# Efficacy and safety of collagenase and hyaluronic acid in the debridement of Pediatric burned patients: our experience.

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## INTRODUCTION

The collagenase is a proteolytic enzyme able to remove the devitalized tissue, both fibrinous or necrotic. The simultaneous presence of hyaluronic acid exerts a protective action against the living tissue, providing an ideal moist environment with a high degree of hydration and wound bed preparation, stimulating the granulation tissue and facilitating the natural healing process .

## MATERIALS AND METHODS

We have been using this product in the treatment of deep second degree burns and third degree, to encourage deep cleansing of the wound, thus accelerating the healing and / or preparing the wound bed for a graft. We treated 24 patients aged from 3 months to 15 years. All patients were treated daily.

## RESULTS

All patients showed marked improvement after just 5 days of daily treatment. In addition, for 16 of the 24 patients treated, there has been a complete re-epithelialization, thus avoiding the planned surgical treatment. In the remaining 8 patients, there was an optimal wound bed preparation, although it was necessary to perform dermo-epidermal graft or regenerative dermal graft.

## CONCLUSIONS

The use of topical products based on hyaluronic acid and collagenase in deep second degree burns and third degree promotes rapid wound bed preparation. Hyaluronic acid stimulates, in fact, the granulation tissue while protecting surrounding healthy tissue, making the debridement, explained by the collagenases, easier to obtain.

These results encourage the use of this product to avoid the formation of dry eschar, facilitating the use of hydrosurgery.