Appendix SI

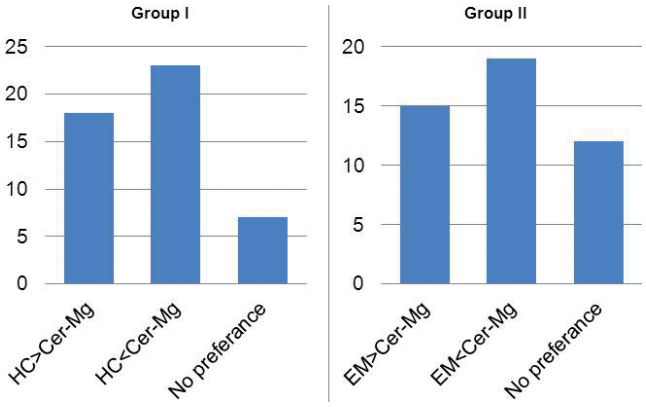
RESULTS

Local pruritus (itch) intensity

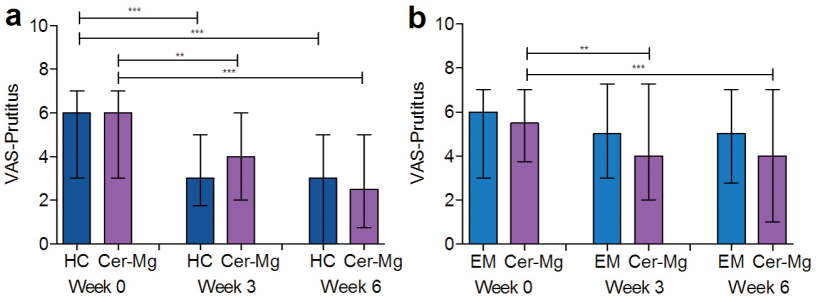
Group I: Hydrocortisone vs. Cer-Mg. Local itch intensity, as assessed by VAS, decreased significantly at week 3 and week 6 after both treatments (SFig. 1)

The decrease in VAS from baseline (ΔPruritus) after hydrocortisone and Cer-Mg differed significantly at week 3; however, at week 6 the difference in ΔPruritus between the 2 treatments was not significant.

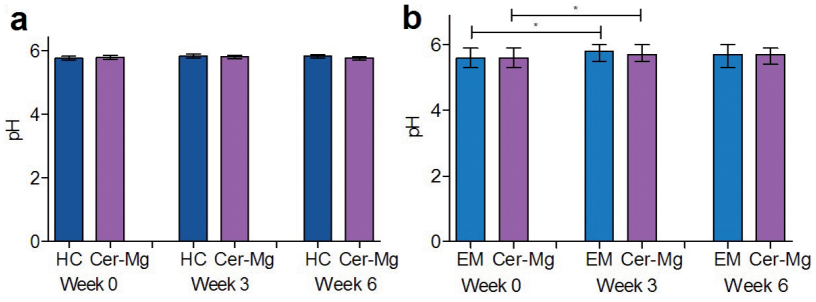
Group II: EM vs. Cer-Mg. As shown in SFig. 1 a significant decrease of VAS was observed after Cer-Mg treatment at both time-points, while VAS after EM did not change significantly from the baseline values. The reduction from baseline (ΔPruritus) was greater after Cer-Mg compared with EM at both time-points (Table II).



SFig. 3. Overall preference of the patient in groups I and II. y-axes indicate the total number of patients giving a statement on preferability. The greater-than sign indicates the patient preference.



SFig. 1. Pruritus (visual analogue scale (VAS) score) at baseline after 3 and 6 weeks of treatment in: (a) group I (hydrocortisone (HC) vs. Cer-Mg; $n=48$); and (b) group II (EM (unguentum leniens, also called cold cream) vs. Cer-Mg; $n=47$). Results are shown as medians and interquartile ranges. Significance levels as tested by Wilcoxon signed-rank test: $^{**}p<0.01$; $^{***}p<0.001$.



SFig. 2. pH at baseline after 3 and 6 weeks of treatment in: (a) group I (hydrocortisone (HC) vs. Cer-Mg; $n=48$); and (b) group II (EM vs. Cer-Mg; $n=47$). Results are shown as means and standard deviation (SD). Significance levels according to Student's *t*-test: $^{*}p<0.05$.

Skin surface pH

Group I: hydrocortisone vs. Cer-Mg. The pH levels in both arms of the treatment did not change significantly over time. After 6 weeks a small, but statistical, significant difference exists between the 2 arms (SFig. 2).

Group II: EM vs. Cer-Mg. The pH values after Cer-Mg increased after 3 weeks of treatment from 5.6 (IQR: 5.3–5.9) to 5.7 (IQR: 5.5–6.0). Treatment with EM led to a pH increase from 5.6 (IQR: 5.3–5.9) at baseline to 5.8 (5.5–6.2) at week 3. No significant differences were detected between the treatments at any time-point (Table II).

Tolerability and subjective preference

No severe adverse events were recorded during the trial. No allergic reactions were observed in the HC and Cer-Mg study arms. Overall preference slightly favoured Cer-Mg cream in both groups (see SFig. 3).