

A Novel LCD (Coal Tar) Solution Helps Reduce Regression of Plaque Psoriasis After 12 Weeks of Treatment

Maria Beatrice Alora-Palli, MD, Alicia Van Cott, RN, Alexa B. Kimball, MD, MPH
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Introduction

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The objective of this study was to compare regression rates and patient satisfaction between LCD- and calcipotriol-treated adults with moderate plaque psoriasis 6 weeks after completing treatment.

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Psoriasis patients who completed 12 weeks of topical therapy with either LCD solution (15%, equivalent to 2.3% coal tar) or a commercially available calcipotriol cream (0.005%) twice daily were re-assessed after 6 weeks without treatment. A blinded investigator assessed size and severity of their psoriatic plaques using a modified PASI and PGA that excluded the scalp. Patients completed questionnaires evaluating their quality of life, psoriasis symptoms, and effectiveness, tolerability and overall satisfaction with the outcome of the treatment.

Full Study Methodology

Design	Randomized, investigator-blind, monadic, active-controlled
Population/Inclusion	Males & females in general good health, 18 years or older, with moderate chronic plaque psoriasis involving 3-15% body surface area (excluding scalp, face, palms, soles and groin)
Exclusion Criteria	Topical psoriasis treatment within previous 2 weeks, phototherapy or oral therapy within previous 4 weeks, systemic immunomodulatory therapy within previous 12 weeks; impaired renal or liver function; pregnancy/lactation
Duration	18 weeks (12 weeks of treatment, 6 weeks of follow-up)
Treatments	Group 1 (n=30): LCD solution 15%, twice daily (Psorent®) Group 2 (n=30): Calcipotriol cream 0.005%, twice daily (Dovonex®) Groups 1 & 2: as needed use of a commercially available topical moisturizing lotion
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Statistics

Treatment data were analyzed using a modified intent-to-treat (ITT) population at $\alpha = 0.05$ with missing scores filled in by last observation carried forward (LOCF) method. Patients who completed the end of treatment visit (Week 12) and the end of follow-up visit (Week 18) were subsequently included in the regression data analysis. Regression data were analyzed at $\alpha = 0.05$ using the following statistical methods:

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Of the 60 patients enrolled, 23 patients from the LCD group and 20 patients from the calcipotriol group completed the Week 12 Visit and the Week 18 Visit and represent the analyzed regression population.

SUMMARY OF TREATMENT EFFECTS (WEEK 12)⁷

> **PASI 50 and PASI 75**: Significantly more patients in the LCD group than in the calcipotriol group achieved PASI 50 (67% vs. 36%) and PASI 75 (37% vs. 0%), $P < 0.05$.

> **Percent Change in PASI**: Baseline PASI scores improved 58% in the LCD group vs. 37% in the calcipotriol group, $P < 0.05$.

> **PGA Scores**: Significantly lower disease severity based on PGA scores was observed in the LCD group compared to the calcipotriol group, $P < 0.05$. (Fig. 1)

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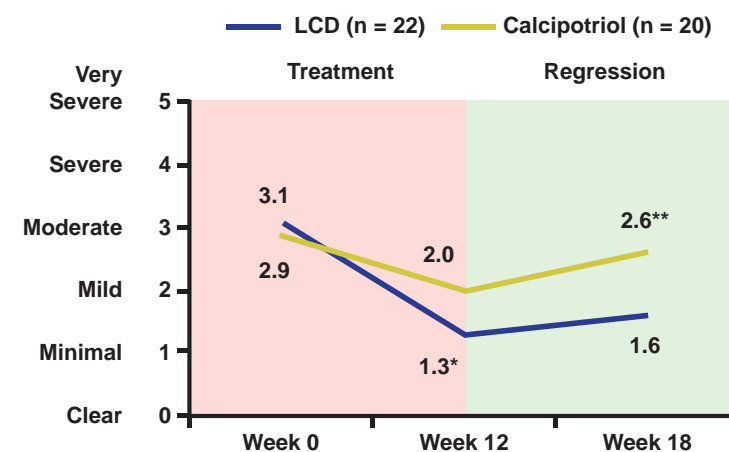
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> **Regression Rates**: Significantly fewer patients regressed to their baseline PGA score after stopping LCD therapy (5/22) than after stopping calcipotriol therapy (14/20), $P = 0.005$.

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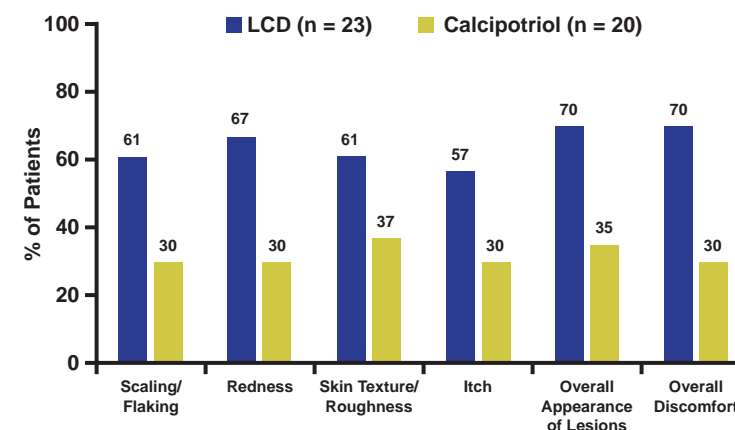
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Figure 2. Percent of Patients Who Reported Control of Psoriasis Symptoms During Regression[†]



[†]Patients were asked to rate the change in their psoriasis characteristics between Week 12 and Week 18 on a scale of Much Worse, Somewhat Worse, Slightly Worse, About the Same, and Better. More LCD-treated patients than calcipotriol-treated patients reported that their psoriasis was the same or better after 6 weeks without treatment.

Clinical Photography

Figure 3. Abdominal Plaque Treated with LCD Solution



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Summary

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PSORIASIS RESPONSE:

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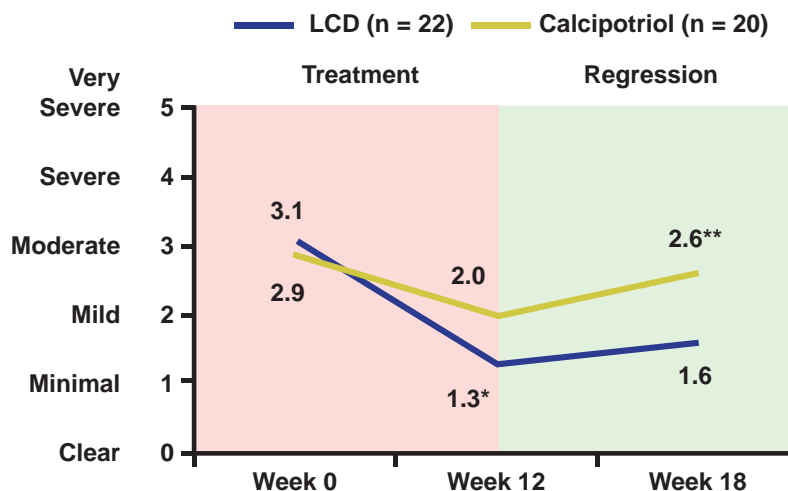
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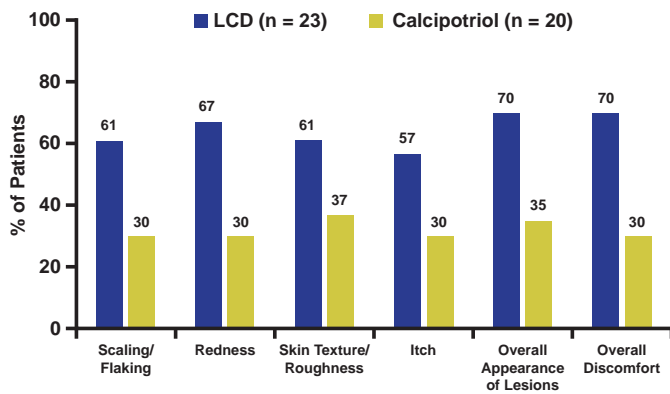


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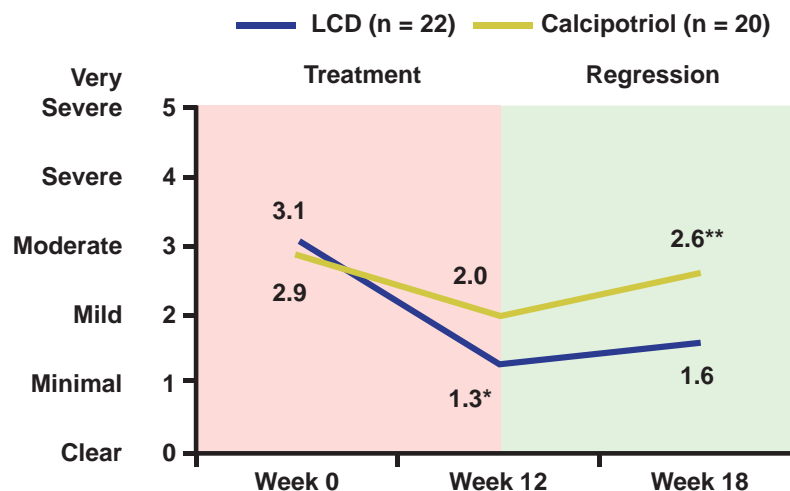
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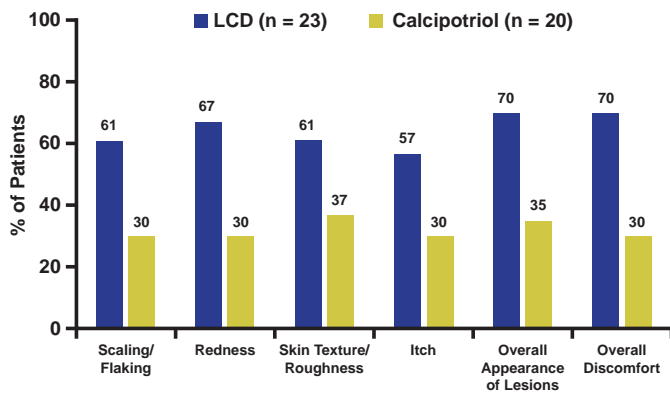


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