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Topical metronidazole maintains remissions of rosacea.

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Abstract

BACKGROUND: Rosacea is a chronic skin disease that requires long-term therapy. Oral antibiotics and topical metronidazole successfully treat rosacea. Because long-term use of systemic antibiotics carries risks for systemic complications and adverse reactions, topical treatments are preferred.

OBJECTIVE: To determine if the use of topical metronidazole gel (Metrogel) could prevent relapse of moderate to severe rosacea.

DESIGN: A combination of oral tetracycline and topical metronidazole gel was used to treat 113 subjects with rosacea (open portion of the study). Successfully treated subjects (n = 88) entered a randomized, double-blind, placebo-controlled study applying either 0.75% topical metronidazole gel (active agent) or topical metronidazole vehicle gel (placebo) twice daily (blinded portion of the study).

SETTING: Subjects were enrolled at 6 separate sites in large cities at sites associated with major medical centers.

SUBJECTS: One hundred thirteen subjects with at least 6 inflammatory papules and pustules, moderate to severe facial erythema and telangiectasia entered the open phase of the study. Eighty-eight subjects responded to treatment with systemic tetracycline and topical metronidazole gel as measured by at least a 70% reduction in the number of inflammatory lesions. These subjects were randomized to receive 1 of 2 treatments: either 0.75% metronidazole gel or placebo gel.

INTERVENTIONS: Subjects were evaluated monthly for up to 6 months to determine relapse rates.

MAIN OUTCOME MEASURES: Inflammatory papules and pustules were counted at each visit. Relapse was determined by the appearance of a clinically significant increase in the number of papules and pustules. Prominence of telangiectases and dryness (roughness and scaling) were also observed.

RESULTS: In the open phase, treatment with tetracycline and metronidazole gel eliminated all papules and pustules in 67 subjects (59%). The faces of 104 subjects (92%) displayed fewer papules and pustules after treatment, and 82 subjects (73%) exhibited less erythema. In the randomized double-blind phase, the use of topical metronidazole significantly prolonged the disease-free interval and minimized recurrence compared with subjects treated with the vehicle. Eighteen (42%) of 43 subjects applying the vehicle experienced relapse, compared with 9 (23%) of 39 subjects applying metronidazole gel ($P < .05$).

The metronidazole group had fewer papules and/or pustules after 6 months of treatment ($P < .01$). Relapse of erythema also occurred less often in subjects treated with metronidazole (74% vs 55%).

CONCLUSION: In a majority of subjects studied, continued treatment with metronidazole gel alone maintains remission of moderate to severe rosacea induced by treatment with oral tetracycline and topical metronidazole gel.

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