

Clobetasol Propionate Cream Versus Halcinonide Cream in Psoriasis

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Clobetasol propionate, probably the most potent topical corticosteroid yet developed,¹ has recently been approved for use in the United States. Confirming vasoconstrictor assay predictions of clinical effectiveness,² clobetasol has been shown in double-blind, multicenter trials^{3,4} to be statistically significantly superior in 0.05% cream formulation to 0.05% fluocinonide cream and in 0.05% ointment formulation to 0.05% betamethasone dipropionate in an optimized vehicle in the treatment of psoriasis. Clobetasol propionate cream 0.05% has also been compared with the potent topical corticosteroid cream halcinonide 0.1% in a recent two-center study. The results of the 2-week randomized double-blind, left-right paired trial (the most accurate comparative measure of topical corticosteroid efficacy in psoriasis) are presented below.

Materials and Methods

Clobetasol and halcinonide creams were applied twice daily for 2 weeks, in quantities not exceeding 50 g per week, by 73 patients with moderate-to-severe psoriasis. (Identical blind-labeled tubes of cream were randomly marked for use on patients' right or left sides.) Investigator preference and patient preference were assessed on treatment days 3, 7,

and 14. Treatment preferences were again assessed 2 weeks after discontinuation of therapy, as was the incidence of relapse by treatment side.

Results

By investigators' preference, a significant treatment difference in favor of clobetasol became evident as early as the third day and more than doubled by two weeks (Fig. 1). After 2 weeks without therapy, the margin of difference widened further, to 81% clobetasol-treated sides preferred versus 3% halcinonide-treated sides preferred. Patient preference showed a similar pattern (Fig. 1). Also, significantly fewer patients showed relapse on the clobetasol side 2 weeks after treatment was stopped (3% clobetasol versus 63% halcinonide; $p < 0.001$, McNemar's test).

Both drugs were well tolerated: seven instances of mild adverse cutaneous reactions were reported for clobetasol and nine for halcinonide.

Discussion

The results of this comparative trial of clobetasol and halcinonide creams demonstrate a superior pharmacologic efficiency of clobetasol in psoriasis as measured by degree, rate, and duration of healing. Similar results have been reported in comparisons of clobetasol and fluocinonide creams³ and clobetasol and betamethasone dipropionate ointments⁴ and support the predictive value of the vasoconstrictor assay in determining clinical efficacy.

Drug Names

betamethasone dipropionate in an optimized vehicle: Diprolene
clobetasol: Temovate
fluocinonide: Lidex
halcinonide: Halog

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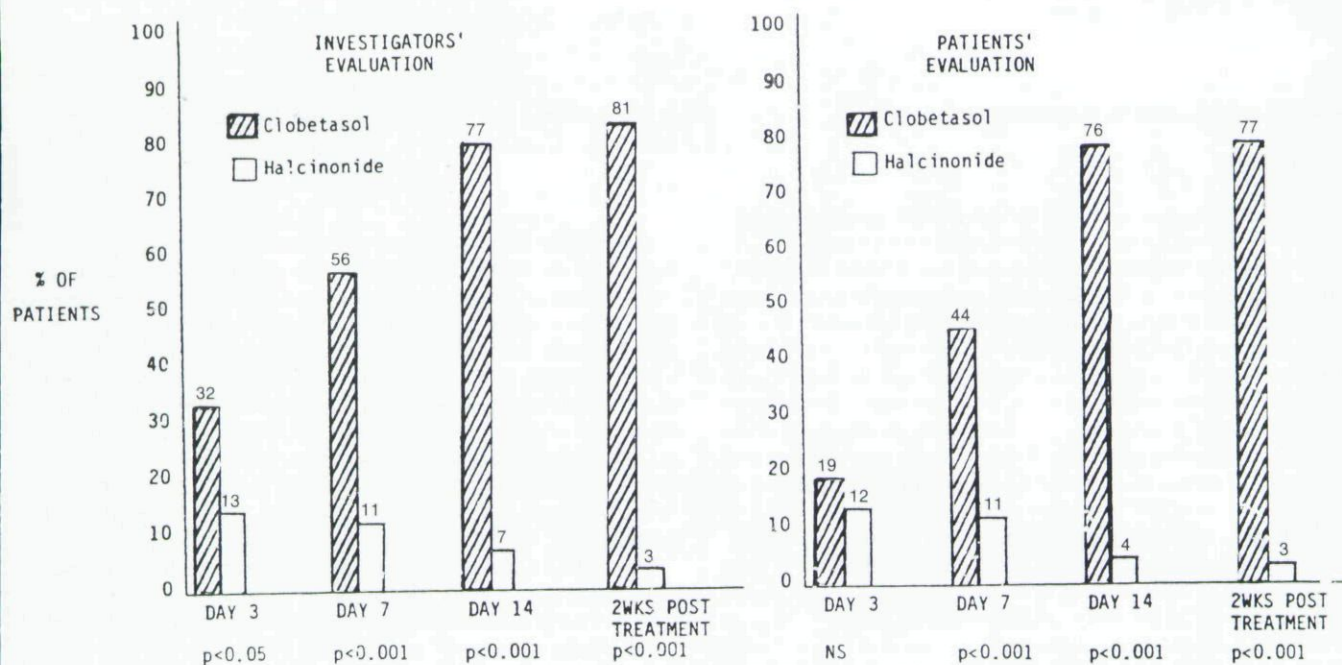


FIG. 1. Percent of treatment sides rated superior according to investigators and patients (preferences compared by sign test).

References

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Leprosy Testing

Despite the existence of apparently effective chemotherapy since the 1940s, the prevalence of leprosy in parts of many developing countries remains as high as 10 per 1000 of the population; furthermore, strains that are resistant to the low-cost drug dapsone seem to be increasing in frequency. Much effort is therefore being directed towards understanding the immune response to *Mycobacterium leprae* and towards development of potentially prophylactic and therapeutic vaccines to combat the disease. Epidemiological evidence suggests that the spread of leprosy is mainly person to person and, since modern chemotherapy rapidly reduces the number of viable organisms spread by an individual, the major source of transmission is likely to be individuals who do not yet have symptoms. This may be particularly true of patients with lepromatous disease, in whom very large numbers of bacilli are present at the time of clinical diagnosis. One of the principal goals of leprosy research is to develop tests that will allow identification and early treatment of such individuals, with the aim of reducing transmission of the disease.—*Serological tests for leprosy. Lancet* 1986;1:533-535.

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