

# SEVERE BURN: MANAGEMENT OF AN ADULT PATIENT

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## INTRODUCTION

Burns are injuries resulting from the action of direct or indirect heat on the body. Traumatic wounds are caused by thermal, chemical, electrical or radioactive.

Besides prevention, attention should be given to factors that strongly influence the burned patient's prognosis: depth of the burn, mechanism of injury, affected body surface area, and, especially, early and effective treatment. This is a major challenge, requiring specific treatment units. The dermatologist or other physician, can provide primary care to this patient contributing no doubt to a better prognosis.

This study aims to report a large patient case Burnt in Burn Treatment Unit of the João XXIII Hospital from FHEMIG - Belo Horizonte - MG, with emphasis on dermatological aspects - clinical and surgical therapy approach.

## CASE REPORT

JAV, male, 53, suffered thermal burns by direct flame after having fired accidentally on the mattress of his bed with lighted candle. He had burns the airways and 40% of the body surface area (3rd degree in anterior and posterior trunk, upper limbs and neck). He had early care receiving fluid resuscitation, blood transfusions, clinical support and intensive care. Underwent surgical treatment by the team of plastic surgery: 1 escharotomy, 5 surgical debridement and 4 partial skin grafts. At the same time, he was monitored daily by the nursing team for bathing and dressing with silver sulfadiazine. Received systemic antibiotic for treatment of associated infections.

Treatment response was satisfactory, with significant improvement of skin lesions. At discharge, he was referred for outpatient treatment.



Fig 1: Three days after the first skin graft



Fig2: Patient after successful graft

## DISCUSSION

The treatment of burn patients is a major challenge, both by the complexity of the lesions, as the need for intensive and multidisciplinary care. Starting from this understanding, it developed the concept of Burn Treatment Center (BTC): closed units, with a multidisciplinary team specializing in the treatment of burn victims; and where our patient was treated.

The mortality rate of such patients is strongly influenced by the early and effective treatment of deep burns, injury mechanism in addition to the affected body surface area.

Non-surgical treatment includes cleansing, debridement, topical antimicrobials and dressing changes for the purpose of absorption, protection and environmental isolation measure. Emphasis should be given to analgesia for major burn because no resolution of this framework affect the proper course of treatment of injuries.

Topical universally accepted as the most effective to control the infection site is silver sulphadiazine. Some laboratories associate with 1% lidocaine to ease pain, and vitamin A to stimulate epithelialization. Silver sulphadiazine can also be applied to chemical topical debriding necrotic tissue and remove the topic to stimulate epithelialization. There are already topics, with high cost, containing growth factors reduce half the time to occur epithelialization. It is high in the use of dermal regeneration matrix resembling the integration of the autograft.

With proper early care and support for major burn, there is a better survival and a growing progress of functional and psychological rehabilitation and social reintegration of victims of burns.

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**Conflict of Interest: None.**

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