

# Bifonazole (Mycospor) in Treatment of Dermatomycoses

KAREL KUBEC, MD, PHD

*From the Department of Dermatology, Al Sabah Hospital, Kuwait.*

**ABSTRACT** - Bifonazole cream and solution were used in the treatment of 33 patients suffering from dermatomycoses, candidosis and tinea versicolor. Twenty six patients completed the study. Out of this number, 21 patients (81%) were cured. In 5 patients (19%) the therapy was unsuccessful.

In spite of the advent of new antifungals, mycotic infections of the skin have not lost their importance. There are two main factors influencing the result of the therapy of mycoses<sup>1</sup>: 1. effectiveness of the active substance, 2. cooperation of the patient.

Studies of compliance in patients affected by mycotic infections demonstrated that almost 50% of patients did not comply with the instructions to apply the drug daily, and 25% stopped using the medication prematurely after symptoms had disappeared<sup>1</sup>. On that account pharmaceutical companies try to develop antifungals of the new generation which can be used once daily and for short treatment<sup>2</sup>. These properties facilitate the therapy for the patient and thus improve his compliance. Bifonazole belongs to this group.

## Materials and Methods

In the second half of 1992, Bifonazole (Mycospor) cream and solution (Bayer) were used once daily in the treatment of 33 patients suffering from dermatomycoses, candidosis and tinea versicolor. The treatment was completed by 26 patients (Table 1). Only those with positive mycological examination (direct smear, cultivation examination) entered the trial (Table 2). These examinations were

repeated 3 days and 14 days after stopping the therapy according to the protocol of Bayer Company.

**Table 1.** Distribution of patients.

Tinea versicolor	6
Tinea corporis or cruris	7
Tinea interdigitalis pedis	5
Candidosis cutis	8

**Table 2.** Distribution of fungi by culture.

Trichophyton interdigitale	4
Trichophyton rubrum	4
Epidermophyton floccosum	1
Microsporum canis	1
Candida albicans	8

## Results

Twenty one patients (81%) were completely cured. In the 5 patients (19%) in whom the treatment was unsuccessful, 4 patients were suffering from superficial candidosis and one from tinea interdigitalis due to *Trichophyton rubrum*.

### Discussion:

Bifonazole is the active substance of the broad-spectrum antimycotic introduced into the market under the trade name Mycospor (Bayer). It has long-lasting intradermal activity (cream 72 hours, solution 48 hours)<sup>3</sup>, easily penetrating the skin<sup>4</sup>, with a primarily fungicidal activity against dermatophytes and a primarily fungistatic effect against yeasts<sup>5</sup>. On that account Bifonazole can be applied only once daily. The treatment is shorter in comparison with other antifungals. It is also effective against molds (e.g. *Aspergillus*), *Malassezia furfur* and *Corynebacterium minutissimum*.

In our clinical trial we used two formulations of Bifonazole: cream and solution (both in 1% concentration) applied once daily for the treatment of dermatomycoses and tinea versicolor. We found that Bifonazole was highly effective. It was also favorably evaluated by the patients because it quickly alleviated pruritus, was easily applied, and did not stain the underwear. Once daily application and shorter treatment were the main reason for good patients' compliance (79%) when compared with literature data (50%)<sup>4</sup>. In our study, only once patient complained of burning of the skin after the application of Bifonazole cream. When we

replaced this formulation with Bifonazole solution, burning stopped. The results of treatment show that Bifonazole is an effective, well tolerated and easily applied antifungal therapy which is favourably evaluated by the patients as well.

### References

1. MEINHOF W, GIRARD R M, STRACK A. Patient non-compliance in dermatomycosis. *Dermatologica* 1984; 169 (suppl. 1) : 57-66.
2. SAFFE E, BIFONAZOLE. Therapie von Dermatomykosen. Permed-Verlag 1984; 81-85.
3. PLEMPEL M. Antimykotische Eigenschaften von Bifonazole in vitro and in vivo. Bifonazole: Treatment of Dermatomycoses. Symposium on Mycospor. Neu-Isenburg, Erlangen 1984; 7-15.
4. PLEMPEL M, REGEL E. Antimycotic properties of the topical azole bifonazole in vitro and in vivo. *Excerpta Medica* 1982; 29-36.
5. BERG D, REGEL E, HARENBERG H E. Bifonazole and Clotrimazole. Their mode of action and the possible reason for the fungicidal behaviour of bifonazole. *Arzneimittelforsch* 1984;34: 139-146.

### Correspondence:

Karel Kubec, MD, PhD, Al-Sabah Hospital,  
P.O. Box 4078, Post Code 13041,  
Kuwait.