**BACKGROUND**
Lamellar ichthyosis is an autosomal recessive disorder that is apparent at birth and is present throughout life. Patients with lamellar ichthyosis have accelerated epidermal turnover with proliferative hyperkeratosis, in contrast to retention hyperkeratosis. The prevalence of lamellar ichthyosis is less than 1 per 300,000 live births and is equally distributed between males and females. The newborn is born encased in a colloidion membrane that sheds within 14 days, revealing generalized scaling with variable redness of the skin. The scaling may be fine or platelet-like, resembling fish skin. In the neonatal period, following the shedding of the colloidion membrane, the newborn is at risk for secondary syphilis and hypernatremic dehydration. As the child ages, the hyperkeratosis can interfere with normal sweat gland function, which can predispose to heat intolerance and potential heat stroke. Although the disorder is not life threatening, it can be disfiguring and cause considerable psychological stress.

Since this disorder has no cure, treatment is directed at decreasing symptoms. Emollients are traditionally applied after showering or bathing. The stratum corneum can absorb 6 times its weight in water, and a heavy emollient, such as petrolatum jelly or water-in-oil preparations should be applied while the skin is still wet. Alpha-hydroxy acids, such as lactic acid, help reduce cornyocyte adhesion and decrease the thickness of the stratum corneum. Urea creams can help soften scales. Salicylic acid in combination with propylene glycol help to remove dark scaling. Topical retinoids decrease thickened scaling. Because of the significant long-term adverse effects, reserve systemic retinoids for severe disease that is refractory to topical treatment. Tazarotene topical 0.05%, (a receptor-selective retinoid), and calcipotriol (a synthetic derivative of vitamin D3) are now available over the counter (Olivamine* based products). They are a new advanced skin care line that provides the skin with surfactant-free cleansing ingredients, amino acids, vitamins, and antioxidants in addition to the most sophisticated silicones (moisturizers) available for superior deep repair and moisturization.

**PATIENT RECOMMENDATIONS**
- Shower only twice a week. Bathe the arms and groin more frequently, if necessary.
- Use only tepid ( lukewarm) water when showering and limit the time actually in the water.
- Do not use soap, only a phospholipid based cleanser.
- Use a humidifier for your home.
- Consider moving to a warmer and more humid climate.
- Consider taking supplements such as Flaxseed Oil, Omega 6 and Omega 3 essential fatty acids and Evening Primrose Oil. This can help provide internal healthy oil for your skin.
- Consider taking an over-the-counter antihistamine for intense itching.

**STUDY PROTOCOL**
1. Cleanse with Olivamine based 4-in-1 cleansing lotion or 4-in-1 body cleanser and gently pat dry.
2. Follow immediately with a thin coating of Olivamine based nourishing repair cream and allow to dry.
3. Then apply Olivamine based dimethicone/silicone barrier cream to seal in the moisture and prevent dehydration of the skin.

**CASE STUDY**
LP is a 17 year old, Hispanic female who was diagnosed with Lamellar Ichthyosis at birth. She is a high school student and active in young adult church functions. Her lifestyle has been limited in the summer due to extreme heat which was exaggerated by the preparations she was using prior to her participation in the study. She suffered heat exhaustion once due to her condition. She has no other significant medical history. Previous treatment regimen included daily showers or baths followed with application of some positive results, none has proven to be a panacea. Some of the newer therapies that have resulted in clinical improvement are Locobase fatty cream, (5% lactic acid and 20% propylene glycol in lipophilic cream), topical N-acetylcysteine, (an antiproliferative effect), tazarotene topical 0.05%, (a receptor-selective retinoid), and calcipotriol (a synthetic derivative of vitamin D3). Also new to the market are the Olivamine* based products. They are a new advanced skin care line that provides the skin with surfactant-free cleansing ingredients, amino acids, vitamins, and antioxidants in addition to the most sophisticated silicones (moisturizers) available for superior deep repair and moisturization.

**RESULTS**

**REFERENCES**

Groom M. Decreasing the Incidence of Skin Tears in the Extended Care Setting with the Use of a New Line of Advanced Skin Care Products Containing Olivamine. Presented at the Symposium on Advances in Skin and Wound Care. San Diego, CA 2005.


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