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## BACKGROUND

- Congenital hemidysplasia with Ichtyosiform erythroderma and limb defects syndrome (**CHILD syndrome**) is a rare X-linked dominant syndromic disorder of cholesterol metabolism.
- Epidermal **hamartoma** is a clinical expression of CHILD syndrome.
- Using coapplication of **topical formulation of simvastatin and cholesterol (TFSC)** on skin lesions after previous failures has recently been reported<sup>1</sup>. No specialty is available, leading to a compounded preparation at the hospital pharmacy.

## OBJECTIVES

To describe **protocol of use, efficacy and safety** of this TFSC for one patient.

## METHODS

### Patient:

- A woman born in 1988 diagnosed CHILD Naevus (missense variation in exon X of *NSDHL* gene).
- **Hemi body epidermal hamartoma** on the right side of the body.
- Skin lesions did not improve with acitretine, topical corticoid, and various types of dressings.

### Protocol:

- 1st month: 0.5% simvastatin and cholesterol at in Excipial Lipocrema<sup>®</sup>, twice per day on a limited area to test tolerance.
- After 1 month: at 2%, twice per day on a wider area.

### Evaluated criteria:

- Clinical response: aspect and extension of the skin lesions.
- Tolerance: clinically and biologically assessed.

### Formulation:

- Original ethanol-free formulation with simvastatin, cholesterol in Excipial Lipocrema<sup>®</sup> (Galderma).
- Incorporate simvastatin in powder and triturated ground powder of cholesterol with excipial.
- Physical stability was satisfactory for at least 30 days.

## RESULTS



02/2016: Beginning of treatment.



01/2017: Erythema has whitened.



08/2017: Erythema has totally disappeared.



03/2018: Improvement begins on the papillomatous aspect.



After 30 months, whitening areas were stable, with persisting papillomatosis in the stump and flexion areas.

A two-month supply disruption of simvastatin powder during the first year of treatment leads to a reappearance of erythema. When TFSC resumed, the lesions improved again.

### Tolerance:

- The main reported side effect was the skin's dryness on application, leading to emollient use.
- Complete blood counts, electrolytes, urea, triglycerides, cholesterol, CPK and liver function have remained normal.

## CONCLUSION

This case report shows interest and safety of TFSC in hamartoma lesions, indicating a potential interest in other types of hamartoma.

<sup>1</sup>: Alexopoulos A and Kakourou T. CHILD Syndrome: Successful Treatment of Skin Lesions with Topical Simvastatin/Cholesterol Ointment—A Case Report. Pediatric Dermatology Vol. 32 No. 4 e145–e147, 2015.

