

Evaluation of Emu Oil In Lubrication & Treatment of Healed Burn Wounds

S. O'Banion, J. Griswold,
Texas Tech University Health Sciences Center, Lubbock, Texas;
American Burn Association, March 18, 1998. Chicago, Illinois.

Compiled from research by Harner Burn Center

AEA began working with Dr. John Griswold, Director of Timothy J. Harnar Burn Center (affiliated with the Texas Tech University Medical Center in Lubbock) during the first quarter of 1995. We agreed to a four-six month study to analyze the potentially effective involvement of emu oil in the healing process of burn wounds.

Healing burn wounds are painful and pose many difficulties for the recovery of a burned patient. Inflammation, lack of moisture, and wound sensitivity are often cited as impediments to daily activities and therapy. Current emollients vary in their ability to penetrate skin and decrease sensitivity and associated pain. Adequate lubrication aids the healing process by providing moisture in areas where sebaceous glands are depleted or currently dysfunctional.

Inflammation is the normal response to healing of a burn wound. This inflammation also causes scar tissue to form. Approximately 2.5 million people seek medical attention of burn injuries each year. Virtually all require some type of lubricant application during their recovery. This provides a large segment of the population with potential need for an emu oil product.

In a letter received from Dr. Griswold by the American Emu Association in January, 1997, he said, "We now have 10 patients with appropriate wounds who have completed at least initial evaluation of approximately nine months that could be compared in an treatment/control fashion in the same patient. This required wounds that were completely separate in opposite sides of the body yet in areas that would heal similarly in order to appropriately compare the emu oil versus a placebo. Two important results from evaluation of the data are:

1. Comments from patients almost unanimously favored emu oil as an end result and during application.
2. There was a unanimous difference noted in photographs taken of the wounds as far as reduction in scarring and inflammation done by three blinded observers as to which was emu and which was a control wound area. This difference was statistically significant.

We are in the process of providing you more in-depth details as to the complete study, patient demographics and results."

During the American Burn Association meeting on March 18-21, 1998, a poster presentation was made on the completed study. The presentation was entitled; Evaluation of Emu Oil in Lubrication and Treatment of Healed Burn Wounds. Accredited authors were M. Penturf, PhD., RD; S. O'Banion, RPh; and J. Griswold, MD.

The full and complete abstract presented to the American Burn Association reads, “Emu oil has been reported to have significant anti-inflammatory effects, and has been used both in cosmetics and therapeutic vehicles. This experiment was conducted to evaluate emu oil as a lubricant as a aid in reducing scar formation in healed burned wounds. Ten patients were evaluated in a randomized double blind study for a minimum of 6 months. Patients served as their own control by utilizing bilateral wound areas for application of emu oil (New Discoveries, Inc. Florence, MS) and the placebo lubricant on independent sites respectively patients were instructed to apply both lotions daily on an as-needed basis. During scheduled out-patient clinic visited, patients’ wounds were evaluated by the Vancouver Scar Assessment Scale. Photos were taken on each clinic visit. Treatment ranged from 195 to 385 days before discontinuation. LL of the patients were men, ranging in age from 24-63 years. Per scar assessment, significant differences were noted in pigmentation and pliability (p less than 0.02). There were no differences noted in vascularity and height of the healed wound, (=0.08). Pictures were scored by a four person blinded panel on pigmentation, scar maturation and general health of the skin. Emu treated areas healed significantly better (p less than 0.02) than control in photo analysis.

Statistics were calculated by analysis of variance, means were separated with the F-protected predicted difference test. The results of the pilot study are promising, however, additional research is needed to further elucidate any therapeutic qualities of the oil.”

Now that the study has been presented in a peer-reviewed context, the abstract can be cited in research studies. Proper citation id “Evaluation of Emu Oil In Lubrication and Treatment of Healed Burn Wounds,” S. O’Banion, J. Griswold, Texas Tech University Health Sciences Center, Lubbock, Texas; American Burn Association, March 18. 1998. Chicago, Illinois.

In closing, because the study was thought to be ground breaking at the time, our expectations were high. This study now pales in comparison to current experiences of the benefits of emu oil in wound healing.