

# Use of Polymeric Membrane Dressings\* After Occlusive Deep Facial and Neck Chemical Peel Improves Outcomes

#### **PURPOSE:**

Pain, severe edema, extensive drainage, scabbing, long lasting redness, pigment alterations, delayed healing, contact dermatitis and infections can be complications after occlusive deep chemical peels. Minimizing or eliminating these potential complications facilitates early return to normal daily activities as well as optimizes the desired final outcomes from the procedures.

### **RATIONALE:**

Polymeric membrane dressings help reduce edema, pain, and inflammation when applied to burns, abrasions and other wounds. The dressings have also been shown to reduce inflammation, edema, bruising and pain when applied over injury sites where the skin is unbroken, such as sprains, strains and contusions. The dressings have been shown to decrease inflammation by altering the nociceptor response at and around the injury site. The nociceptor response to injury results in edema and inflammation as well as the sensations of pain, itching and burning at and around the site of injury.

# LEARNING OBJECTIVES:

- Outline the common complications commonly associated with deep chemical peels.
- 2. Recognize that polymeric membrane dressings directly address edema, bruising and inflammation as well as the sensations of pain, itching and burning at and around the site of injury.



10 NOVEMBER: 85-year-old female underwent deep chemical peel procedure.



11 NOVEMBER: Deep chemical peel completed after 24 hrs.

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3. Illustrate polymeric membrane dressings' role in improving patient recovery and increased comfort level after deep chemical peels.

#### **METHODS:**

Retrospective case series analysis of 20 patients undergoing extensive occlusive deep chemical peels was conducted. When the occlusive material was removed 24 hrs after application, the faces and necks were cleansed and appropriate sized sterile silver polymeric membrane dressings applied. The dressings were replaced 24 hours later and then at 3 day intervals with final removal on post-procedure day 10.

The results were evaluated compared to the historical outcomes achieved by the practice's historical practices which included: rinses of saline, water, vinegar and antibacterial soap to clean the wounds; antibacterial ointment was then applied.

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\*PolyMem<sup>®</sup> Silver<sup>®</sup> Dressings are made by Ferris Mfg. Corp., Burr Ridge, IL 60527 USA 800.POLYMEM (765.9636) • www.polymem.com



11 NOVEMBER: Occlusive plastic film removal.

#### **RESULTS:**

The occlusive deep chemical peel procedures were performed on 1 male and 19 females with an average age of 66 years (range 45-85). The use of the polymeric membrane dressings resulted in significant reduction in drainage and edema while eliminating scabbing, which helps eliminate risk of scarring and infections. After application of the dressings, the patients' faces and necks were painfree allowing patients to greatly reduce and often eliminate post-procedure pain medication. The use of the dressings shortened the healing time to 7 days from the anticipated 10-21 days. The expected post-procedure severe skin redness was greatly reduced in 2-4 weeks compared to the customary 2-3 months. The dressings also reduced the itching and stinging often experienced during the first week after the procedure. Use of polymeric membrane dressings reduced post-procedure skin pigmentation alterations and eliminated delayed healing, infection and signs of contact dermatitis.

#### **CONCLUSIONS:**

The dressings optimized the final outcome in a shorter amount of time while enhancing patient comfort. Polymeric membrane dressings are now a standard part of this treatment.



11 NOVEMBER: Silver polymeric membrane dressings cut and applied in order to reduce risk of infection.

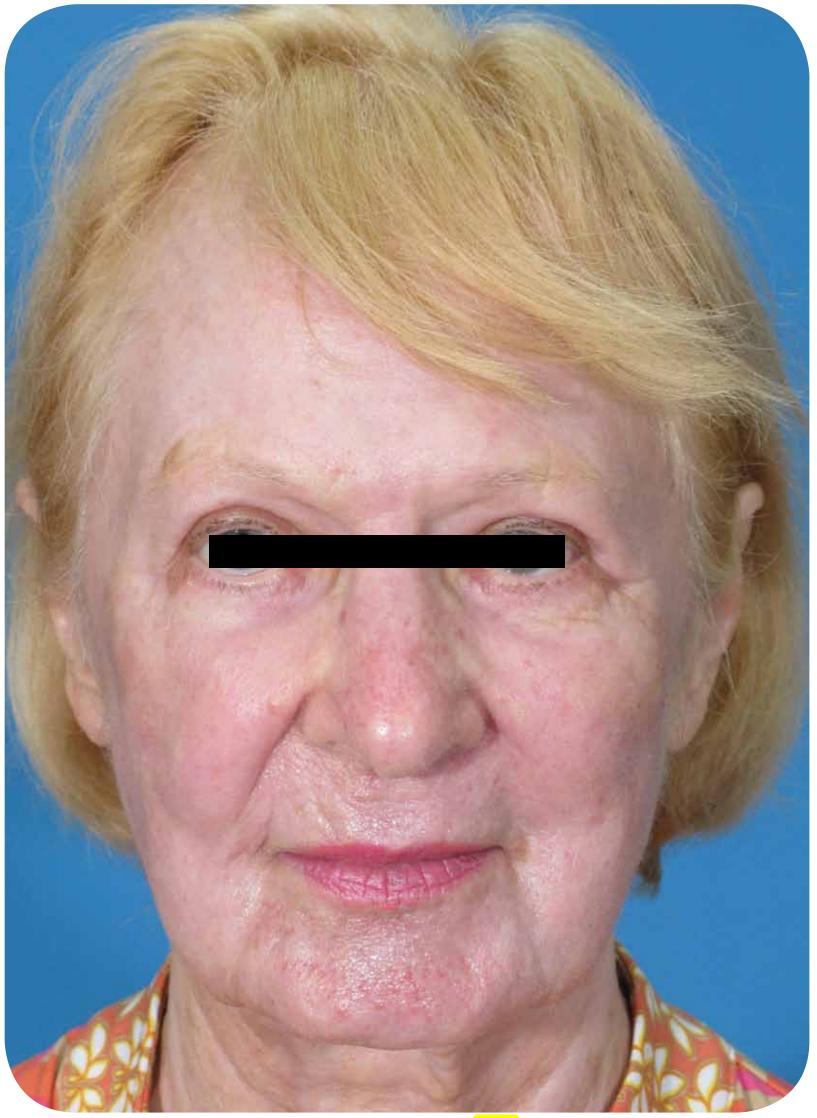


11 NOVEMBER: Patient is completely comfortable in a few hours after dressing application.

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4 WEEKS LATER: Excellent results apparent with this dressing approach.