuram como problema tanto para o paciente, quanto para família e instituição, podendo causar dor, desconforto e sofrimento, além do aumento da morbi-mortalidade, elevando os custos (CARDOSO, 2004). Este trabalho objetivou identificar os fatores de riscos intrínsecos e extrínsecos presentes na ocorrência de UP em pacientes hospitalizados. Trata-se de um estudo descritivo, com delineamento longitudinal e abordagem quantitativa, com pacientes internados em duas instituições hospitalares, sendo uma pública e outra privada e ambas localizadas em Natal/RN. A população foi constituída por 52 pacientes acamados, 51,9%, desenvolveram UP, sendo 77,8% idosos, 59,3% do sexo masculino; 74,1% apresentavam sensibilidade superficial alterada, 96,3% alteração na textura da pele, 70,4%, edema; 81,5% apresentavam alteração na umidade da pele, 65,2% tinham alteração da temperatura corporal e 96,3% mobilidade física prejudicada total; 81,5% apresentavam força de pressão no corpo, 92,6% força de cisalhamento e fricção. Entre os 5 com restrição total do movimento, 100% desenvolveram UP; 100% eram mobilizados inadequadamente e 92,6% apresentavam condições de roupa de cama inadequada. A multicausalidade no surgimento de UP nos remete a importância da busca de informações sobre a influência da multiplicidade dos fatores e condições que aumentam o risco UP, na perspectiva de contribuir com a prevenção e diminuição das complicações, com conseqüente melhoria da qualidade de vida.

Palavras chave: Úlcera de pressão, Fatores de risco, Assistência Hospitalar.