

A COMPARATIVE STUDY BETWEEN DIFFERENT TECHNIQUES FOR SKIN RESURFACING IN POST-BURN SCARING OF THE FACE



THESIS

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By

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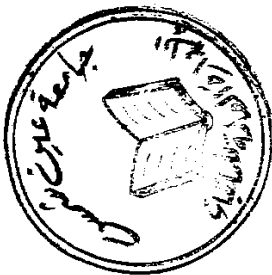
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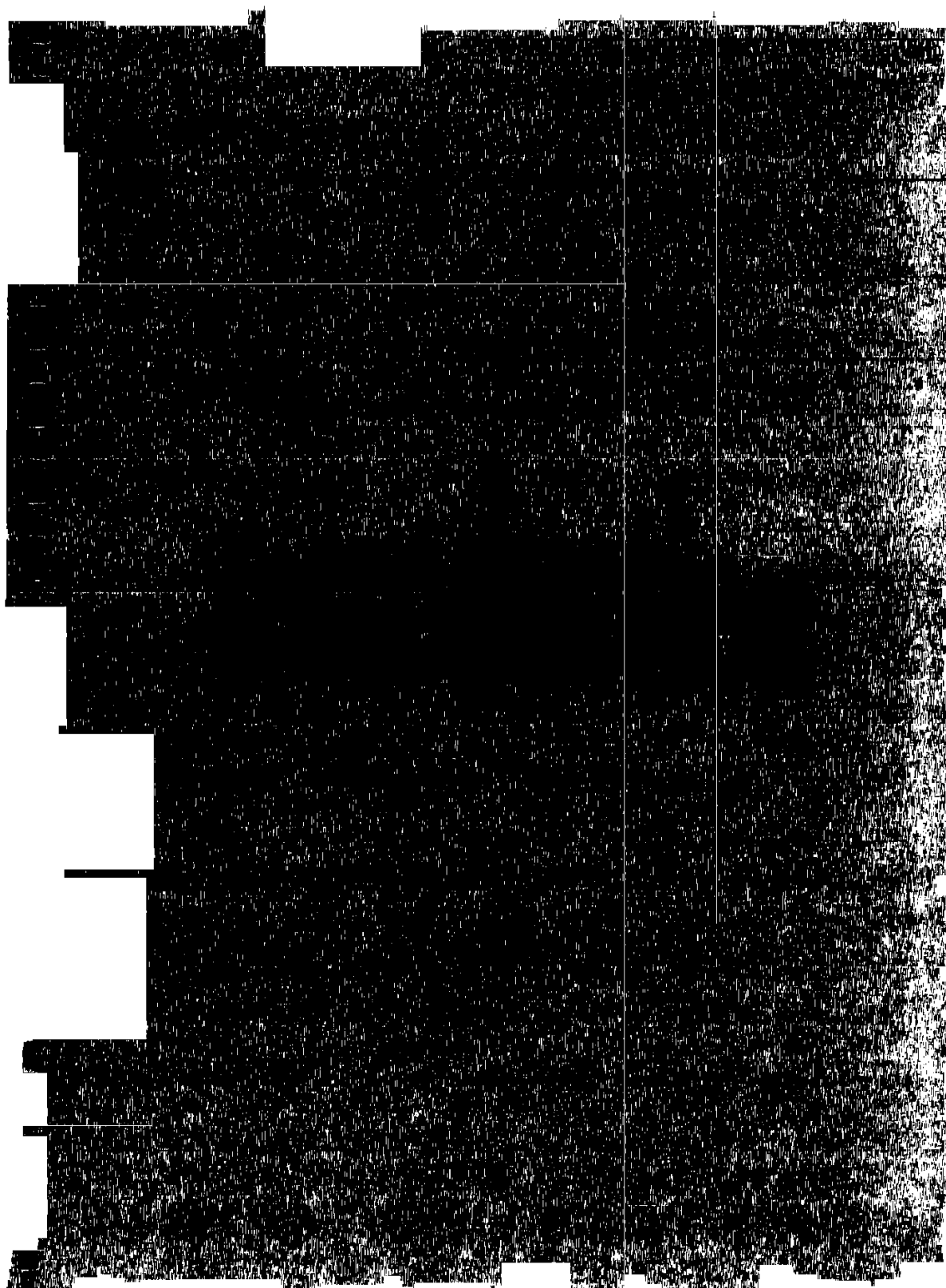
The Candidate



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INTRODUCTION

Post burn disfigurement of the face is one of the most physically and emotionally disturbing injuries incurred by man. It is encountered in a relatively high percentage of thermal injuries (*Sawyer et al, 1983*). It is one of the most severe, survivable forms of trauma - besides severe head injury and high spinal lesions. And, unlike wheelchair- bound spinal injury patients, their appearance is more likely to evoke public avoidance or revulsion rather than sympathy (*Burnside, 1996*).

Despite of the use of surgical procedures for the treatment of acute burns of the face, during the early stages of burn wound healing, non-surgical procedures are still being used. Some of these non-surgical procedures are silicone sheets or custom made pressure garments which help reduce the incidence as well as treat hypertrophic scarring (*Achauer, 1992*).

Early surgical reconstruction of the burned face is indicated in certain areas because of their functional significance. These include the eyelids to cover the exposed cornea thus preventing corneal ulcerations, or to cover exposed bones or cartilage to avoid their necrosis. Intermediate stage reconstruction, before scars maturation

is indicated in certain areas such as the mouth and nostril openings to facilitate eating, breathing and easy access for anesthesia later on (*Achauer, 1992*).

Definitive cosmetic reconstruction of the burned face is ideally performed after scars have matured. This is to avoid further hypertrophic scarring and contracture recurrences, which are common among burn victims (*Almaguer et al, 1985*).

Two basic elements determine the aesthetic outcome of any facial reconstructive procedures. These are the contour and the skin cover of the face (*Feldman, 1990*).

Restoration of facial contour means not only restoring normal shape to facial parts, but also returning them to their normal position. Contractures should be corrected and released to realign the displaced eyelids, lips or nasal alae (*Feldman, 1990*).

The facial skin cover and its restoration with the best possible cosmetic outcome were our main concern in this study.

In the planning of any reconstructive procedure, functional considerations are more important than the

appearance of any part of the body. In the face, the aesthetic goals and functional considerations are inseparable. Obtaining the best possible results for both is the concern of any plastic surgeon (*Lynch et al, 1967; Achauer, 1992*).

Therefore, the restoration of post burn scarred face represents a great challenge to any plastic surgeon.

