

25 - EMERGENCY CARE FOR SEVERELY BURNT VICTIMS

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1. INTRODUCTION

According to Brazilian statistics, the number of burnt patients in emergency services has been increasing in the past years, and in this way, there is an urgent need for a specific service and for well-trained teams, able to carry out an efficient emergency care, using specific scientific knowledge.

This study seeks to perform a literature review about procedures to be used in first aid that the team must carry forward the patient burned in the emergency service, with the goal of making the service effectively, ASTM scientifically and thereby increasing the survival of the patient severely burned.

According to Irion (2005) US about 2.5 million a year burns require some degree of care of health professionals, with 70,000 of those requiring hospitalization. One concern is that since 35% of severe burns involving children.

According to Maciel and Serra (2004), the burn is the lesion produced by action short or prolonged extreme temperatures on the skin, mucous, muscles, blood vessels, nerves and bones can be harmed. The burns can be superficial or deep and are classified according to severity, and degree of injury and the extent of the affected area.

They are usually caused by chemical and physical agents. The physical agents originate in the cold or the heat through conduction or electromagnetic radiation. The chemical agents are caused by products that can be corrosive to the home bases or strong acid.

The thermal burns can be through: frost, snow, sun, vapors, fire, liquid and boiling solid material. The burns by electromagnetic radiation can be through: electricity, rays and radiation.

As the ranking, the burns may be: from first grade, when only affects the skin and that the location presents hyperaemia or redness, warmth, swelling discreet, burning and dryness of the skin. Generally, people who appear in too exposed to the sun (ultraviolet rays) and / or the extreme heat (and MACIEL SERRA, 2004).

The burning of second degree reaches the dermis and may be superficial or deep. They are characteristic of the presence of blebs or blisters with net content or colloid and presents edema affecting surrounding regions, presenting intense pain caused her intimate relationship with peripheral vessels and nerve endings, and can bleed. There is loss of water and electrolytes can cause dehydration and are usually caused by vapor, liquid and solid burning (GOMES, 2001).

Burn of third degree destroy all layers of the skin, reaching deep adjacent tissues causing hypertrophic scarring per second and / or third intention generally linked by direct flame of fire. The skin it is hard, staining grayed-out, causing very strong pain in some cases may be painless and does not bleeding (MOZACHI, 2005).

Burns is the fourth degree of carbonization, in which all tissues are burned. It is very serious and the patient's survival will depend on its extension.

Factors that indicate the seriousness of the wound, such as the location, depth, size, presence or absence of infection, the causative agent trauma, nutritional status of patients, presence of chronic degenerative diseases and age, will affect the process of healing and influence in the recovery of the patient (FERREIRA, et al., 2003).

Many severe burns occur in the workplace or in car accidents and other types of collisions, however, 75 to 85% occur at home, especially in the kitchen and bathroom, with food and hot liquids spilled in the kitchen is the most important source of burns in children. Individuals with peripheral neuropathy secondary to the Diabetes Mellitus also have a high risk for injury due to decreased sensitivity (IRION, 2005).

Complications of these burns are evident, as second study conducted in Brasilia, 252 patients monitored and processed by the service of care burned, 49 (19.4%) developed sepsis clinically and microbiologically proven, and that of these, 30 (61.2 %) patients had their first episode septicemic within the first week after burning (MACEDO, et al, 2003).

As to the survival of the patient burned, there are two age groups which have statistically risk of death, and that of children under 5 years of age and of the individuals over 65 who lose their ability to escape from situations at risk of death and they are less able to tolerate the physical stress of the post-burn.

2. METHODOLOGY

A survey was conducted bibliographic the last 5 years, through research in articles published in scientific journals and books related to the theme. For both, were used the following key words: severely burned, first aid, nursing. The publications found were organized as search and review and subsequently cited according to related statistics, survival of the patient burned and protocols for emergency care. Through the analysis of these publications, it was possible to contextualize the implications of specialized care to the patient severely burned.

3. RESULTS AND DISCUSSION

Here are the results in the review of literature considering the categorization held: assessment, first aid, management of the wound and treatment for burns.

3.1. Assessment

It is considered a serious state when the burned area is not superficial and, in addition, is extensive. This causes the prognosis of these patients has to be determined with promptly, to act quickly.

According to Rodríguez (2002), you can find the same patient varying degrees of burn, depending on the region affected (e.g., in the hand, the palm is a little more resistant to heat than the back), the time of exposure and the agent cause: if it is liquid, such as water, or denser, such as olive oil. In the first case the burn will be less profound, as the water cools quickly, and the oil takes longer to cool.

In burns by fire, the biggest change is due to inhalation of smoke. In burns by chemicals, it is observed that the patient breathed toxic gases considered to establish a treatment with the antidote early as possible. The burning of electrical discharge is one of the most worrying, as it might cause as a first stop cardio respiratory the complication of the individual, as they changed the cardiac electrical stimuli after discharge.

The next step, after determining the depth and the causative agent, is to investigate the body surface injured in each of

the types of burning. A scheme widely used and easy to memorize it is the Rule of Nine. This rule charges amount equal to nine or multiples of nine to the parties affected, nine for every senior member, nine to head, 18% lower for each member, 18% for each side of the trunk and one to the genitalia (Macedo, 2003). The calculation of the body surface will be of fundamental importance not only for the prognosis of the patient and also burned throughout treatment.

Another concern for the team is the possible damage airway, and that must always be asked if the patient had smoke in the place of the accident and whether the patient presents burns on the face, hair absence of the entry of the nostrils, salivation dark (the resulting smoke), hoarseness, smell of smoke or loss of consciousness. This type of patient requires a rapid assessment of their airway, both upper and lower, to eliminate the possibility of obstruction by swelling of the upper airway or the respiratory syndrome problem in the adult.

3.2. First Aid

3.2.1 A Room of receipt of Burns

This room must meet a series of features and be properly equipped, as described below:

- Temperature around 24°C, with the possibility of being governed by blades, fans or air conditioning. The ventilation of this room must be independent.

- Humidity between 40 and 50%.

- Lighting: should be well lit, with outbreaks furniture that can move the light to different points.

- Bed-equipped with anti-material adhering to the patient and sterile as regards clothing.

- Car of curative provided with necessary material: sheets, aprons and fields sterile, sterile cotton, bandage, Vaseline bandage of different sizes, compresses, gauze, adhesive, mesh-fixing, scissors, sterile gloves of different sizes, various tools (pliers, rapier of dissection, spatulas, boxes of dissection of vein and tracheotomy), surgical soap and ointments for use in accordance with the existing standard.

- Material of oxygen (masks, goggles).

- Syringes, needles and tubes for laboratory tests.

- Material from peripheral venous catheterization of lanes.

- Material of bladder catheterization.

- Material for drilling tube.

- Closets of medicine, with all the analgesic medication needed, diuretic, bronchodilator and relaxing, plus all fluids necessary, and the medication to stop cardio respiratory (PCR) for the case to be necessary (RODRIGUÉZ, 2002).

3.2.2 The performance of the team of nursing before the patient burned

According Rodríguez (2002), the first measure to be adopted should be the assessment of the patient as to their situation hemodynamic (PCR or shock). Then, seek to know the kind of burning and the circumstances in which it happened. After these data, the performance will be as follows:

- Ensure the permeability of the respiratory tract, respiratory and determine the situation to endotracheal intubation, or make nasotraqueal tracheotomy, if necessary.

- Remove the clothes of the patient in a more sterile possible, and less bloody (mouth with saline and not removing the clothes while adhering). Also remove hair in the areas that are burned.

- Determine the extent of the injury and, if possible, his degree, noting mobility and pain in the area because the pain is something to be taken very much into account (the deep burns are less painful).

- Catheterize one or two lanes of major venous caliber, for the taking of samples for analysis (blood, coagulation time and biochemistry), administration of medication and control of liquids and electrolytes. When it is not possible to secure a road peripheral it holds a catheterization of a central path (or subclavian vein).

Place a probe bladder-type bag with Foley collector of urine control zone connected, so that it can control, then, the replacement of water and electrolytes of the patient, performance will be priority if the burn jeopardizes the genital region.

- Controlling the pain: this is one of the most important acts and that will improve, so considerable, the situation of the patient. For analgesic drugs used, advises to intramuscular (IM) by the time hemodynamic instability, and the oral surgical treatment for any emergency.

- In case of vomiting, implement survey tube immediately.

- Make the assessment of vital signs and monitoring of the patient.

- Trying to reassure and inform the patient of all the techniques that are being made.

- Restore net, as one of the biggest problems of very extensive burns is in the amendments hydroelectrolytics they produce. The destruction of the capillaries causing the loss of fluid, electrolytes and plasma, and can lead to shock by dehydration and loss of essential substances. Not always the emergency service available plasma fresh in short time for the patient, in this case, the most convenient is the treatment with lactated Ringer's solution at a rate of infusion that will achieve diuresis around 50 ml / h, in the case for adults, and 1 ml / kg / h in children, taking into account that, in cases of electrical burn, the amount of serum administered should be doubled.

3.3. Handling of wound

Much curative, are generally made under analgesia and sedation, which is held the debridement, remaining the curative open or closed, and implementation of sulphadiazine silver to 1%; Usually made in center and surgical ICU's.

Curative minors may have debridement without sedation, sometimes without analgesia, kept open or closed, and implementation of sulphadiazine silver to 1%.

Exchanges of dressing every 12 or 24 hours dependent on the moisture in the healing period. Bandage wet needs to exchange a lesser period of time (12/12 hours) (SOUZA and MOZACHI, 2005).

4. FINAL CONSIDERATIONS

Clearly the need of scientific knowledge with regard to the severely burned patient care, ensuring that it increases the survival of the patient, you should common complications of the burn and that the organization of the service so happens that the service is effective under training and protocols of care.

The team must be able to assess the patient in the act of their arrival at the emergency service, check causative agent, gravity depth of the wound and quickly start the necessary procedures, such as monitoring, guaranteed access venous effective and replacement of fluids and electrolytes.

In this study it was observed that grows in Brazil the number of services of specialized care to the patient burned, which shows the concern of health professionals and institutions to the quality of care, it was possible to observe that not many studies

published in relative to the subject, as national statistics and technical approach to the patient.

Therefore, this study opens doors to the development of protocols of care burned in units of emergency care, assuming that the urgent need for serious scientific approach to the patient, enabling the work of the team and ensuring a better quality of life and recovery of the patient.

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ABSTRACT

Considering the statistical crescents seriously regarding the patients burned, it was researched the procedures of First Aid to be accomplished in the emergency services to turn the effective service and based scientifically, and like this to increase the patient's supervened. A bibliographical rising of the last 5 years was accomplished, by researches in books and published articles, which were organized as of research and of revision and later mentioned in agreement with the related statistics, the burned patient's supervened and protocols of emergency service. It was ended that the team should be capable for: evaluation, determining the gravity, depth and the agent cause of the burn; First Aid, organizing the room in a functional and practical way, using technique and scientific knowledge; I handle of the wound and treatment. Being like this, it is noticed the need of service protocols, so that the work of the team is uniform and effective, guaranteeing the survival and preventing the patient's complications seriously burned. KEY WORDS: seriously burnt, first aid, nursing

PROCEDES D'URGENCE POUR DES PATIENTS SERIEUSEMENT BRULEES

RÉSUMÉ

Vu la statistique croissants concernant les patients gravement brûlé, il a été étudié les procédures de premiers secours pour qu'ils soient réalisés dans les services d'urgence pour transformer le service efficace et scientifiquement fondée, et comme à cette augmentation du patient dessus. Une bibliographie de la hausse au cours des 5 dernières années a été accompli, par des recherches dans des livres et articles publiés, qui ont été organisés en tant que de la recherche et de la révision et, plus tard, mentionnés en accord avec les statistiques, le patient brûlé dessus et protocoles de service d'urgence. Il a été terminée que l'équipe doit être capable de: l'évaluation, la détermination de la gravité, la profondeur et l'agent cause de la brûlure; premiers secours, organisation de la chambre dans une façon pratique et fonctionnelle, en utilisant la technique et des connaissances scientifiques; Je s'occuper de la plaie Et le traitement. Être de ce genre, il est constaté la nécessité de protocoles de service, de sorte que le travail de l'équipe est homogène et efficace, garantissant la survie et la prévention des complications du patient gravement brûlé. MOTS CLÉS: gravement brûlé, les premiers secours, les soins infirmiers

ASISTENCIA DE EMERGENCIA EN SERIO LA QUEMA DEL PACIENTE

RESUMEN

Teniendo en cuenta las estadísticas crecientes en serio con respecto a los pacientes quemados, se investigó los procedimientos de primeros auxilios para ser llevado a cabo en los servicios de emergencia para activar el servicio eficaz y con base científica, y al igual que a este aumento del paciente supervened. Un aumento bibliográficas de los últimos 5 años se ha logrado, por las investigaciones en libros y artículos publicados, que fueron organizados como de la investigación y de la revisión y más tarde se menciona en el acuerdo con las estadísticas, el quemado del paciente supervened y protocolos de servicio de emergencia. Se terminó el que el equipo debe ser capaz de: la evaluación, la determinación de la gravedad, la profundidad y el agente causa de la quemadura; Primeros Auxilios, la organización de la sala en una forma práctica y funcional, utilizando la técnica y los conocimientos científicos; Yo mango de la herida Y el tratamiento. Siendo así, se advierte la necesidad de que los protocolos de servicio, a fin de que la labor del equipo sea uniforme y eficaz, que garantice la supervivencia y la prevención de las complicaciones del paciente gravemente quemado. PALABRAS CLAVE: gravemente quemada, de primeros auxilios, enfermería

ATENDIMENTO DE EMERGÊNCIA AO PACIENTE GRAVEMENTE QUEIMADO

RESUMO

Considerando as crescentes estatísticas referentes aos pacientes gravemente queimados, pesquisaram-se os procedimentos de primeiros socorros a serem realizados nos serviços de emergência para tornar o atendimento eficaz e embasado cientificamente, e assim aumentar a sobrevida do paciente. Realizou-se um levantamento bibliográfico dos últimos 5 anos, mediante pesquisa em livros e artigos publicados, os quais foram organizados como de pesquisa e de revisão e posteriormente citados de acordo com as estatísticas relacionadas, sobrevida do paciente queimado e protocolos de atendimento de emergência. Concluiu-se que a equipe deve estar apta para: avaliação, determinando a gravidade, profundidade e o agente causador da queimadura; primeiros socorros, organizando a sala de forma funcional e prática, utilizando técnica e conhecimento científico; manejo da ferida e tratamento. Sendo assim, percebe-se a necessidade de protocolos de atendimento, para que o trabalho da equipe seja uniforme e eficaz, garantindo a sobrevivência e prevenindo complicações do paciente gravemente queimado. PALAVRAS CHAVE: gravemente queimado, primeiros socorros, enfermagem.