

Treatment of Moderate to Severe Facial Seborrheic Dermatitis with Itraconazole: An Open Non-Comparative Study

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Abstract:

Background: Seborrheic dermatitis is a common chronic disease. *Malassezia* yeasts have been implicated in the pathogenesis of this disease. Antifungal agents are known to be effective in the treatment of *Malassezia* yeast infections.

Objectives: To evaluate the efficacy of itraconazole in the treatment of mild to severe facial seborrheic dermatitis.

Methods: Sixty patients with moderate to severe seborrheic dermatitis were evaluated in an open non-comparative study. Patients were treated with oral itraconazole, initially 200 mg/day for a week, followed by a maintenance therapy of a single dose of 200 mg every 2 weeks. Four clinical parameters (erythema, scaling, burning, itching) were assessed using a 0–3 score. Mycological evaluation determined the presence of *Malassezia* spores in the scales using a direct smear.

Results: At the end of the initial treatment significant improvement was reported in three clinical parameters: erythema, scaling, itching. Maintenance therapy led to only slight further improvement. Burning sensation was only mildly improved during the treatment. The quantity of *Malassezia* spores present in the direct smear decreased throughout the treatment period. No blood test abnormalities were found during the treatment.

Conclusions: In this study initial treatment with itraconazole was beneficial in patients with moderate to severe seborrheic dermatitis.

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Patients and Methods

Males and females over the age of 18 with moderate to severe facial seborrheic dermatitis were enrolled in this open non-comparative study. Patients with known hypersensitivity to itraconazole, patients with liver disease, and pregnant or nursing women were excluded from the study.

The treatment was initiated after a wash-out period of one month during which all topical treatments with anti-seborrheic agents were stopped. Itraconazole 200 mg/day was administered for 7 consecutive days. Five weeks later, patients were instructed to take a single dose of 200 mg itraconazole every 2 weeks for 18 weeks.

All patients were examined by the same physician at initiation of the study (visit 0), and at 2 weeks (visit 1), 6 weeks (visit 2) and 24 weeks (visit 3) after the beginning of treatment. At each visit, patients were evaluated both clinically and mycologically. Patients underwent routine blood tests (complete blood count and liver function test) before and during the study.

Patients were evaluated according to four clinical parameters – erythema, scaling, burning and itch – using a four-point score (0 = absent, 1 = mild, 2 = moderate, 3 = severe). Patients enrolled into the study were required to have a sum of at least 5. Clinical efficacy during the study was determined by improvement measured using the score: complete improvement for patients achieving a total score of 0, good improvement (sum of 1 or 2), moderate improvement (sum of 3 or 4), and failure in cases with a sum of 5 or more.

At each visit, mycological evaluation determined the presence of *Malassezia* spores in the scales using the KOH test. Paired *t*-test was used for statistical analysis.

Results

The study group of 60 patients comprised 35 males (mean age 27.2 years) and 25 females (mean age 25.1 years); 5 patients were lost to follow-up.

At visit 1 significant improvement was reported in three clinical parameters: erythema, scaling, itching. At visits 3 and 4, during the maintenance treatment period, only slight improvement was noted. Burning sensation was only mildly improved during the treatment. The results are shown in Figure 1.

Seborrheic dermatitis is a chronic common skin disease, affecting 1–3% of the adult population [1]. The etiology of the disease is unknown, but an abnormal immune response to *Malassezia* yeasts, a member of the normal flora of the skin, has been suggested [2,3]. Several topical agents such as zinc perithione, selenium sulfide, antifungal agents and steroids are usually used in the treatment of mild disease. These topical agents give temporary and partial relief but are less effective in more severe cases. Systemic antifungal agents including itraconazole, which are known to be effective in the treatment of *Malassezia* species infection, were suggested as one of the therapeutic modalities in cases of moderate to severe seborrheic dermatitis [1,4,5].

In this study we evaluated the efficacy and safety of itraconazole in the treatment of facial seborrheic dermatitis for short-term and maintenance therapy.

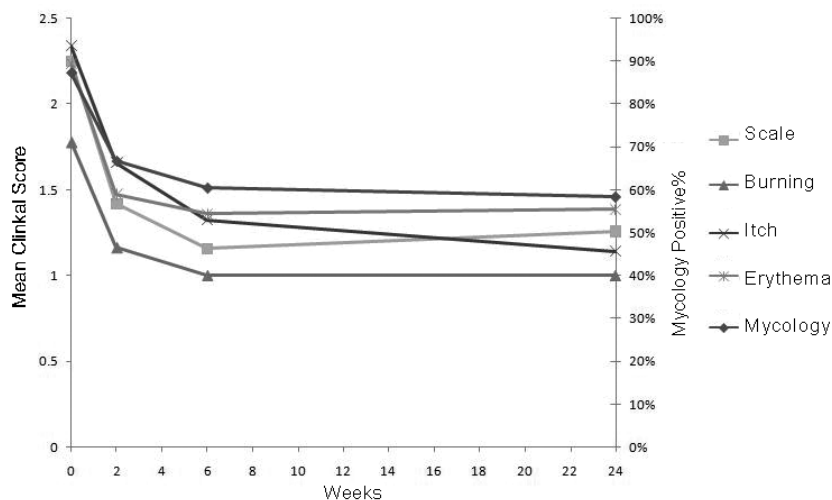


Figure 1. Change in the mean clinical score during the study.

The amount of *Malassezia* spores present in the direct smear decreased throughout the treatment period. The most significant decrease was found 2 weeks after initiation of treatment, while during the maintenance treatment only a slight decrease was noted. The same pattern was demonstrated for the itching and erythema scores.

A decrease in scale grade was also noted after the initial treatment. During the maintenance treatment, a very mild decrease occurred. No blood test abnormalities were found during the treatment.

Discussion

Topical corticosteroid treatment is one of the most common therapeutic modalities in the treatment of seborrheic dermatitis. However, prolonged use of these corticosteroid preparations may cause adverse effects such as skin atrophy, perioral dermatitis or telangiectasia. The use of azoles topically in the treatment of mild disease is also well established. Systemic use of antifungal agents is also beneficial in more severe cases. Itraconazole, a systemic azole, has been reported to be an effective treatment in seborrheic dermatitis patients [5–7]. The rationale for the use of itraconazole is based on its antimycotic and anti-inflammatory properties [8–10].

Two open non-comparative studies that evaluated the efficacy and safety of itraconazole in seborrheic dermatitis were recently reported in the literature [6,7]. Baysal et al. [6] treated 32 patients with a combination therapy of itraconazole and hydrocortisone cream. At the end of the study most of the patients showed complete improvement and a statistically significant decrease in the mean severity score was reported. In a second study by Kose et al. [7], 29 patients were treated with itraconazole 200 mg/day for 1 week and then, after a 3 week interval, patients

used itraconazole 200 mg/day for the first 2 days of 2 months. Marked improvement was observed in 83% of patients; no drug-related systemic adverse event was observed during the study.

In our study we showed that treatment with itraconazole, 200 mg/day for a week with a maintenance therapy of a single dose of 200 mg every 2 weeks, is beneficial in patients with moderate to severe disease. This treatment regime is effective, safe and improves compliance with treatment. On the other hand, since the improvement was achieved after the first week of treatment and the maintenance therapy conserved the initial improvement but failed to produce further improvement, itraconazole may be useful only during exacerbations, and topical agents should be used in maintenance treatment. This treatment modality can be used as alternative therapy in patients who do not respond or do not wish to use topical treatment.

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