RESULTS

* Results obtained with oral fluconazole therapy:

Fifty adult patients were included in the study. Their ages ranged between 18 and 62 years with a mean of 32.83 ± 13.53 years. The duration of their disease was from 1 to 16 weeks with a mean of 4.96 weeks. Diabetes mellitus was concomitantly present in one case and was under control by oral therapy.

Guided by clinical and mycological responses, 24 patients (48%) received only one oral 150 mg fluconazole capsule, while 26 patients (52%) received 2 capsules with one week interval. All patients were seen at 5 visits (one visit per week) i.e. 28 days after the therapeutic fluconazole course.

The therapeutic effects of fluconazole therapy on the clinical manifestations of the treated patients, namely itching, rash, redness, colour changes, fissuring, scaling and maceration were quite impressive and statistically highly significant. Marked improvement started to be elicited at the second visit (V2) i.e. 1 week after the first dose, and this improvement progressively continued till the last follow-up visit, where these manifestations completely dissappeared in 47 cases (94%), while 3 patients (6%) were suffering from mild itching.
* Results obtained with oral itraconazole therapy:

Twenty adult patients were included in the study, their ages ranged between 18 and 68 years with a mean of 35.73 ± 12.58 years.

The duration of their disease was from 1.5 to 20 weeks with a mean of 5.2 weeks. No concomitant systemic disease was present in any of the patients.

All the patients received the full dose of 100 mg capsule daily for two weeks. Patients were seen at 5 visits with one week apart i.e. till for about 1 month after the therapeutic itraconazole course.

The therapeutic effect of itraconazole on the clinical manifestations of the treated patients, namely itching, rash, redness, colour changes, fissuring, scaling and maceration, was markedly evident after the two weeks of therapy.

Yet, improvement continued for the rest of the follow up period and clinical cure was quite noticed by the end of the visits. The manifestations completely disappeared in 18 patients (90%), while 1 patient showed persistent colour change and 1 patient suffered from mild itching. The Graph (II) illustrates the effects of itraconazole therapy on 3 selected parameter, namely: itching, redness and scaling.
Those manifestations dropped from a mean score of moderate to severe intensity before therapy to be almost absent 4 weeks after itraconazole therapy.

![Graph (II)](image)

The mycological results were also traced. Mycological cure (i.e. eradication of fungi) started one week after the start of administration of the drug. Full eradication of fungus was obtained at the last mycological examination which was done one month after the beginning of the study.

One fungus was isolated in each patient. The following table (2) illustrates the type of isolated fungus and the effects of itraconazole on the culture study.
Table (2): Assessment by mycological culture.

<table>
<thead>
<tr>
<th>Visits</th>
<th>Positive culture</th>
<th>Negative culture (No growth) with fluconazole</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Base line V1</td>
<td>13</td>
<td>3</td>
</tr>
<tr>
<td>Follow up visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V3</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>V5</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

a = Epidermophyton floccosum  
b = Trichophyton violaceum  
c = Candida spp.  
d = Trichophyton verrucosum

The tolerability of oral itraconazole therapy was marvellous. None of the patients complained of any adverse effect of the drug. Laboratory tests made in all the 20 patients showed no significant deviations in the mean values of blood picture, erythrocyte sedimentation rate, liver and renal function tests done before and repeated after the end of therapy.
* Results obtained with oral terbinafine therapy:

Twenty adult patients were included in the study. Their ages ranged between 20 and 60 years with a mean of 33.71 ± 12.64 years.

The duration of their disease was from 2 weeks to 3 months, with a mean of 7.8 weeks no concomittant disease was elicited in any of the patients.

All patients received 250 mg tablet daily for one week only. The therapeutic effect of terbinafine on the clinical manifestations of the treated patients, namely; itching, rash, redness, colour changes, fissuring, scaling and maceration, was relatively minimal after one week of therapy, but the improvement continued progressively in an astonishing ascending manner for the rest of the follow up period with the resultant complete clinical cure by the end of the study 7 weeks after the start of therapy.

The Graph (III) illustrates the effect of terbinafine therapy on the itching, redness and scaling.
Graph (III)

The effect of terbinafine therapy on the clinical manifestation.
The mycological cure rate was interesting. Only 10 cases out of the 20 showed cure by the end of the first week. The rest showed mycological cure, in order, in the rest of the follow up period.

One fungus was isolated in each patient. The following table (3) illustrates the type of isolated fungus and the effects of terbinafine on the culture results.

**Table (3): Assessment by mycological culture.**

<table>
<thead>
<tr>
<th>Visits</th>
<th>Positive culture</th>
<th>Negative culture (No growth)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>Base line V1</td>
<td>11</td>
<td>4</td>
</tr>
<tr>
<td>Follow up visits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V2</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>V4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

A = Epidermophyton floccosum  
B = Trichophyton violaceum  
C = Candida spp.  
D = Trichophyton verrucosum

The tolerability of oral terbinafine was very satisfactory. None of the patients reported any discomfort whatsoever. All the patients did not show any abnormalities in the laboratory tests made, guaranteeing the safety of oral terbinafine on bone marrow, liver and kidney.
Fig. (1): Before treatment with oral terbinafine (Lamisil)

Fig. (2): After one week therapy
Fig. (3): Before treatment.

Fig. (4): Week after therapy with oral terbinafine (Lamisil)
Fig. (5): One week later i.e. after stopping Lamisil 
notice the after effect of the drug
Fig. (6): Before treatment.

Fig. (7): One week after oral terbinafine (Lamisil)
Fig.(8): Before treatment.

Fig.(9): One week after treatment with oral terbinafine.
Fig. (10): One week later i.e. after stopping therapy.
Fig. (11): Before treatment.

Fig. (12): One week after treatment with oral terbinafine.
Fig.(13): One week after stopping the drug.
Fig. (14): Before treatment.

Fig. (15): One week after treatment with oral terbinafine.
Fig.(16): Before treatment.

Fig.(17): One week after terbinafine (Lamisil)