Treatment of Psoriasis in Geriatric Patients with Medium Potency Topical Corticosteroids

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Scalp psoriasis in elderly woman

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Introduction

Psoriasis is a common, often lifelong erythro-papulo-squamous eruption with variable clinical features and having a chronic relapsing nature. It affects about two percent of the U.S. population and may occur at any age, with a secondary peak incidence in the seventh decade.

Psoriasis causes a tremendous amount of financial loss and debility for our geriatric society. In most cases, cosmetic concerns of older patients are the same as for younger patients and thus the disease is debilitating by its cosmetic disfigurement.

Psoriatic geriatric patients may face some particular problems that are not a concern for younger patients. They are searching for an effective treatment to control their disease with minimal side effects and risk, and requiring minimal visits outside the home. For the truly homebound, nursing care may be limited to one or two hours a day, and patients may find it difficult to apply medications more than once a day.

This exhibit pictorially depicts some of the various manifestations of psoriasis in the elderly; presents some treatment options; discusses reasons the elderly may forego seeking treatment; and presents efficacy and safety results of once a day therapy vs. twice a day therapy with a medium potency corticosteroid.

Microscopic picture of psoriatic skin (40 X magnification)
Psoriasis in the Geriatric Population

Clinical Features

- **VARIABLE**
  - Erythro-papulo-squamous eruption with variable clinical features.

- **CHRONIC**
  - Lifelong — occurs at any age.

- **RELAPSING**
  - Remissions and exacerbations. Secondary peak incidence in the seventh decade.

- **DEBILITATING**
  - Cosmetic and symptomatic concerns are as important for the geriatric patient as for the younger patient.

Prevalence

- Occurs in 1-2% of the total population (estimates vary according to geographic locations).
- Approximately 1-3 million (of all ages) in the US are affected.

Manifestations of Psoriasis in the Elderly.

Classic red indurated plaques on man's buttocks showing micaceous scale and some slight fissuring.

Man's knee with typical red scaly plaque.

Thick white scales over red typical scalp plaque, in white-haired woman.

Forehead and anterior scalp involvement in woman with grey wiry hair.
Two hands severely crippled with disabling psoriatic arthritis. Woman patient has widespread psoriasis, and x-ray changes of hands and fingers were characteristic of psoriatic arthritis.

Typical patches and plaques as they appear on a negro woman’s back. Note slightly lighter color change with scale.

Typical plaques and patches on man’s buttocks and lower back, showing propensity for psoriasis to be more severe in sun-spared areas.

Treatment Choices

- TOPICAL CORTICOSTEROIDS
- UVB and TARS
- PUVA using oral PSORALENS
- UVB and TOPICAL CORTICOSTEROIDS

Reasons for Not Seeking Treatment

- COST
  Some geriatric patients forego medical treatment as a trade-off for other expenses.

- CONVENIENCE
  Visits outside the home, to clinic or physician’s office for treatment can be very burdensome for the elderly. (eg. lack of transportation)

- RISKS
  Skin cancer and cataracts with PUVA treatment may pose a threat to patients who risk further ultraviolet damage to already photo damaged skin.

- SIDE EFFECTS
  Systemic and topical effects of medications may be accentuated in the elderly.
Selecting an Acceptable Treatment

THE CLINICIAN MUST BALANCE EFFICACY AND SAFETY WHEN CHOOSING ANY TREATMENT. WHEN TREATING AN OLDER PERSON, THE CLINICIAN MUST ALSO CONSIDER OTHER FACTORS SPECIFIC TO THE GERIATRIC POPULATION WHO MAY HAVE OTHER HEALTH PROBLEMS.

Psoriasis on back of woman before and after treatment with a topical corticosteroid.

Pretreatment

Posttreatment
Geriatric Psoriasis Study
MOMETASONE FUROATE (QD) VS. TRIAMCINOLONE ACETONIDE (BID)

STUDY COMPARES 2 MEDIUM POTENCY TOPICAL CORTICOSTEROIDS IN PATIENTS 60-89 YEARS WITH MODERATE TO SEVERE PSORIASIS

Design
- 266 patients (269 for safety), 6 centers, evaluator blind.
- Geriatric patients, 60-89 years, mean age 68.
- Duration of psoriasis, mean duration 22 years.
- Patients treated for 6 weeks.

Treatment
- Mometasone furoate (0.1% ointment) — Once a day.
- Triamcinolone acetonide (0.1% ointment) — Twice a day.

Safety Evaluations
Visual signs of skin atrophy (shininess, thinness, telangiectasia, loss of elasticity, loss of normal skin markings, bruising and striae) at the target site were evaluated at each visit using 2 X magnification. All other adverse experiences were also recorded.

Systemic effects of treatment (HPA axis effects) were evaluated in one of the 6 centers by measurement of morning plasma cortisol levels pretreatment and posttreatment (values used were an average of 2 pretreatment and 2 posttreatment levels).

Efficacy Evaluations
Efficacy was evaluated by the investigator (blinded to treatment) at each visit on the basis of changes in disease sign scores for erythema, induration and scaling in the selected target area; the mean percent improvement in total sign scores (sum of erythema, induration and scaling) in the target area; and a global evaluation of overall change in disease status of all treated areas (including other treated sites outside of the target area). In addition, the patients gave their evaluations of treatment effectiveness and cosmetic acceptability at the end of the study.
Safety Results

Signs of Skin Atrophy

<table>
<thead>
<tr>
<th></th>
<th>Number of patients</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mometasone furoate</td>
<td>3</td>
<td>mild telangiectasia — 3 patients</td>
</tr>
<tr>
<td>(N = 132)</td>
<td></td>
<td>thinness — 1 patient</td>
</tr>
<tr>
<td>Triamcinolone acetonide</td>
<td>5</td>
<td>mild to mod. telangiectasia — 4 patients</td>
</tr>
<tr>
<td>(N = 137)</td>
<td></td>
<td>mild shininess — 2 patients</td>
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HPA Axis Evaluation

(1 Center) N = 34

No plasma cortisol values went below normal in either group.

Other Adverse Reactions

Treatment related adverse experiences were reported by 7% of the patients in each group (mometasone 9/132, triamcinolone 10/137). With the exception of 6 triamcinolone patients (one who reported severe pruritus, one who reported severe erythema, and 4 with mild to moderate telangiectasia), all adverse experiences were considered to be mild.
Efficacy Results

PERCENT IMPROVEMENT IN TOTAL SIGN SCORES*
(sum of erythema, induration and scaling scores)

\[ p = < .01 \text{ (for day 8 through day 43)} \]

![Graph showing percent improvement in total sign scores over days in study.]

*Percent improvement is defined as the difference between the total sign scores (sum of scores for erythema, induration and scaling) at treatment and pre treatment divided by the total score at pre treatment, multiplied by 100.

GLOBAL CLINICAL RESPONSE*

\[ p = < .01 \text{ (for day 8 through day 43)} \]

![Bar chart showing percent of patients with different clinical responses.]

*Global evaluation of overall change in disease status at endpoint (last visit for each patient) compared to baseline.
Study Conclusions

- Once daily topical mometasone ointment is effective treatment in geriatric patients with psoriasis.

- Mometasone ointment used once a day was significantly more effective than triamcinolone ointment used twice a day in reducing the signs of psoriasis in geriatric patients (p < .01).

- Safety profiles for the two medium potency steroids were comparable.

- No subnormal plasma cortisol levels were observed at any time in either of the treatment groups. (Cortisol levels were done in one center.)

- Significantly more patients preferred mometasone to triamcinolone with regard to cosmetic acceptability, efficacy, and the treatment's effect on the patient's participation in social activities (p < .001).

- Six triamcinolone patients but none of the mometasone patients discontinued early due to treatment failure.

Discussion

It has been pointed out that the geriatric population having psoriasis faces some particular problems. In addition to safety concerns of side effects and risks of treatment, forgetfulness may lead to lack of patient compliance as frequency of application increases. Thus, while topical application of corticosteroids is a known and effective treatment for most patients with psoriasis, any product which could reduce frequency of application, increase ease of application (with increased emolliency) and reduce cost (QD vs BID dosage) should be widely heralded as a boon to aging psoriatics.

Increasingly, older patients have an active social and sexual life, and any method physicians may have to prolong their comfort and natural lifestyle at home should be used and encouraged. Mometasone furoate ointment used once a day, was more effective than a twice a day regimen of triamcinolone acetonide ointment for reducing scaling, erythema and induration of psoriasis over a period of six weeks. Complication of bacterial and yeast infections did not occur. Moreover, the once a day treatment was perceived by most to be more efficacious and to let them better cope with this chronic disease (mean duration of psoriasis in our study population was twenty-two years).

Conclusion: Geriatric patients can get dramatic clinical relief from signs and symptoms of psoriasis using a once a day topical corticosteroid therapy for psoriasis.
Selected References

H.H. Roenigk, MD, H.I. Maibach, MD, Psoriasis, New York, Marcel Dekker, 1985
National Psoriasis Foundation Publication, Psoriasis, 4 Million People Aren’t Laughing.

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Mometasone furoate-Elocon®
triamicinolone acetonide-generic