

# Treatment of Second-Degree Burns with Lactic Acid Skin Substitute in Outpatient Setting: Pain and Patient Comfort.

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# Treatment of Second Degree Burns with Lactic Acid Skin Substitute in the Outpatient Setting: Pain and Patient Comfort

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## **OBJECTIVE**

A burn wound coverage has long been sought that, among other requirements, reduces pain, protects the fragile wound bed, and minimizes the risk of infection during the healing phase of second degree burns.

## **METHODS**

Our burn center experience with lactic acid skin substitute spans 3 years treating over 400 patients with partial thickness thermal burns, ages ranging 8 weeks to 95 years old.

Under moderate sedation, wounds are initially debrided and lactic acid skin substitute and petroleum based gauze is applied. Outer dressings and burn net are then applied.

The patient is discharged with outer layer dressing changes planned every 2-3 days. Over the next 6-14 days, loose edges of the skin substitute are trimmed as they separate from epithelialized wound margins until all has separated in the outpatient setting.

## **CONCLUSION**

The lactic acid skin substitute currently utilized in our burn center appears to meet the needs of pain control, wound bed protection, and infection risk minimization. The lactic acid skin substitute provides a relevant option in the treatment of partial thickness burns.

## **RESULTS**

Overall, there has been positive response from patients and families. Most patients and their families welcome the prospect of a “no-touch” wound care system as well as the decreased need for opiate pain control and dressing materials.

Benefits include:

- Dressing changes, with virtually no pain, are easily taught to family members.
- The need for IV pain control for dressing changes is reduced, resulting in decreased hospital length of stay.
- The lactic acid skin substitute is generally well tolerated at home.

Occasional reports of disadvantages include the following:

- Itch beneath dressing (toward the end of the healing phase);
- Inability to shower;
- Unusual (but inconsequential) color changes in bilayer as healing progresses; and
- Uncomfortable warmth of dressing (rare).

