



METHODS OF EARLY SURGICAL TREATMENT OF BURNS

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Abstract

Objective: This study evaluates the main methods of treatment of patients with deep burns, as well as patients with thermal trauma complicated by thermal trauma, compared with patients with early surgical treatment. improving the outcome of treatment of burn victims on the basis of improvement.

Method: From 2019 to 2020, 43 patients with deep burns of various localizations treated in the Department of Combustology of the RSHTYoIMSF Emergency Hospital, as well as 14 patients with deep burns, complicated by burns, according to the classification MKB-10 the results of a comprehensive examination and treatment of one patient were analyzed. health facility The comparison group consisted of 27 patients comparable in age, sex, severity of burns, and depth of injury. Results of the study: Gender distribution: men - 71 people (75.5%), women -23 (24.5%). Age of patients (Me 42 years (35 - 49.5)), 8 patients over 60 years (8.7%). Burns occurred as





a result of contact with fire (52%), hot liquid (15%), chemicals (15%), steam (8%), heated object (10%).

Conclusions:

1. Early surgical treatment of burns is not in vain. As the duration of injury increases, the appropriateness of its use decreases.
2. Achieving satisfactory rapid and long-term clinical results is possible only at the border of radical, healthy tissue, in the conditions of removal of burn necrosis.
3. Early necrectomy is a very traumatic operation associated with the risk of significant disruption of hemo and homeostasis.

Keywords: deep burns, burns, previous surgery, early necrectomy.

Introduction

According to WHO, burns are the third most common type of injury and the second most common in some countries. Every year 4-5 out of 5000 people on the planet get thermal burns. Among them, from 8 to 12 percent of the victims are elderly and senile people. Every year, 60,000 to 70,000 people die from burns worldwide [4,12]. The relevance of the treatment of burn wounds remains at an all-time high level, despite many years of experience in studying this problem. Among other things, the issue of the high cost of treatment required for this type of injury is acute: the average number of hospitalizations per year is 23 days, and the cost of one day of treatment. For the USA - about 3000 US dollars, for India - 250 US dollars [8].

Within the framework of the state policy in the field of public health protection and taking into account its implementation in accordance with the legislation of the Republic. In the Republic of Uzbekistan, "Health" is a state guarantee of public health, and the issue of treating burn patients is relevant not only in medicine, but also in the economic sphere [4,16].

The burn process is a complex set of biological reactions that respond to tissue damage and usually end in their treatment [2, 3, 6, 7]. However, it is accompanied by a complex of biological reactions: a violation of homeostasis (burn shock), infection with resistant flora (resistance to most groups of antibiotics), malformation, keloid, hypertrophic scars, as well as the possible development of disability. The range of surgical interventions used in the treatment of burn patients is quite wide. The method of free skin grafting was of the greatest practical importance for restoring lost skin in deeply damaged areas. The duration of treatment, its functional and cosmetic results depend on how clearly the indications for surgery are defined and the method





of skin restoration is chosen [1]. The spread of early surgical treatment of burns with primary or delayed skin grafting contributes to the rapid restoration of the integrity of the skin, reducing the development of possible severe complications, and improving the emotional state of patients. reduction of economic costs for the treatment of the patient.

Purpose

To evaluate the main methods of treatment of patients with deep burns, as well as patients with thermal injury complicated by thermal injury, in comparison with patients with early surgical treatment based on improved outcomes of treatment of burn patients.

Material and Method

From 2019 to 2020, 43 patients with deep burns of various localization, as well as patients with deep burns with complications of burns according to the ICD-10 classification, were treated in the combustology department of the SF RCEMP. analyzed a comprehensive examination and treatment of 14 patients. medical institution The comparison group consisted of 27 patients matched in age, gender, severity of burns and depth of injury. The patients were divided into 3 groups. Statistical data processing was performed using the Statistica 6.0 software package. The distribution was assessed using the Shapiro-Wilk test (for small samples). If the distribution of values in the sample obeys the normal distribution law, then similar data M - arithmetic mean and 95% CI - confidence interval (mean of the population mean) and ma, not obeying the normal distribution law Data are described using Me (median) and Pc (percentage).) is a distribution measure because they are less affected by the extreme case [7]. If these conditions are not met, the nonparametric Mann-Whitney U-test and the Kolmogorov-Smirnov Z-test are used. If the samples were independent and used in 26 comparisons between the two groups, the Mann-Whitney test was used. All three groups were evaluated using the statistical method of Kraskes-Wallace [7]. In this study, the significance level for testing statistical hypotheses was 0.05.

Results of The Research and Their Discussion

Distribution by sex: men - 71 people (75.5%), women - 23 (24.5%). Age of patients (Me 42 years (35 - 49.5)), 8 patients older than 60 years (8.7%). Burns resulted from contact with fire (52%), hot liquid (15%), chemicals (15%), steam (8%), heated object (10%).





| Cause of burns | From the fire | Hot liquid | Chemical substance | Steam | Contact with a heated object |
|----------------|---------------|------------|--------------------|-------|------------------------------|
| Percent | 52% | 15% | 15% | 8% | 10% |
| Floor | Male 71 | | Female 23 | | |

Often, lower extremity injuries, including shin injuries, are more common in women with deep localized burns than men, and upper extremity injuries, including hand injuries ($Z = -2.24526$; $p = 0.025$). injuries is 6-12% (M 9.14% (95% CI: 5.91%); 12.36%). All patients underwent early surgery on days 4-8 (M 6525 (95% CI: 4.81; 8.24)).

Early necrectomy consists in the excision of obviously vital necrotic tissue of no more than 10% of the total skin area in 3-5 days simultaneously or with delayed plasty. In the total sample, 14 patients (24.5%) corresponded to patients with deep burns of various localization, complicated by burns. Among the fatal burns - 5.2% (3 patients), the area of deep burns - more than 30%. The injury was complicated by severe burns and respiratory distress syndrome. Number of operations: one intervention - 50%, two interventions - 18%, 3 or more interventions - 32%. Patients with burns, local deep burns with the use of EN and patients with statistically significant necrectomy burns. Complications after early necrectomy: anemia - in 5 patients (8.7%); thrombocytopenia - 3, (5.2%); hematoma - 2 per day (3.5%); partial lysis, which required additional operations, in 7 patients (12.28%).

Conclusions

Early surgical treatment of burns is not in vain. As the duration of the injury increases, the expediency of its use decreases. Achieving satisfactory fast and long-term clinical results is possible only at the border of radical, healthy tissues, in conditions of elimination of burn necrosis. Early necrectomy is a highly traumatic operation associated with the risk of significant disturbance of hemo- and homeostasis.

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