The Use of Olivamine™-Containing Skin Care Products* for Morbidly Obese Patients with Lymphedema

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INTRODUCTION
Lymphedema is a chronic condition characterized by edema, which is usually located in the limbs, trunk and genitalia. The World Health Organization estimates that 45 million people have symptoms associated with lymphedema1. Recent literature has focused on the treatment of massive localized lymphedema in morbidly obese patients.1-3 Lymphedema associated with obesity is most commonly localized in the lower limbs and the abdominal pannus1. Swelling induces chronic venous insufficiency. Venous return is initially compensated by the lymphatic system but continual overload results in lymphatic failure and edema. Edema can arise due to venous and lymphatic edema. Localized lymphedema in obese patients results in numerous symptoms associated with skin breakdown. Therefore, managing and understanding the pathology of lymphedema has become increasingly relevant3 and important in improving the quality of life in the morbidly obese.

PROBLEM
The reduction of lymphatic drainage induces a build up of inflammatory mediators in the skin. The accumulation of immune proteins and cytokines, in addition to venous and lymphatic edema, results in skin/barrier dysfunction2.4 Inadequate skin/bARRIER function eventually leads to infection, erythema and dermatitis2. The outermost layer of the skin, the stratum corneum consists of non-metabolically active lipids5,6,9. These skin layers require nourishment and protection to reduce problematic symptoms associated with localized lymphedema.

OBJECTIVE
To determine if a skin care regimen using Olivamine containing skin care products could reduce skin breakdown, pain, odor and pruritis in the morbidly obese with lymphedema.

METHODOLOGY
Nine morbidly obese patients, with lymphedema, were evaluated over an approximate six month period. The lymphedema presented on the lower extremities or abdominal pannus. Four criteria, including dry/flaky/scaly skin, erythema, fungal component, and maceration along with pain, odor and pruritus were evaluated on an initial physician visit. Final physician evaluations were noted for each patient. All patients were treated in the office and then given Olivamine containing products for self-care. Patient protocols were based on the location of the lymphedema and their symptoms.

PROTOCOLS
Macerated and Infamed Skin
1. Cleanse with Olivamine containing cleansing lotion and then pat dry
2. Spray area with Olivamine containing antimicrobial cleanser
3. Apply Olivamine containing zinc protectant paste
4. Lightly dust area with Olivamine containing antifungal powder or apply Olivamine containing antifungal cream, as indicated

Dry/Flaky/Scaly Skin
1. Cleanse with Olivamine containing cleansing lotion and then pat dry
2. Spray area with Olivamine containing antimicrobial cleanser
3. Apply a small amount of Olivamine containing nourishing cream
4. Apply Olivamine containing dimethicone/silicone ointment using gentle strokes
5. Lightly dust area with Olivamine containing antifungal powder or apply Olivamine containing antifungal cream, as indicated

CASE STUDY – DV
DV is a 54 year old male weighing 455 pounds with a body mass index greater than 60. He presents with severe localized lymphedema in his lower limbs, trunk, abdomen, and genitalia. He graduated high school at age 18 and attended college for 2 years. In 2001, the patient experienced a surgical complication with a metal plate in his right leg for a prior knee injury. Since then, the patient has had swelling in his right leg and right ankle. He began using hydrotherapy 5 days a week and intermittent compression stockings 7 days a week. In 2006, he gained 300 pounds, which was associated with increased lymphedema. He also developed a deep vein thrombosis in his right leg. The patient was admitted for right lower extremity lymphedema and deep vein thrombosis. He was discharged with a compression garment. The patient was referred to our clinic for treatment of his lymphedema. Upon evaluation, he was found to have lymphedema in his right lower extremity, right knee and right ankle. His symptoms were controlled and his quality of life improved with ongoing use of the Olivamine containing skin care products.

CONCLUSIONS
Eighty nine percent (99%) of the skin breakdown, odor, pain, and pruritus were reduced or completely resolved and maintained for at least six (6) months. In most cases, patients who had experienced painful, chronic symptoms for numerous years drastically improved in a matter of weeks. The Olivamine containing skin care product regimen significantly improved patient quality of life by diminishing the agony that accompanies skin breakdown associated with lymphedema.

REFERENCES