75 - PRESSURE ULCERS IN ELDERLY IN A UNIVERSITY HOSPITAL: PREDISPOSING CONDITIONS, INTRINSIC AND EXTRINSIC RISK FACTORS

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INTRODUCTION

The pressure ulcers (PUs) are considered chronic wounds caused by cell death, which develop when a soft tissue is compressed between a bone prominence and a hard surface for a long period of time (NPUAP, 2004).

Studies of Fernandes and Torres (2006), Fernandes (2005) and Blanes et al. (2004) show the importance of identification of intrinsic and extrinsic factors in the occurrence of such injury and highlight the combination of these factors with the occurrence of PUs. These predisposing factors and conditions are composed of variables, which enhance the understanding of the multicausality in the emergence of PUs and enable better understanding in the clinical evaluation of the patient (GIARETTA; POSSO, 2005, ANTHONY et al., 2004, BREM et al., 2004).

In the process of aging, the skin of the elderly is going through changes making it more fragile, the intrinsic changes comes of the advancing age, as the extrinsic as pressure, friction/shear occur in hospitalization (NASCIMENTO, 2001).

This study aims to identify the predisposing conditions, intrinsic and extrinsic risk factors in the occurrence of PUs in elderly patients hospitalized in a University Hospital of Natal/RN.

METHODOLOGY

Descriptive study, with a longitudinal design and quantitative approach, with patients hospitalized in the Intensive Care Unit (ICU), clinical wards, surgery wards and neurology wards at the University Hospital Onofre Lopes (HUOL) in Natal/RN, belonging to the Health Complex of Federal University of Rio Grande do Norte (UFRN), characterized as a medium-sized institution of higher education, tertiary referral to the state and integrated with Unified Health System (SUS).

The target population consisted of 30 patients bedridden, of both sexes, hospitalized for at least 7 days in the sectors selected for the study, which did not have PUs at the time of admission in the study and consented to participate or had their participation authorized by the legal representative with the signing of the Term of Free and Informed Consent (FICT). The research project was approved (Opinion No. 135/07) by the Commission on Ethics in Research of HUOL/UFRN.

The data collection was performed from 13/12/2007 to 20/01/2008, from records of patients and structured formulary of risk assessment for PUs, adapted from Fernandes (2005). The formulary was composed by demographic information of the patient; predisposing conditions, intrinsic factors and extrinsic factors; diagnosis of PUs. The data collected were transferred to Microsoft Excel 2007 software and analyzed in the Statistical Package for Social Science (SPSS) version 15.0 Windows.

RESULTS AND DISCUSSION

Of the total 30 patients, 46.7% developed PUs, being 50.0% elderly, 57.1% of them females, 50% were hospitalized from 7 to 18 days in ICU and wards (57.1%). The main regions of PUs were sacral (85.7%) and trochanteric (28.6%).

Table

1. Predisposing conditions in patients who developed PUs in hospitalized patients in a university hospital. Natal / RN

PREDISPONENT CONDITIONS	AGE GROUP UP TO 59 YEARS		AGE GROUP AFTER 60 YEARS		TOTAL	
	N	%	N	%	N	%
Use of Analgesics	5	35,7	9	64,3	14	100,0
Hematologic	5	35,7	8	57,1	13	92,9
Cardio-Respiratory	5	35,7	6	42,9	11	78,6
Metabolic	3	21,4	6	42,9	9	64,3
Psychogenic	1	7,1	8	57,1	9	64,3
Use of Anxiolytics	2	14,3	6	42,9	8	57,1
Nutritional	1	7,1	6	42,9	7	50,0
Neurological	1	7,1	4	28,6	5	35,7
Circulatory	1	7,1	1	7,1	2	14,3
Chronic-degenerative	0	0,0	2	14,3	2	14,3

Of the predisposing conditions (Table 1), we observed that the majority was present in the elderly: use of analgesics (64.3%); hematological and psychogenic (57.1%), cardio-respiratory, metabolic, nutritional and use of anxiolytics (42.9%). Similar data were found in studies by Paiva et al. (2008), Fernandes (2005) and Nogueira; Caliri and Santos (2002), which identified the hematological conditions, circulatory, nutritional and use of analgesics and anxiolytics, as more frequent in patients who developed PUs.

Table

2. Intrinsic factors in patients who developed PUs while hospitalized in a university hospital. Natal / RN

INTRINSIC FACTORS	AGE GROUP UP TO 59 YEARS		AGE GROUP AFTER 60 YEARS		TOTAL	
	N	%	N	%	N	%
Partial physical mobility impaired	5	35,7	8	57,1	13	92,9
Change in skin texture (smooth, rough, thin, delicate)	3	21,4	9	64,3	12	85,7
Change of body temperature (hypo / hyperthermia)	3	21,4	8	57,1	11	78,6
Edema (mild, moderate, intense, anasarca)	4	28,6	7	50,0	11	78,6
Changes in turgor and elasticity of the skin	1	7,1	8	57,1	9	64,3
Evidenced bone prominence (iliac crests, scapula, sacrum, coccyx, calcaneus)	2	14,3	7	50,0	9	64,3
Change in moisture of the skin (dry, sweat)	2	14,3	7	50,0	9	64,3
Total impaired physical mobility	2	14,3	3	21,4	5	35,7
Changes in superficial sensitivity (tactile, thermal, painful)	0	0,0	2	14,3	2	14,3

Most of the intrinsic factors (Table 2) were seen in the elderly population: changes in texture (64.3%), temperature, elasticity and turgor of skin and partial physical mobility impaired (57.1%). Paiva et al. (2008), Fernandes (2005), Blanes et al. (2004), Nogueira; Caliri and Santos (2002) also starred in their studies the occurrence of changes in texture, and elasticity of skin turgor, mobility and activity in the patient, presence of edema and bone prominence.

Table 3. Extrinsic factors in patients who developed PUs while hospitalized in a university hospital. Natal / RN

EXTRINSIC FACTORS	AGE GROUP UP TO 59 YEARS		AGE GROUP AFTER 60 YEARS		TOTAL	
	N	%	N	%	N	%
Body pressure force (areas with redness, marks)	5	35,7	9	64,3	14	100,0
Elevation of the headboard of the bed equal to or greater than 30 degrees	5	35,7	9	64,3	14	100,0
Inadequate bed linen conditions (folds, urine, feces, sweat)	5	35,7	9	64,3	14	100,0
Type of mattress (foam, egg box, air)	5	35,7	8	57,1	13	92,9
Mobility inadequate (same decubitus for more than 2h)	4	28,6	9	64,3	13	92,9
Partial restriction of movement	5	35,7	6	42,9	11	78,6
Shear/friction force	3	21,4	6	42,9	9	64,3
Inadequate hygiene (blood urine, feces, sweat)	3	21,4	5	35,7	8	57,1
Total restriction of movement	1	7,1	3	21,4	4	28,5

As for extrinsic factors (Table 3) deserved prominence in the elderly: body pressure (64.3%), elevation of headboard = 30 degrees, bed linen conditions and inadequate mobility (same decubitus > 2h); inappropriate type of mattress (57.1%); partial restriction of movement and shear/friction force (42.9%). Fernandes (2005), Blanes et al. (2004), Nogueira; Caliri and Santos (2002) quote as intrinsic factors: the inadequate type of mattress, lack of accurate change of decubitus (2/2h), body pressure (areas with redness and marks) and shear/friction forces, restrictions of movement and poor hygiene.

CONCLUSION

The predisposing conditions, intrinsic and extrinsic factors were more present in the elderly population when compared with age up to 59 years. Among the groups that developed PUs, the elderly population reveals more risk factors by the aging process itself, showing a decline in organic systems associated with chronic-degenerative diseases by changing the lifestyle of the elderly, sensory perception, activity, mobility, nutrition and characteristics of the skin, one of the organs that most suffer from changes, making the elderly more vulnerable to development of PUs.

Accordingly, the weaknesses and frailties of an aging population require a more effective assistance focused on prevention of these injuries and their complications, responsible for an increase in morbidity and mortality and costs during hospitalization.

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PRESSURE ULCER IN THE ELDERLY IN A UNIVERSITY HOSPITAL: PREDISPOSING CONDITIONS, RISK FACTORS INTRINSIC AND EXTRINSIC.

The pressure ulcers (PU) are areas of cell death, which develop when a soft tissue is compressed between a bone prominence and a hard surface for a long time. The predisposing conditions (PC), intrinsic factors (FI) and extrinsic (EF) influence on the occurrence of UP, because interfere with the normal physiology of the body. This paper aims to identify the predisposing conditions, risk factors intrinsic and extrinsic in the occurrence of PU in elderly patients hospitalized in a University Hospital of Natal / RN. Study descriptive and quantitative approach, with 30 patients in the clinical areas of medical, surgical clinic, neurology and ICU. After approval by the Commission on Ethics in Research of HUOL / UFRN (Opinion No. 135/07), was conducted to collect data from 13/12/2007 to 20/01/2008, using medical records and structured form. The data were analyzed with SPSS 15.0. Of the patients, 46.7% developed UP, and 50.0% elderly, 57.1% female. The main regions of UP were sacral (85.7%) and trochanteric (28.6%). The PC, IF and EF were more present in the elderly, and the main predisposing conditions: use of analgesics (64.3%) and hematological and psychogenic (57.1%); intrinsic factors: changes in texture (64.3%) , Temperature, and elasticity of skin turgor and physical mobility impaired partial (57.1%); extrinsic factors: pressure from the body, lifting the head =

30 degrees, conditions of bed linen and mobility inadequate (even decubitus> 2h) (64 , 3%); type of mattress inadequate (57.1%). The weaknesses of the elderly help to change their lifestyle, the compromises sensory perception, activity, mobility, nutrition and characteristics of the skin, requiring assistance more effective and focused on prevention of UP and its complications, responsible for an increase in morbidity and mortality and costs in hospitalization.

Key words: pressure ulcer, aged, risk factors.

LES ULCERES DE PRESSION DANS DES PERSONNES AGEES DANS UN HOPITAL UNIVERSITAIRE: CONDITIONS DE PREDISPOSITION, LES FACTEURS DE RISQUE INTRINSEQUES ET EXTRINSEQUES

Les ulcères de pression (UP) sont des zones de la mort des cellules qui se développent lorsque le tissu mou est comprimé entre une proéminence des os et une surface dure pendant une longue période. Les conditions de prédisposition (CP), facteurs intrinsèques (FI) et extrinsèques (AF) influence sur l'apparition de l'UP, en raison d'interférer avec la physiologie normale de l'organisme. Ce document vise à identifier les conditions de prédisposition, les facteurs de risque intrinsèque et extrinsèque dans l'accident de l'UP chez les patients âgés hospitalisés dans un hôpital de l'Université de Natal / RN. Étude descriptive et approche quantitative, avec 30 patients de la clinique domaines de l'assistance médicale, clinique chirurgicale, la neurologie et de soins intensifs. Après l'approbation par la Commission sur l'éthique dans la recherche de HUOL / UFRN (avis n ° 135/07), a été menée pour recueillir des données à partir de 13/12/2007 au 20/01/2008, en utilisant les dossiers médicaux et structurée. Les données ont été analysées avec SPSS 15.0. Parmi les patients, 46,7% ont développé UP, et 50,0% des personnes âgées, 57,1% de femmes. Les principales régions de l'UP ont été sacrées (85,7%) et trochantérienne (28,6%). Le CP, SI et SF ont été plus présents chez les personnes âgées, et les principales conditions de prédisposition: utilisez des analgésiques (64,3%) et hématologiques et psychogène (57,1%); facteurs intrinsèques: les changements de texture (64,3%) , De températures et d'élasticité de la peau turgescence et de physique à mobilité réduite partiel (57,1%), des facteurs extrinsèques: la pression exercée par le corps, la tête levée = 30 degrés, les conditions de linge de lit et de la mobilité insuffisante (même décubitus> 2h) (64 , 3%), le type de matelas insuffisante (57,1%). Les faiblesses des personnes âgées aider à changer leur mode de vie, les compromis la perception sensorielle, l'activité, la mobilité, la nutrition et les caractéristiques de la peau, nécessitant une assistance plus efficace et plus ciblée sur la prévention de l'UP et de ses complications, responsables d'une augmentation de la morbidité et la mortalité et coûts hospitalization.

Mots clés: ulcère de pression, de personnes âgées, les facteurs de risque.

LAS ÚLCERAS DE PRESIÓN EN ANCIANOS EN UN HOSPITAL UNIVERSITARIO: LAS CONDICIONES PREDISPONENTES, LOS FACTORES DE RIESGO INTRÍNSECOS Y EXTRÍNSECOS

Las úlceras de presión (UP) son esferas de la muerte de la célula, que se desarrollan cuando un tejido blando es comprimido entre una prominencia ósea y una superficie dura durante mucho tiempo. Las condiciones predisponentes (CP), factores intrínsecos (FI) y extrínsecos (FI) influencia en la incidencia de UP, porque interfiere con la fisiología normal del cuerpo. El presente documento tiene por objeto determinar las condiciones predisponentes, los factores de riesgo intrínsecos y extrínsecos en la aparición de la UP en pacientes ancianos hospitalizados en un Hospital de la Universidad de Natal / RN. Estudio descriptivo y cuantitativo, con 30 pacientes en la clínica de las áreas médica, clínica quirúrgica, neurología y la Unión de Tribunales Islámicos. Después de la aprobación por la Comisión de Ética en la Investigación de HUOL / UFRN (Dictamen N º 135/07), se llevó a cabo para recopilar datos de 13/12/2007 a 20/01/2008, utilizando los registros médicos y de forma estructurada. Los datos fueron analizados con SPSS 15.0. De los pacientes, el 46,7% desarrolló UP, 50,0% y ancianos, 57,1% mujeres. Las principales regiones de la UP fueron sacra (85,7%) y trocantérea (28,6%). La CP, IF y SF son más presentes en las personas de edad avanzada, y las principales condiciones predisponentes: uso de analgésicos (64,3%) y hematológicos y psicógena (57,1%); factores intrínsecos: los cambios en la textura (64,3%) , La temperatura, la elasticidad y turgencia de la piel y problemas de movilidad física parcial (57,1%); factores extrínsecos: la presión del cuerpo, levantar la cabeza = 30 grados, las condiciones de ropa de cama y la movilidad inadecuada (incluso decúbito> 2h) (64 , 3%), el tipo de colchón insuficiente (57,1%). Las debilidades de las personas de edad avanzada ayudará a cambiar su estilo de vida, los compromisos percepción sensorial, la actividad, la movilidad, la nutrición y las características de la piel, que necesitan asistencia más eficaz y se centró en la prevención de la UP y sus complicaciones, responsables de un aumento de la morbilidad y la mortalidad y la los costos de hospitalización.

Palabras clave: úlcera de presión, anciano, factores de riesgo.

ÚLCERA DE PRESSãO EM IDOSOS EM UM HOSPITAL UNIVERSITáRIO: CONDIçõES PREDISPONENTES, FATORES DE RISCO INTRíNSECOS E EXTRíNSECOS

RESUMO

As úlceras de pressão (UP) são áreas de morte celular, que se desenvolvem quando um tecido mole é comprimindo entre uma proeminência óssea e uma superfície dura por longo tempo. As condições predisponentes (CP), fatores intrínsecos (FI) e extrínsecos (FE) influenciam na ocorrência de UP, porque interferem na fisiologia normal do organismo. Este trabalho objetiva identificar as condições predisponentes, fatores de risco intrínsecos e extrínsecos presentes na ocorrência de UP em pacientes idosos internados em um Hospital Universitário de Natal/RN. Estudo descritivo e abordagem quantitativa, com 30 pacientes dos setores de clínica médica, clínica cirúrgica, neurologia e UTI. Após aprovação da Comissão de Ética em Pesquisa do HUOL/UFRN (parecer n.º 135/07), foi realizada a coleta de dados de 13/12/2007 a 20/01/2008, utilizando prontuário e formulário estruturado. Os dados foram analisados no SPSS 15.0. Dos pacientes, 46,7% desenvolveram UP, sendo 50,0% idosos, 57,1% do sexo feminino. As principais regiões de UP foram sacral (85,7%) e trocantérica (28,6%). As CP, FI e FE estiveram mais presentes nos idosos, sendo as principais condições predisponentes: uso de analgésicos (64,3%) e hematológicas e psicogênicas (57,1%); fatores intrínsecos: alterações na textura (64,3%), temperatura, turgor e elasticidade da pele e mobilidade física prejudicada parcial (57,1%); fatores extrínsecos: pressão do corpo, elevação da cabeceira = 30 graus, condições de roupa de cama e mobilidade inadequadas (mesmo decúbito > 2h) (64,3%); tipo de colchão inadequado (57,1%). As fragilidades do idoso contribuem por alterar seu estilo de vida, comprometendo a percepção sensorial, atividade, mobilidade, nutrição e características da pele, requerendo assistência mais efetiva e focalizada na prevenção das UP e de suas complicações, responsáveis por aumento da morbi-mortalidade e dos custos na hospitalização.

Palavras-chave: Úlcera de pressão, Idoso, Fatores de risco.