

49 - CHARACTERIZATION OF INJURIES AND PAINFUL PROCESS IN BURNS VICTIMS: A STUDY OF PATIENTS ADMITTED TO AN EMERGENCY HOSPITAL, NATAL/RN.

GLAUCEA MACIEL DE FARIAS
MIRNA CRISTINA DA SILVA FREITAS
WERUSKA ALCOFORADO COSTA
DANIELE VIEIRA DANTAS

Universidade Federal do Rio Grande do Norte, Natal/RN, Brasil
glauceamaciel@gmail.com

INTRODUCTION

Burn injuries are among the worst damages people can suffer. It can be conceptualized as the product resulting from direct and indirect action of heat on the human organism, and can be caused by domestic accidents, aggression and suicide. The mainly causal agents are from chemical, thermal and electrical aetiology. The most common agents are flame, contact with boiling water or other hot liquids, objects heated. Burns caused by a flow of electric charge is less frequent (VALE, 2005).

Data from research studies put forward that in United States of America (USA) approximately 14 millions of burn injuries are reported per year. It is responsible for 54 thousand hospitalizations per year. From this group, 8 thousand patients died from burn skins injuries and from inhalation during the event, becoming thus the fourth leading cause of death in the U.S (FERREIRA, 2006).

Yet, about the theme, statistics in United Kingdom report that every year 250 thousand people suffer burn injuries and 175 thousand are attended in an emergency ward, 13 thousands are hospitalized, a thousand need to take measures of hydroelectrolitic resuscitation and 300 of patients die (VALE, 2005).

Data reported by the Brazilian Burn Society show that a million of burn injuries happen every year. Two hundred are treated in an emergency unit and 40 thousand need hospitalizations. These injuries are one of the mainly external causes of recorded deaths; it loses only to automobile accidents and homicide. Also, burn injuries are listed among the most frequent causes of accidents in children and teenagers. In 2006, 16.573 children and teenager under 15 years were hospitalized from burn injuries in Brazil. It represents 14,0% of all hospitalizations from external causes in this group (VALE, 2005; MARTINS et al., 2006).

Moreover, it's extremely important the knowledgment on burn injuries epidemiology to ascertain the extent of the problem, to be acquainted of the population most affected and circumstances in which they occur. It provides input and improves prevention programs both to the event itself and its consequences (FERREIRA, 2006).

In this sense, is important underline that the severity of this type of injury can vary, so it is necessary classify it into three levels, as follow: first degree burns: the lesion involves only the epidermis, characterized by erythema and skin burning, without blisters; second degree burns: it affects the epidermis and the dermis, characterized by burning, erythema, and presence of blisters; third degree burns: it affects the epidermis, dermis, and sometimes also the subcutaneous tissue, with skin characteristic of white and pliable or black and charred, with a reduction in tissue elasticity becoming rigid (FREITAS, et al., 2006).

Regarding to the extension of the burned area, the determination is usually done by assessing the percentage of body surface area burns. The Rule of Nine is a simple and rapid method that allows estimate the extension of body areas burned. In adults, the head represents 9%, thorax anterior and posterior worth 18% each, one arm represent 9% and 18% for legs, the genital region is 1% (BRUNNER; SUDDARTH, 2002; VASCO, 2005; VALE, 2005).

For reasons already stated, it is observed that burn victim is exposed to a set of problems, which is important to highlight the pain. It is one of the most stressful situations experienced by them. The Pain is an individual phenomenon, and to characterize it, should be carried out systematic evaluation. The record of this information allows data to be shared between the various services and multi-professional staff, providing better care (RIGOTTI; FERREIRA, 2005).

On this subject, and according to the International Association for Study of Pain (IASP), we can conceptualize this phenomenon as a sensory and emotional experience associated with a real or potential damage to tissue or described in terms of such injuries. Each individual learns to use this term through their previous traumatic experiences (RIGOTTI; FERREIRA, 2005; PEDROSO; CELICH, 2006).

Carrero (2008), in his study refers to the presence of pain in burn patients, in a way that the expression of this aches stimulus that reflects the patient's discomfort and results in stress for the health team, and sometimes, holding back the staff of doing a good technique.

Into this context, we ask: Who are the burned patients who seek assistance at Monsenhor Walfredo Gurgel Hospital / Emergency Clovis Sarinho? What is the severity of injuries and the painful impact level in these patients? Is there significant difference between the pain reported by patients in the first and second week after the burn?

In accordance on those questions, the following objectives were developed: to identify the burned patients who seek assistance at Monsenhor Walfredo Gurgel Hospital / Emergency Clóvis Sarinho; identify the severity of injuries and the painful impact level in these patients; identify if there is significant difference between pain reported by the patient in the first and second week after the burn.

MATERIAL AND METHOD

It is an exploratory-descriptive and quantitative study with prospective data, carried out in the Hospital Monsenhor Walfredo Gurgel (HMWG), in Natal / RN. This hospital focus on urgent care from SUS, it is a public hospital of Rio Grande do Norte, which offer care services care for burn injuries and orthopedics 24 hours.

The target population consisted of 30 patient victims of burn injuries, who were hospitalized for treatment in HMWG during the data collection of this research.

The data collection instrument consisted of a questionnaire based on the research objectives. The questionnaire consisted of closed questions divided into four parts: personal identification, information about the accident, details of the burn injury, and information about the phenomenon of pain.

We highlight that we have fulfilled all the legal procedures necessary to conduct a research on human subjects in accordance with Resolution 196/96 of the National Health Council (BRASIL, 2000), which also includes the approval by the Ethics in Research Committee (CEP), No 171/2005.

After that, all the data collect procedures began through June and July 2007, as followed: identify patients who would

fit the criteria for inclusion in staging, introduce of the interviewer to patient, explanation of the objectives of the study, and invite to participate of the study interview.

When the response was positive, we presented the Term of Informed and Clarified Consent (TCLE), stating that their participation was voluntary and could leave the study at any time without prejudice, also, assuring confidentiality of their identity on the information. After signing the term, the individually interview began. If the patient is for any reason unable to respond to the interview but had a companion legally authorized, the signature of TCLE and the data were provided by him.

Then, an evaluation through the instrument and the Visual Analogue Scale (VAS) was carried out. This scale consists of a line, often 10 cm in length anchored by word descriptors at each end identifying a minimum and a maximum. In their study, Bacci (2004) draws attention to the fact that this scale can be used reliably to compare the intensity of pain.

Regarding the extension of burned area and a more accurate evaluation, the Rule of Nine was used in all patients participant of the study.

After collected, data were categorized and processed electronically through the Excel 2007 Statistic 6.0 program, analyzed through descriptive statistic.

RESULTS AND DISCUSSION

Characterization

Regarding the variables characterizing the population, distribution was homogeneous concerning the gender, so that 15 (50%) were male and 15 (50%) female, 16 people (53.3%) were aged between 20 and 30 and 11 (36.7%) between 31 to 40 years, and 23 (76.7%) from Natal, capital of Rio Grande do Norte.

Disagreeing with our findings, a study conducted in the Burns Unit of Hospital das Clínicas, of Ribeirão Preto Medicine Faculty (SP) with 30 patients who suffered burns, showed that 63.3% of respondents were male (CARLUCE et al. , 2007).

It was observed that the cook (13,3%) and the housewife (13,3%) were the ones more affected a total of 08 victims (16,6%). Then, people with no occupation (10,0%), corresponding to 03 burn victims.

The day of week the event occurred more was Saturday with 8 instances (26,7%) and Tuesdays with 7 (23,3%) were the days most representative.

Data about the burn injury

Regarding the burn injury characteristics, it is highlighted itens as: cause, agent, kind, extension, and depth and evaluation method, as in the table 01.

TABLE 01 – Characterization in accordance to cause and agent associated with burn injury of the patients from the research. Natal/RN.

DATA ON THE BURN	N	%
Causes		
Domestic Accident	12	40,0
Work Accident	11	36,7
Self Injury	03	10,0
Other	04	13,3
TOTAL	30	100,0
Agent		
Superheated Liquid	15	50,0
Direct Flame	10	33,4
Chemical substances	03	10,0
shock	01	03,3
Other	01	03,3
TOTAL	30	100,0

Fonte: Natal/RN, 2007.

In accordance to the table 01, it is noticed that the burn injuries caused by domestic accidents are numerically close to the cases of accidents at work showing, respectively, 12 (40,0%) and 11 (36,7%), the lesions are self-inflicted in 03 cases (10,0%). Fifteen victims (50%) by superheated liquid, followed by direct flame 10 (33,3%).

In a research conducted by Pereira Junior et al. (2007), in patients at the Hospital Nossa Senhora da Conceição, Tubarão (SC), the agents involved in burns, 21 cases (33,3%), were heated liquids, 33,3%, by flammable, 23,8% by fire and heated surfaces and 9,5% for electricity.

Concerning the size and depth of the burn victims included in the research. It was observed prevalence of middle extension burn (80%) and 2-degree depth (83,3%). On this issue, findings of Pereira Junior et al. (2007) report that the proportion of burned body surface area found in 21 cases of its study on its distribution, 9,5% as small burned, 66,7% as average and 23,8% burned and great burned. The same author also shows that, in respect to the degree of burn, the occurrence was 57,1% for superficial and second degree, and 42,9% of third degree, and there was no single case of hospitalization for first-degree burn.

Regarding to the localization of burn injuries, the area more affected was the arms, 70% of the cases. In this same way, concerning to pain localization, findings show that it is direct related with the localization of burn injury. Thus, the prevalence is from who feel pain in the arms (66, 7%). Similar data were found by Macedo; Rosa (2000), were the majority of burn victims had the trunk (70, 1%) and upper limbs (64, 8%) more injured.

On the subject of the pain complaint, it became clear the remission of pain from the first to the second week. While in the first week 50,0% attributed a score of 10 the pain which is the worst pain, in the second week, only 13,3% of them gave the maximum score. It is highlighted that in the second week a small portion (10,0%) have scored zero on the pain, or absence of painful stimuli.

On this subject, Guanilo (2005) shows in his study, patients in the Burns Unit of Hospital das Clinicas, Medicine Faculty of Ribeirão Preto, the results report that the pain intensity obtained for EVA had great variability, but the higher scores were shown to be mainly in the first week after the occurrence of burning, more specifically after bathing and dressing changes. Furthermore, the author draws attention to the fact that low scores can be related to the use of analgesic drugs, or even the period of rest of the patient.

CONCLUSIONS

At the end, we pursue to answer the question and objectives of this study in accordance with data collected and to the analysis made during the research.

Regarding the identification of the burned patients that seek assistance at the Hospital Monsenhor Walfredo Gurgel/Emergency Clóvis Sarinho: patients aged 20 and 30 year was predominant (53,3%) and living in Natal/RN.

With regard to injuries and their severity, the cases of burns caused by domestic accident (40.0%) approach numerically the cases of accidents at work (36.7%). Most injuries were middle extension burn (80.0%), 2nd degree depth (83.3%), being caused mainly by direct flame (23.3%) and superheated liquids (40.0%). The location most affected by burns was the upper limbs (70.0%) related to the location of the pain.

In relation to pain complaints, 80% of the population stated an intermittent nature of pain, while 20% said that this was continuous. In addition, 50% attributed a score of 10 to pain in the first week and only 13.3% in the second, so there were a regression of pain complaints in the weeks followed the occurrence of the burn.

Burns and its complications were the main causes of death worldwide, causing very intense painful sensations, but even knowing the importance and severity of pain, it is still undervalued in the therapeutic process. It leads to direct and indirect losses for the assistance, and for the recovery of the patient.

KEYWORDS: BURN, PAIN MEASUREMENT, NURSING

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Main Author: GLAUCEA MACIEL DE FARIAS, Rua Jerônimo de Albuquerque, 3621, Candelária, CEP: 59064-650, Natal/RN – Brasil. Phone: (84) 3215-3840 / 9983-6159. E-mail: glauceamaciel@gmail.com

CHARACTERIZATION OF INJURIES AND PAINFUL PROCESS IN BURNS VICTIMS: A STUDY OF PATIENTS ADMITTED TO AN EMERGENCY HOSPITAL, NATAL/RN.**ABSTRACT**

Introduction: burn injuries are among the worst damages people can suffer. It can be conceptualized as the product resulting from direct and indirect action of heat on the human organism, and can be caused by domestic accidents, aggression and suicide. Objectives: to identify the burned patients who seek assistance at Monsignor Walfredo Gurgel Hospital / Emergency Clóvis Sarinho; identify the severity of injuries and the painful impact level in these patients; identify if there is significant difference between pain reported by the patient in the first and second week after the burn. Method: it's an exploratory-descriptive and quantitative study with prospective data, carried out in the Hospital Monsenhor Walfredo Gurgel (HMWG), in Natal / RN. The target population consisted of 30 patient victims of burn injuries, who were hospitalized for treatment in HMWG during the data collection of this research. Results: it was detected a young population aged between 20 and 30 years (53.3%), equal proportions between genders, and 23 (76.7%) were from Natal. Regarding to burn injuries data, the most common was caused by domestic (40.0%), with prevalence of burns of middle extension (80%) and 2-degree depth (83.3%) and the most affected were the upper limbs, with 70% of cases. Concerning to the pain complaint, as in the first week 50% attributed a score of 10 to pain in the second week, only 13.3% of them gave the maximum score. Conclusion: Burns and its complications were the main causes of death worldwide, causing very intense painful sensations, but even knowing the importance and severity of pain, it is still undervalued in the therapeutic process. It leads to direct and indirect losses for the assistance, and for the recovery of the patient.

KEYWORDS: Burn, Pain Measurement, Nursing

CARACTÉRISATION DES LÉSIONS ET DU PROCESSUS DOULOUREUX CHEZ LES VICTIMES DE BRÛLURES: ÉTUDES RÉALISÉE AVEC DES PATIENTS D'UN HÔPITAL D'URGENCE DE LA VILLE BRÉSILIENNE DE NATAL/RN.

RÉSUMÉ

Introduction: la brûlure figure parmi les pires traumas pouvant atteindre l'homme, et peut être définie comme le produit de l'action directe ou indirecte de la chaleur sur l'organisme, provenant d'accidents de travail, domestiques, agression et tentative de suicide. Objectifs: identifier les patients brûlés qui sont admis à l'Hospital Monsenhor Walfredo Gurgel /Pronto Socorro Clóvis Sarinho (Hôpital Monseigneur Walfredo Gurgel / Service des Urgences Clóvis Sarinho); identifier la gravité des lésions et le niveau algique qu'elles répercutent chez les patients; vérifier s'il y a une différence significative entre la douleur relatée par le patient dans la première et dans la deuxième semaine après la brûlure. Méthodologie: étude exploratoire descriptive, quantitative et données prospectives réalisée à l'Hospital Monsenhor Walfredo Gurgel (Hôpital Monseigneur Walfredo Gurgel) - HMWG - à Natal/RN. La population ciblée fut composée de trente patients victimes de brûlure, qui étaient hospitalisés pour faire un traitement pendant la période de composition des données pour cette recherche. Résultats: nous détectâmes une population jeune appartenant à une tranche d'âge située entre vingt et trente ans (53,3%), proportions égales entre les sexes, sauf que vingt-trois (76,7%) venaient de Natal; Quant aux données de brûlure, la plus commune fut celle qui suit un accident domestique (40,0%); il y eut la prévalence de brûlures d'extension moyenne (80%) et du second degré de profondeur (83,3%) et les zones du corps les plus affectées furent les membres supérieurs totalisant 70,0% des cas. En ce qui concerne la plainte algique, dans la première semaine 50,0% attribuèrent la note 10 à la douleur, tandis que dans la deuxième semaine seulement 13,3% attribuèrent la note maximum. Conclusion: En plus d'être les principales causes de décès au monde, les brûlures et leurs complications provoquent des sensations douloureuses assez intenses. Cependant, même si nous connaissons l'importance et la gravité de la douleur, elle est encore peu valorisée dans le processus thérapeutique, ce qui porte des préjudices directs et indirects à l'assistance livrée pour la récupération du patient.

MOTS CLÉS: BRÛLURES; Mesure de la Douleur; Soins d'Infirmier.

CARACTERIZACIÓN DE LAS LESIONES Y DEL PROCESO DOLOROSO EN VICTIMAS DE QUEMADURAS: ESTUDIO CON PACIENTES DE UN HOSPITAL DE URGENCIA, NATAL/RN.

RESUMEN

Introducción: las quemaduras están clasificadas entre los peores traumas que pueden afectar al hombre, definiéndose como el producto de la acción directa o indirecta del calor sobre el organismo, siendo sus causas los accidentes laborales, domésticos, agresión e intento de suicidio. Objetivos: Identificar los pacientes quemados que buscan asistencia en el Hospital Monsenhor Walfredo Gurgel/Pronto Socorro Sarinho; identificar la gravedad de las lesiones y el nivel algico que estas producen; identificar se existe diferencia significativa entre el dolor relatado por el paciente en la primera y segunda semana luego de la quemadura. Metodología: estudio exploratorio descriptivo, cuantitativo prospectivo realizado en el Hospital Monsenhor Walfredo Gurgel (HMWG) en Natal/RN. La población blanca fue compuesta por 30 pacientes víctimas de quemaduras, que se encontraban internados para tratamiento durante la recolección de datos. Resultados: detectamos una población joven, rango de edad entre 20 y 30 años (53,3%), proporciones iguales entre ambos sexos, el 23% de los pacientes proceden de Natal. Entre las características de las quemaduras destacan: el accidente doméstico representó la mayor frecuencia (40%); prevalencia de quemaduras de extensión media (80%) y de segundo grado de profundidad (83,3%), siendo la región mas afectada las extremidades superiores representando 70% de los casos. Los datos relacionados al nivel algico durante la primera semana, un 50% de los caos atribuyeron nota de dolor igual a 10 / escala de 1 a 10), para la segunda semana sólo el 13,3% asignaron la nota máxima. Conclusiones: la quemadura y sus complicaciones, son la principal causa de muerte en el mundo, provocan sensaciones dolorosas bastante intensas, no obstante que conozcamos su importancia y gravedad del dolor asociado, no ha sido valorizada en el proceso terapéutico, llevando a prejuicios directos e indirectos para la asistencia entregada y para la recuperación del paciente.

PALABRAS CLAVES: Quemaduras, Dimensión del Dolor, Enfermería.

CARACTERIZAÇÃO DAS LESÕES E DO PROCESSO DOLOROSO EM VÍTIMAS DE QUEIMADURAS: ESTUDO COM PACIENTES DE UM HOSPITAL DE URGÊNCIA, NATAL/RN.

RESUMO

Introdução: as queimaduras estão relacionadas entre os piores traumas que podem atingir o homem, e podem ser conceituadas como produto da ação direta ou indireta do calor sobre o organismo, podendo ser oriundas de acidentes de trabalho doméstico, agressão e tentativa de suicídio. Objetivos: identificar os pacientes queimados que buscam assistência no Hospital Monsenhor Walfredo Gurgel/Pronto Socorro Clóvis Sarinho; identificar a gravidade das lesões e o nível algico que estas repercutem nesses pacientes; identificar se há diferença significativa entre a dor relatada pelo paciente na primeira e segunda semana após a queimadura. Metodologia: estudo exploratório descriptivo, quantitativo e dados prospectivos, realizado no Hospital Monsenhor Walfredo Gurgel (HMWG), em Natal/RN. A população alvo foi composta por 30 pacientes vítimas de queimadura, que se encontravam internados para tratamento durante a coleta de dados desta pesquisa. Resultados: detectamos uma população jovem na faixa etária entre 20 e 30 anos (53,3%), proporções iguais entre os sexos, sendo que 23 (76,7%) procediam de Natal; Quanto aos dados da queimadura, a mais comum foi a causada por acidente doméstico (40,0%); houve prevalência de queimaduras de média extensão (80%) e de 2º grau de profundidade (83,3%) e a região mais afetada foram os membros superiores, totalizando 70% dos casos. No que concerne à queixa algica, enquanto na primeira semana 50% atribuíram nota 10 à dor, na segunda semana, apenas 13,3% atribuíram nota máxima. Conclusão: A queimadura e suas complicações, além de serem as principais causas de morte no mundo, provocam sensações dolorosas bastante intensas, porém mesmo que conheçamos a importância e a gravidade da dor, ela é ainda pouco valorizada no processo terapêutico, o que leva a prejuízos diretos e indiretos para a assistência prestada, e para a recuperação do paciente.

PALAVRAS CHAVES: Queimaduras, Medição da Dor, Enfermagem.

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