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Stable Ozonides with Vitamin E Acetate versus Corticosteroid in the Treatment of Lichen Sclerosus in Foreskin: Evaluation of Effects on Inflammation.

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BACKGROUND: Lichen sclerosus (LS) is a disease of the skin of unclear etiology that can occur in the foreskin. Topical therapy with corticosteroids is recommended, but they can have side effects.

OBJECTIVES: We aimed to compare the effects of ozonides with vitamin E acetate (OZOILE) versus topical corticosteroid in children undergoing circumcision.

METHOD: Twenty children undergoing circumcision were treated before surgery: 10 children with OZOILE cream and 10 with 0.1% mometasone furoate once a day for 7 days. Ten age-matched patients with LS of the foreskin without any treatment were recruited as controls. Transcript levels of proinflammatory and anti-inflammatory cytokines and e-cadherin were evaluated in removed foreskins by qRT-PCR.

RESULTS: OZOILE and steroid topical treatment produced a similar reduction of TNF- α and IL-1 β mRNA levels in foreskins from patients with LS when compared to untreated patients ($p < 0.001$). OZOILE and steroid treatment caused an increase

in the transcript levels of IL-13 and e-cadherin in the foreskin of patients affected by LS in comparison to untreated foreskin ($p < 0.001$).

CONCLUSIONS: On the basis of our biochemical data, a randomized clinical trial might be useful to verify the actual clinical effect of OZOILE as alternative treatment to corticosteroids in children affected by LS of the foreskin.

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