Results From Application of an Absorbable Synthetic Membrane to Superficial and Deep Second Degree Wounds

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**Objectives**
- Understand different treatment options for second degree burns
- Compare outcomes after different treatments for second degree burns
- Discuss outcome measures for second degree burns
- Evaluate Cost of different treatment options for second degree burns

**Absorbable Synthetic Membrane**

**Positioning in the Treatment of Wounds**

**Properties**

- Wound Preparation
- Application
- Outer Dressing
- Dressing Change
- Removal
- Outcome
- Fewer Hypertrophic Scars (10.5% vs. 23%)
- Normal Dressing
- Discoloration, NOT
- Pseudomonas Infection

**Study Design**

- Retrospective chart review
- 2nd degree burns (2A and 2B)
- Patient received wound excision under sedation/anesthesia and absorbable synthetic lactic acid based membrane was placed (= standard care)
- Study period: September 1, 2013 – September 30, 2014
- IRB approval was obtained

**Outcome Parameters**

- Demographics
- Size of Burn
- Time to healing
- Normal healing
- Pain (average)
- Failure (required removal/grafing)
- Hypertrophic scarring

**Procedure**

- Dermabrasion (in OR) or rough debridement (under sedation) of wound
- Reise with sterile saline
- Dry dry
- Apply absorbable lactic acid membrane
- Cover with bristol (Germantex\textsuperscript{®}, A-terface\textsuperscript{®},…)
- Cover with absorbent gauze
- Cover with Avit填料 bandage or Coban\textsuperscript{®} or surgical netting
- Change outer dressing every 1-4 days down to bridal veil
- Remove when healed

**Results From Application of an Absorbable Synthetic Membrane to Superficial and Deep Second Degree Wounds**

- **Demographics**
  - 85 patients, 238 applications, for burns
  - Average age 30 years (9 weeks to 73 years)
  - Average Burn size 34% TBSA (1-33)
  - Planned in WR/BC 7/14

- **Absorbable Synthetic Membrane**
  - 15 study sites
  - 25 study sites were categorized as membrane treatment sites
  - 25 study sites were categorized as topical treatment sites
  - 159 study sites

- **Comparison to Other Skin Substitutes**

- **Cost Analysis**

**Case Study**

- **9 week old with 26% TBSA**

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