

## Surgical Treatment of Deep Burns

Artiom ȘEVCIUC<sup>a,b\*</sup>, Virgiliu MANOLE<sup>a,b</sup>, Octavian CIRIMPEI<sup>a,b</sup>

<sup>a</sup> “Nicolae Testemițanu” State University of Medicine and Pharmacy, Ștefan cel Mare și Sfânt Blvd., no. 165, Chișinău, Republic of Moldova.

<sup>b</sup> IMSP Traumatology and Orthopedics Clinical Hospital, Chișinău, Republic of Moldova.

Emails: arteom97@gmail.com, virgil.manole6@gmail.com, octaviancirimpei@gmail.com

\* Author to whom correspondence should be addressed

### Abstract

*Introduction:* Deep burns, primarily caused by thermal exposure such as fire and hot liquids, result in severe tissue injuries with enduring consequences, prompting extensive research into their etiology, treatment, and ramifications. Surgical intervention is pivotal, though its efficacy varies based on diverse factors. Technological advancements and global collaboration are paramount for enhancing treatment efficacy and patient outcomes. *Research Aim:* The research aim involves a retrospective analysis of burn cases, particularly those involving respiratory tract involvement, with a focus on elucidating current diagnostic and treatment modalities. *Materials and Methods:* A patient cohort of 110 individuals, predominantly male (ratio 3:1), aged 40-80, underwent examination. Key criteria evaluated encompassed gender, age, pre-treatment diagnosis, intervals between surgeries, hospitalization duration, burn severity and extent, blood transfusions, burn types and locations, treatment modalities, and post-treatment complications. *Result:* Findings revealed a male predominance and increased susceptibility among individuals aged 40-60 and 60-80. Surgical approaches varied, encompassing excisional debridement, skin grafting, and, in some cases, amputation. Common causes of deep burns, such as fire and hot liquids, were identified, along with associated complications like infections and coagulation abnormalities. Effective management of these complications, including systemic inflammatory response syndrome and post-hemorrhagic anemia, proved pivotal for optimal patient outcomes. *Conclusions:* In conclusion, deep burns pose significant challenges, particularly for middle-aged and older individuals. Surgical interventions necessitate individualized and comprehensive approaches. Efficient management of associated complications is imperative for ensuring optimal patient recovery.

**Keywords:** Deep burns; Surgical treatment; Thermal exposure; Complications

