

The initial management of mild and moderate burned patients in the emergency department: an expert consensus statement

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Abstract

Early diagnosis and treatment of burn patients are a key issue in the emergency setting. With the aim of assisting physicians in the diagnosis and subsequent management of burns in emergency departments (EDs), a Nominal Group Technique (NGT) was designated. A group of 6 Italian experts (2 emergency physicians, 2 emergency medicine nurses, and 2 dermatologists chief of a burn center) developed a consensus document based on the available evidence and their clinical experience on the fundamental steps to be followed in the ED in the management of patients with a mild to moderate degree burn. The expert consensus statement proposed can assist emergency physicians in applying the results of clinical studies and clinical experience to routine care settings, providing guidance on all aspects of 7 steps: prehospital treatment, centralization criteria, transport (equipment and composition of the healthcare team), management of ED phase, clinical evaluation, treatment of pain and disposition.

Introduction

The global incidence of burns requiring medical attention reached nearly 11 million. While burns and fires cause over 300,000 deaths worldwide each year, most burn cases are not fatal.^{1,2} Burns are common traumatic injuries for which patients often present to the ED; mild to moderate burns represent the majority of burns that present to the ED and can be effectively managed there. They may be caused by friction, cold, heat, radiation, or chemical or electrical sources, but most are caused by heat from liquids, solids, or fire.³ However, many smaller centers lack the specialized knowledge and standardized protocols to optimize burn care.

Challenges related to caring for patients with burns in peripheral centers include delays in treatment due to geographic location, limited access to resources or people with specialized training, and loss of information due to multiple handovers.⁴ Although several diagnostic algorithms are available⁵ and validated for the diagnosis and treatment of severe burns, there are no clear indications for the diagnosis and management of mild-moderate burns in the ED. Until such indications are validated according to a methodology based on scientific evidence, the criterion of structured consensus among professionals is likely to be the only available method. For this purpose, professionals involved in the diagnosis and treatment of mild-moderate burns were involved to develop an expert consensus statement that reflect the current models of diagnosis and management of mild-moderate burns in Italian EDs.

The aim of the present document is to provide through the methodology of a NGT⁶ a useful guidance to emergency physi-

cians on the main characteristics of initial burn assessment. Using the best available information, including those parts, where the evidences are limited or even unavailable, the burn patient journey in the ED is discussed in its various phases, considering the diagnostic framework, risk stratification, early diagnosis and the most appropriate initial treatment.

Materials and Methods

We collected the feedbacks coming from a group of experts from the following scientific societies e.g., SIMEU, ADOI and AIUC to develop the proper patient journey in the burns management. An NGT was chosen, as consensus method, to prepare this document. It is a structured, multi-step, facilitated group meeting technique that is used to generate and prioritize responses to specific questions posed to a group of experts.⁷ The NGT meeting typically involves a series of structured phases:⁸ i) Phase 1, Introduction: A designated facilitator explains the purpose of the meeting and, at the end, summarizes recent research findings on the topics being discussed; ii) Phase 2, Generation: each expert

individually writes down his or her “ideas” on the topic; iii) Phase 3, Sharing: each expert takes turns sharing notes and the facilitator records them; iv) Phase 4, Discussion: the facilitator leads the discussion and provides equal opportunity for experts to contribute their personal opinions during the discussion by presenting their own list of “ideas.” At the end of the discussion, the experts arrive at a shared list of opinions; v) Phase 5, Ranking: NTG express their level of agreement with the list of proposals. The facilitator consolidates the results and presents them to the group.

From May 2024 to January 2025, two NGT meetings were conducted to reach a consensus statement on the management of patients with mild and moderate burns. The focus was on the care pathway, from initial prehospital diagnosis and treatment to ED admission and transfer to a third-level burn center within a hub-and-spoke network model (Figure 1).

Expert identification

Experts were specifically selected to participate in the NGT: all experts had at least 10 years of experience in the ED and 2 peer-reviewed publications in emergency medicine in the last 10 years. Six experts: 2 emergency physicians (BS, AF), 2 emergency

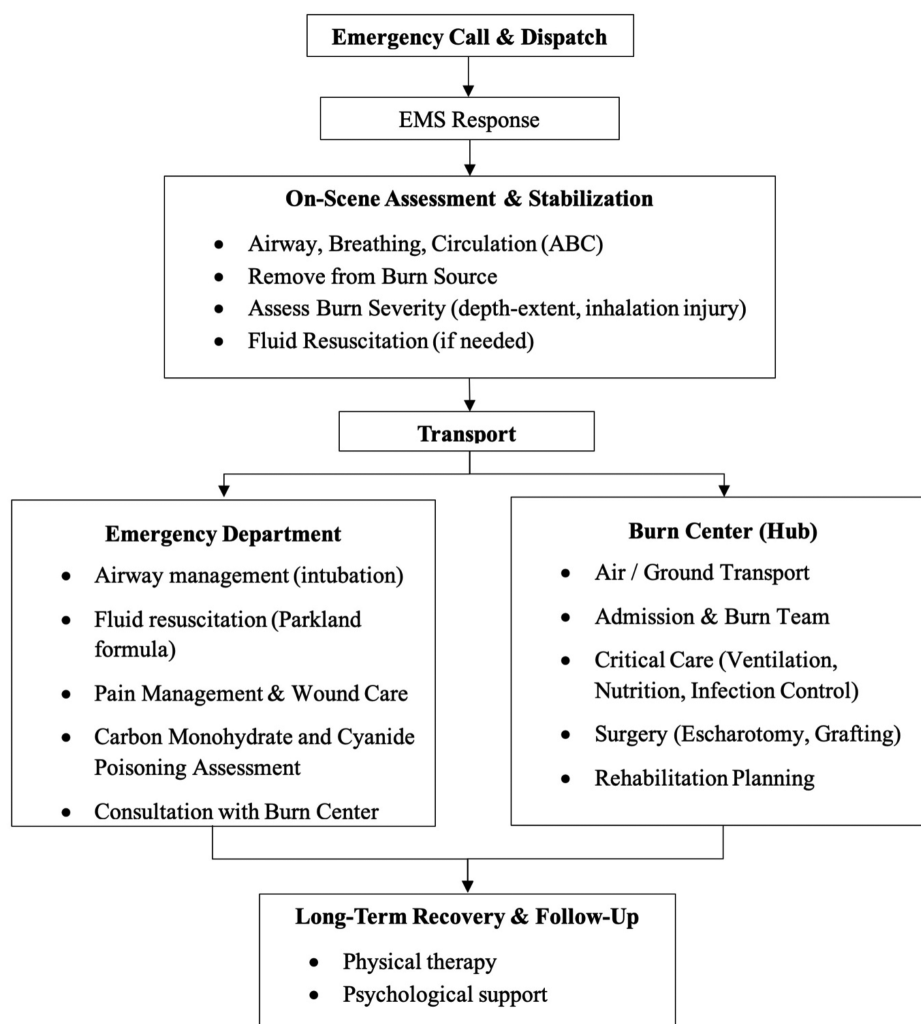


Figure 1. Flowchart outlining the journey of burned patients from the pre-hospital setting to the Emergency Department phase following to a burn unit in a hub & spoke network model.

medicine nurses (DP, GZ) and 2 dermatologists chief of a burn center (DM, ADL) agreed to participate in the study. Prior to the NGT process, a survey was conducted to investigate the pathways on diagnosis and treatment of burns in the Italian ED, with a focus on the journey, events and factors that influence the pathways of diagnosis and treatment and the related clinical outcomes.

Based on the available evidence in the literature on the diagnosis and management of mild and moderate burns, a series of closed-ended questions identified as those crucial to the topic under discussion were defined by the research team members with extensive experience in standardized consensus methods.

NGT Meetings

The first meeting of the NGT group was held on September 13th, 2024. At the beginning, the objective of the NGT and the questions were presented by the facilitator in the introduction phase. The presentation of the questions was followed by a discussion among the experts. Considering the characteristics of the pathological conditions to be analyzed, it was decided to formulate a single judgment on the patients' journey following 7 steps from pre-hospital treatment, centralization criteria, transport equipment and composition of the healthcare team, management of the hospital phase, treatment of pain, clinical evaluation and final disposition. In phase 2 of silent generation, the experts were given 45 minutes to individually reflect and generate items in response to the research questions. Then, each expert was asked to comment individually on his/her statements in the sharing phase. During the discussion (Phase 4) the experts were invited to include comments. At the end of the first NGT meeting, participants generated consensus statements.⁸ After the meeting, the research team reviewed all materials and defined a list of consensus statements organized by topic that was circulated among the experts via email. NTG members were then invited to include comments and indicate statements to be deleted or amended for the drafting of the consensus document. A second meeting was held on January 16th, 2025, during which all statements were discussed in depth taking into account the updated evidence on diagnosis and treatment. Overall, during the final discussion, statements were reworded or merged; during the final step (Phase 5: Ranking), experts were invited to individually rate each statement on a 5-point Likert-type scale indicating their level of "agreement" and "importance" of each statement. At the end of the meeting, the results were communicated to the entire group. The consensus definition was determined prior to analysis and was set >80% agreement (5 out of 6 experts at least).

Results

Pre-hospital treatment

The fundamental objectives of pre-hospital treatment of patients with severe burns are the stabilization of vital functions, followed by a rapid evaluation of the affected skin areas to establish priorities for intervention.⁵ This allows the patient to be directed to the most appropriate hospital for the definitive course of care. During the pre-hospital phase, monitoring the time taken is essential to avoid delays in definitive treatment in the hospital setting, which may include surgery or interventional radiology procedures. In a burn victim after injury, two assessments should be conducted: a "primary assessment" and a "secondary assessment". The primary assessment is a quick check for life-threatening conditions, while the secondary assessment is a thorough examination of the entire body, including non-burn injuries. During the primary

assessment, check for lung or airway exposure due to inhalation of hot gases. All victims should receive 100% humidified oxygen by mask. Check the airway if hoarseness occurs. For protection from non-burn injuries during the secondary assessment, consider a cervical collar or positioning on a spine board. Establish intravenous access as soon as possible before swelling complicates the procedure. Administer an intravenous solution - e.g. Ringer's Lactate or 0.9% NaCl - at a rate of 500 ml per hour for those 14 years of age and older, as a significant amount of fluid from the blood vessels will move to the burned areas, potentially causing shock.⁹ If intravenous access cannot be promptly established, intraosseous access should be considered as a rapid and reliable alternative. In conscious patients, adequate analgesia must be provided before the procedure. Lidocaine is recommended for intraosseous anesthesia to reduce pain during needle insertion and infusion.¹⁰ Dress the patient with clean dressings or a clean sheet to protect the burn from the external environment during transport. Cover the clean sheet with a blanket and treat the pain. All operations in the pre-hospital setting should take into account the benefit/risk ratio, according to a general management strategy that provides for the direction to the most appropriate structure. It is essential that these procedures are performed by highly qualified healthcare personnel, in order to prevent iatrogenic complications.¹¹ In this specific case, the continuous training of medical and nursing staff involved in serious trauma is an element of great importance.¹² In fact, evidence shows that, with adequate training, skills and appropriate equipment, patients with burn trauma can be transported safely and efficiently on rescue vehicles even for long distances to a burn center.¹³ The involvement of emergency medical services in the transport of these patients is critical, as the greatest risks of complications include insufficient airway control or loss or insufficient venous access.

Centralization criteria

According to the American Burn Association (ABA),⁵ burn injuries that should be treated in a burn center should be: i) partial thickness burns greater than 10% of Total Body Surface Area (TBSA); ii) burns involving the face, hands, feet, genitals, perineum, or major joints; iii) third-degree burns (full thickness) in any age group; iv) electrical burns, including lightning injuries; v) chemical burns; vi) inhalation injuries; vii) burns in patients with pre-existing medical conditions that could complicate management, prolong recovery, or affect mortality; viii) burns in patients with fractures (in this case, relative priorities will be taken into account, taking into account the relative priorities. If the highest priority is fractures, the patient must be treated first in a trauma center and then transferred to the burn center. If, on the other hand, the severity and emergencies resulting from the burn prevail, the priority must be assigned to transfer to the burn center. In any case, clinical judgment will be decisive for the transfer decision, also considering the area operating protocols); ix) all pediatric burns that can benefit from being sent to a burn center for pain management, for the management and renewal of dressings, rehabilitation and that can also meet the needs of patients and parents; x) burns in patients who will require special social, emotional, or rehabilitative interventions. In case of doubts, it is always helpful to contact the burn center of reference for consultation.

Transport: equipment and composition of the healthcare team

Based on the information provided and the clinical evaluation, it is essential to use adequate equipment and materials to ensure

adequate support during the transfer, as well as an equipped means of transport (land or air) and appropriate for the management in terms of timeliness and safety of reaching the destination.¹⁴

Despite different indications in the literature, the ideal team included an anesthesiologist-resuscitator or an emergency physician, a nurse experienced in critical care (preferably in the Emergency Medicine or Intensive Care) and two rescuers. There are two types of transport envisaged: so-called basic transport and advanced transport.¹⁵ In the case of basic transport, the patient is stable and his drug or non-drug therapy can be temporarily suspended during the journey, without the need for continuous monitoring of vital signs. If the patient presents an unstable clinical picture or a high risk of serious complications, continuous assistance and monitoring of vital parameters by a medical-nursing team will be mandatory throughout the transport.¹⁵

The management of the ED phase

Initial stabilization and rapid application of simple emergency measures reduce mortality and burn complications.^{16,17}

In order: i) attention to the possible compromise of the airways resulting from the inhalation of fumes and the development of edema as a result of exposure to high temperatures; ii) hemodynamic stabilization with timely fluid infusion; iii) lowering of body temperature; iv) burns should be cooled as soon as possible, for its analgesic effect: cool, clean running water for 20 minutes within the first 3 hours of the event is the most commonly recommended solution (it is important to identify the heat source before cooling); once the burn is completely cooled, strips of cling film can be applied to the moist burn area (never wrap the head, body or a limb);¹⁸ v) prevention of infectious complications, arrhythmias, rhabdomyolysis, compartment syndromes and eye injuries

The outcomes of a burn in the short and long term are directly related to the extent of the inflammatory response, considering that the greater the depth and extension of the lesion, the greater the consequent inflammatory response.

The extent of the edema in turn depends very much on the nature of the burning cause (flames cause greater and faster edema than the chemical cause, for example). Early and effective venous cannulation (dual and large caliber: G 18) should be followed by constant and prolonged monitoring, as the edema could dislocate the device, as well as worsen due to the application of patches, or even just an identification bracelet that is too tight.¹⁹ Whenever possible, cannulation should be performed on the contralateral arm to the burn to minimize these risks.

Additional Intervention

If not performed (on site or in triage) the clothing must be promptly removed, with the exception of those strongly adhered to the skin, as the synthetic fibers of which they are mostly composed, being very flammable, could prolong combustion, postponing the burning action.

At the same time, due to excessive environmental exposure with heat dispersion and consequent hypothermia, thermal protection with a matte blanket should be considered.⁵

Maximum cleanliness of the skin surface must be guaranteed from the early stages, a possible gateway for germs. Dry dust must be removed from the skin with careful brushing, avoiding further damage to the surface and then it will be necessary to irrigate with tap water 15°C (range 8°C – 25°C).

Chemical burns

Most of these are caused by acids, alkalis, petroleum deriva-

tives. Acid burns create coagulative necrosis that limits the penetration of the damaging agent, more serious those caused by alkali because the liquefaction of the tissues facilitates the spread of the damaging agents.²⁰

In both cases, the removal of the caustic early and the immediate treatment of the lesions is essential. The extent of the burn depends on the duration of the contact, the concentration of the toxicant, the quality and quantity of the chemical agent.

In the case of a caustic powder, remove the powder from the skin by irrigating with water; alternatively, wash with plenty of cool running water for 20-30 minutes with a sprinkler (for alkaline substances, longer irrigation is necessary). The application of buffer substances could trigger chemical reactions with further heat production and therefore complications. A special mention should be paid to those from hydrofluoric acid which also cause vasospasm.²¹

Electrical burns

The human body acts as a conductor and the heat generated causes thermal injury. The transfer of heat is different between superficial and deep tissues and therefore in the face of undamaged skin there may be deep muscle necrosis. Because of this, they can be much more serious than expected, particularly if they affect the limbs. The electric current passes through the body through vessels and nerves, inducing thrombophilia and nerve damage, with an immediate contracture effect of the affected limb; In these cases, the surgery to be undertaken is a bandage, possibly in a burn center.²² However, airway control is a priority, as is venous cannulation on the limb not affected by injuries, the placement of a bladder catheter, the execution of an electrocardiogram to check for any arrhythmias, as well as the execution of laboratory tests in particular to verify any electrolyte imbalances, which are very likely in these situations.

Subsequent checks will be dedicated to the exclusion of fractures secondary to a possible muscle spasm, to the contrast of a possible rhabdomyolysis, also through hydration to prevent kidney failure. Guidelines of the American Burn Association (ABA) suggest volumes corresponding to 4 ml/Kg/% body surface area to ensure a minimum diuresis. 100 ml/hr. in adults and 1.5 ml/Kg/hr in children up to 30 kg.

Tar burns

In the workplace, given the high temperatures of the damaging agent, the permeability of the fabrics, and the adhesive effect on the skin, it is necessary to promptly undertake a lowering of the temperature, and removal of the tar also using a mineral oil (inert substance) as a solvent.²³

Cold burns

In addition to the environmental temperature, there are many variables that affect the outcome: the duration of exposure, the patient's clinical history, the type of clothing worn, immobilization, environmental humidity. There is freezing caused by intense cooling with the formation of ice crystals at the intracellular level, impairment of the microcirculation and tissue anoxia.²⁴

There are lesions of the first degree if hyperemia and edema are present, without necrosis, those of the second degree if there are vesicles with a clear content, with hyperemia and edema with skin necrosis of partial thickness, those of III degree with skin necrosis that affects the subcutaneous tissue at full thickness with hemorrhagic vesicles) and finally those of fourth degree with skin necrosis at full thickness, involvement of muscles and bone and

subsequent gangrene.²⁴ On initial evaluation, the lesion may appear hard, cold, white and lacking in sensitivity, characteristics that restore perfusion after adequate treatment. Different characteristics, on the other hand, are expressed by a cold injury without frostbite, which instead present endothelial damage of the small circulation, with stasis and consequent vascular occlusion. To be considered the so-called trench foot or the hand from immersion in cold water, typical injuries in cases that remain at temperatures between 1.6 and 10° degrees.²⁵

Clinical evaluation

It begins with determining the baseline level of consciousness and verifying airway control for the duration of the hospital stay. In patients at risk of airway compromise, early tracheal intubation is essential to secure the airway.¹⁴ Risk factors indicating the need for prompt airway management include burns involving the face, neck, or anterior cervical region, presence of singed nasal hairs, intraoral burns, carbonaceous sputum, hoarseness, stridor, and altered voice. Inhalation injury should be suspected following exposure to smoke in enclosed spaces or in the presence of facial burns and soot in the oropharynx. Progressive facial swelling altered mental status, and extensive TBSA burns (>40%) also increase the risk of airway compromise. Delayed intubation may become technically challenging or impossible, necessitating emergent surgical airway access. Therefore, early prophylactic intubation should be considered when these risk factors occur.¹⁴

In subjects ventilated following tracheal intubation, the insertion of a nasogastric tube is useful to possibly reduce abdominal pressure and if it is being ventilated, the use of a controlled, intermittently Synchronized Assisted Mode (SIMV), Airway Release Pressure (APRV) and Continuous Positive Airway Pressure (CPAP) is useful. Oxygen administration should be ensured according to the objectives of arterial blood gases (PaO₂ 90–130 mmHg) or oxygen saturation (SpO₂ 97–100), preferably in humidified mode.²⁶ In the case of neuromuscular blockade (curarization) performed during the out-of-hospital phase, it is essential to know the type and time of administration. The detection of signs such as agitation, tearing and tachycardia as manifestations of pain is useful. On the other hand, as far as the administration of fluids via the venous route is concerned, the use of lactated ringer is useful, according to different formulas. The Parkland formula (4 mL/kg/% TBSA; 50% of the dose in the first 8 hrs; 50% in the subsequent 16 hrs.) is the most widely used formula for determining initial resuscitation rates,²⁷ although some centers use the modified Brooke formula (2 mL/kg/% TBSA; half in the first 8 hours; remaining half in 16 hours).²⁸ Recent ABA consensus statements suggest that these two equations establish limits for initial resuscitation.²⁹ Commonly used intravenous fluids are Ringer's Lactate or 0.9% NaCl solution.⁵ In intubation cases, the administration of ketamine at analgesic dose in case of severe pain or during the patient's mobilization is recommended. Ketamine can be administered parenterally as an intermittent (over 10–15 min) or continuous infusion. Clinicians should start at a low dose (0.1 mg/kg every 4 hours for intermittent; 0.1 mg/kg/h for continuous infusion) and increase if needed, to a maximum dose of 0.35 mg/kg (intermittent) or 0.25 mg/kg/h (continuous). In children IV – 0.1-0.3 mg/kg over 1-2 minutes (usually start at 0.3 but will max at 15-20 mg depending on severity of pain).³⁰ The intranasal administration is a good alternative to the IV route at a dose of 0.5 mg/kg.³¹

In cases of burns affecting the entire circumference of the limb, the distal neurocirculatory function should be assessed, evaluating the opportunity of an escharotomy already in the emergency room.

This surgery involves incisions in the areas of burned skin to relieve pressure and restore district circulation. Furthermore, escharotomy should always be performed under sedation, preferably with ketamine.

When calculating the fluid requirement to be infused, it is important to include partial thickness (second degree) and full thickness (third degree) burns in the calculation of the affected TBSA, excluding areas with superficial (first degree) burns. Overestimation of TBSA is frequent for inclusion in the calculation of superficial burns or the entire surface of a limb, only a part of it is affected.³²

During the evaluation of vital parameters, monitoring of central body temperature, which is more reliable than external temperature, should be provided. If available, temperature monitoring with a bladder catheter equipped with a thermo-probe is useful, as is Non-Invasive Blood Pressure Monitoring (NIBPM) in association with vital signs such as heart rate, respiratory rate, skin color and appearance.

Dressings

Dressing is very important in burns from the first moments of trauma. The choice of dressing changes during the various stages of wound evolution. There are different dressings in use but there is little data to support each individual approach.³³ A clean burn can be treated in the initial more exuding phase with a mild antiseptic for compress or even with a simple fatty gauze. From the beginning, particularly in superficial dermal burns, medicated gauze based on natural aqueous extracts that have an antiseptic and healing action such as Rigenase® and polyhexanide can be useful.³⁴ They can be applied daily or every other day. These products can be enriched with antimicrobials and are also suitable in the later evolutionary stages of burns that are not candidates for surgery because they promote natural spontaneous re-epithelialization. Initially, creams, especially colored or soiling, should be avoided, as well as for excessive exudation because they could interfere with the subsequent evaluation of the burn. When exudation is reduced, creams based on antimicrobials and/or healing agents can be used. On top of the dressing, several layers of sterile gauze should be applied in order to protect and absorb exudates and secretions and finally a fixation bandage useful in particular at the level of joint folds, hands and neck.

Most dressings on the market today are easy to use. Among the most widely used antimicrobials is silver sulfadiazine, an antibiotic cream or spray for topical use, effective against Gram negative bacteria including *Pseudomonas*. In the event of infection caused by the latter germ, the dressing tends to become foul-smelling and take on a greenish color. The cream should be applied in a layer 3-5 mm thick and covered with non-stick fatty gauze, sterile gauze and bandage. This type of dressing should be removed and reapplied every two days. Reversible leukopenia is reported in the literature in 3-5% of patients treated. Since it is an antibiotic, it is not recommended to use it prophylaxis.³³ Widely used for their effectiveness in controlling bacterial contamination are products based on the antiseptic polyhexanide, which is often found in combination with natural active ingredients such as wheat extracts (Rigenase®) with a healing and re-epithelializing action.^{34,35}

Hydrocolloids and polyurethanes are widely used for their ability to maintain a moist microenvironment, prevent infections, reduce pain, promote cleansing and promote re-epithelialization. In particular, they are useful when you want to accelerate the detachment of thin and adherent excises in superficial dermal burns and intermediate depth. Their replacement is easy and pain-

less because they do not stick to the wound. They usually need to be changed every three or four days, but they can be left in place for up to seven days, reducing the commitment of the nursing staff and the discomfort that accompanies dressings in particular in the burned child.

In burns that fail to heal within 2-3 weeks, surgical treatment should be considered. Superficial dermal burns, in fact, heal with *restitutio ad integrum* within two weeks.³⁶ The initially healed skin is dry and sensitive; erythema and pigmentation changes are common. Daily use of moisturizing and soothing creams and adequate photoprotection for 6-12 months should be prescribed. Itching is a common problem. Tetanus immune-prophylaxis management in burn patients should be an integral part of treatment and is recommended. In case of incomplete vaccination course, a passive immunization with human tetanus immune globulin (500 UI) is needed in case of incomplete vaccination (up to 21 days after injury) followed by primary course of 3 vaccinations. A booster dose of tetanus dose every 10 years are known to maintain immunity against tetanus in subjects with complete vaccination.^{37,38}

Treatment of pain

The pain and anxiety resulting from sudden trauma require treatment with analgesics and sedatives (morphine or other opioids and benzodiazepines), intravenously, in minimal and refracted doses. Anxiety may coexist more for hypoxemia and hypovolemia than for pain itself. Paracetamol and/or NSAIDs are often used as first-line therapy for mild to moderate pain, with the route of administration, usually oral or Intravenous (IV), depending on the patient's setting and needs. NSAIDs commonly prescribed in Europe include ibuprofen (1200 mg up to 3200 mg per day divided into three or four equal doses), diclofenac (75 mg to a maximum of 150 mg a day) and naproxen (at first, 275 or 550 mg 2 times a day).^{39,40} Weak opioids such as codeine 30 mg in combination with paracetamol 500 mg in Italy⁴¹ 1 dose 3 time a day and tramadol 50 to 100 mg orally every 4 to 6 hours are also used to treat moderate pain. Tramadol acts at L-opioid receptors and inhibits the reuptake of serotonin and noradrenaline.⁴² Opioids provide effective analgesia in cases of severe pain through various routes of administration, e.g., Intravenous (IV), Intranasal (IN), Intraosseous (IO), Subcutaneous (SC) and Oral (PO). Morphine is the most widely used drug for severe pain in Europe, but other opioids such as fentanyl and oxycodone and ketamine are also commonly used.^{39,40} Although the exact mechanism of action is largely unknown, the wide therapeutic index, cardiovascular stability and lack of respiratory depression make ketamine attractive for use in the prehospital setting.^{43,44} The dissociative effect associated with ketamine also makes it an effective treatment, although safety concerns have been raised regarding psychological manifestations and long-term psychotomimetic effects.⁴⁵ When prescribing drugs to patients, it would certainly be appropriate to also take into account the risk associated with the clinical conditions associated with the frailty of elderly patients, for example by considering the Beers criteria.⁴⁶

In burn cases, the administration of oxygen in addition to the infusion of liquids, analgesics, narcotics and sedatives is also useful. The patient could be wrapped in sterile drapes or simply cleaned, better if soaked in saline solution or mild antiseptics. Using systemic and topical antibiotics for prophylactic purposes, creams or smearing ointments that could mask the presentation picture is not recommended. During transport to the ED, thermal protection is useful in cases of very extensive burns or in fragile patients.⁴⁷

Disposition

Once the initial critical phase has been overcome and adequate treatment of the injuries has been ensured, the patient is discharged from the Burn Centre. After discharge, a phase of medical and sometimes even surgical treatments begins, lasting up to years, aimed at improving functional and aesthetic outcomes.^{48,49}

It may happen, for example, that patients with minor burns may also need physiotherapy, and for this reason it is important to identify these cases by starting this type of treatment at an early stage. In some cases, hypertrophic scars can benefit from prolonged therapy with elastic and compressive medications, braces, silicone foils, moisturizing and soothing creams. For these reasons, all patients considered cured should be re-examined after 30-60 days for physiotherapy.

Conclusions

Using the best available information, including that derived from the experience of experts due to the lack of evidence of effectiveness, a group of experts with the methodology of the NGT identified the fundamental steps and the related answers to the main questions for the ED physician. In this consensus document, the group of experts suggests the best answers to the most important questions identified in the 7 main steps of the path of the patient with mild and moderate burns in the ED, from prehospital treatment, and centralization criteria, to disposition.

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