CASE SERIES

Use of Semipermeable Polymeric Membrane Dressing* for the Management of Postsurgical Incision Wounds in Plastic Surgery

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PURPOSE

Pain and delayed wound healing at the surgical site present a common problem in aesthetic surgery and its management is often neglected. Additionally, postoperative surgical site infections remain a major source of morbidity. Effective postoperative pain treatment is important in promoting quality of life and early return to daily activities.

METHODS

Retrospective case series analysis of 14 patients undergoing elective plastic surgery procedure was conducted. Immediately following the surgery appropriately sized sterile polymeric membrane dressings were applied to all wounds. At discharge, instructions were given for appropriate dressing changes until day 10. Postoperatively, patients were assessed for pain, experience with dressing change and analgesic use. The incision sites were examined for closure and signs of infection.

OBJECTIVES

- Indicate the evidence for the use of polymeric membrane dressings to decrease inflammation, edema and pain on sutured surgical incision sites.
- Illustrate polymeric membrane dressings' role in improving patient recovery and increased comfort level.

RESULTS

2 males, 12 females with an average age of 58.2 years (range 36-75) formed the study cohort. Across the sample, a total of 38 procedures were performed (Gynecomastia= 1, Brachioplasty= 2, Eye/Lip Surgery= 5, Neck/Facelift= 7, Liposuction Procedures= 12, Reconstruction Procedures= 11). With a mean follow up of 11.3± 3 days, all incision site wounds closed fully and no signs of inflammation or wound infection were observed. Patients experienced less pain than anticipated based on the previous dressing approaches taken in this practice. 92% reported no pain at follow up and increased comfort levels in changing the dressing. There was a decreased analgesic use (n=12) compared to what would normally be expected for the respective procedures.

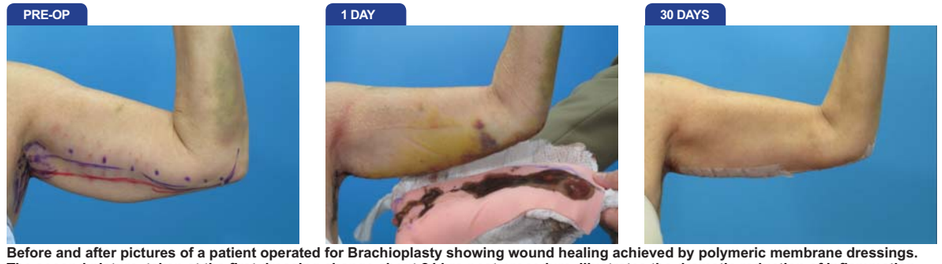
CONCLUSIONS

Polymeric membrane dressings offer effective management in reducing inflammation and wound pain while supporting rapid healing rate and improved quality of life in patients undergoing plastic surgery procedures.

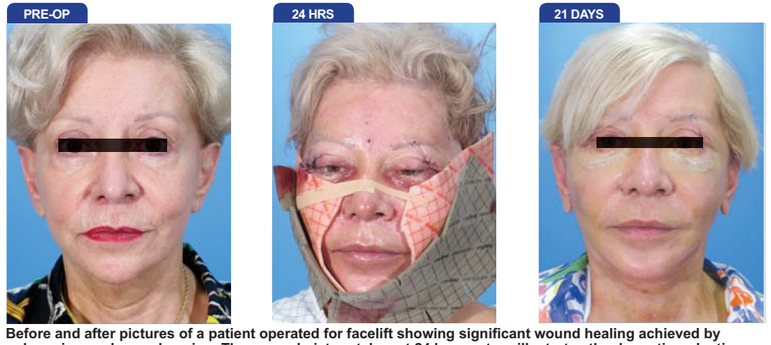
Plan for Gynecomastia surgery

Managed 10 days with another dressing approach. Polymeric membrane dressing initiated.

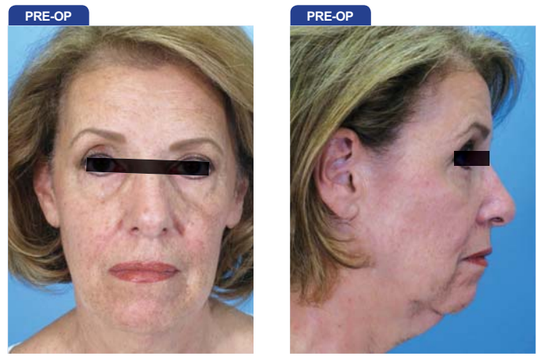
Polymeric membrane dressing used for 30 days to resolve and close necrotic surgical wounds.

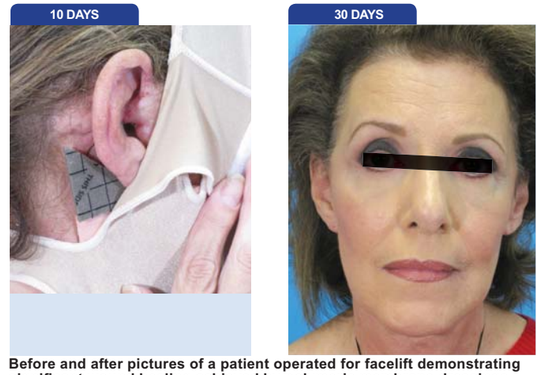


Before and after pictures of a patient operated for Brachioplasty showing wound healing achieved by polymeric membrane dressings. The second picture, taken at the first dressing change about 24 hrs post procedure, illustrates the dramatic reduction of inflammation, edema and bruising experienced by patients when polymeric membrane dressings are applied immediately at the close of the case.



Before and after pictures of a patient operated for facelift showing significant wound healing achieved by polymeric membrane dressing. The second picture taken at 24 hrs post-op illustrates the dramatic reduction in inflammation, edema and bruising experienced when polymeric membrane dressing are applied.





Before and after pictures of a patient operated for facelift demonstrating significant wound healing achieved by polymeric membrane dressings.

BIBLIOGRAPHY

1. Nichols RL. Postoperative infections in the age of drug-resistant gram-positive bacteria. Am J Med 1998;104:11S-16S

2. Leaper D J, Gottrup F. Surgical wounds. In: Leaper DJ, Harding KG, editors. Wounds: biology and management. Oxford: Oxford University Press, 1998; 23-40.

3. Beitz AJ, Newman A, Kahn AR, Ruggles T, Eikmeier L. A polymeric membrane dressing with antinociceptive properties: analysis with a rodent model of stab wound secondary hyperalgesia. J Pain. 2004 Feb;5(1):38- 47.

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