

# ABSTRACTS

## FUNGAL AND ANTIFUNGAL AGENTS:

### 1. Childhood white superficial onychomycosis caused by *Trichophyton rubrum*: report of seven cases and review of the literature.

*Authors(s): Ploysangam-T; Lucky-AW*

*Source: J-Am-Acad-Dermatol. 1997 Jan; 36(1): 29-32*

#### ABSTRACT: BACKGROUND:

Although white superficial onychomycosis (WSO) is well recognized in adults and considered to be mainly caused by *Trichophyton mentagrophytes*, childhood WSO is rare. WSO caused by *Trichophyton rubrum* in prepubertal children has never been reported. **OBJECTIVE:** Our purpose was to describe the existence of WSO in children and to emphasize that *T. rubrum* may be its main cause. **METHODS:** Seven children with WSO seen between 1988 and 1993 were examined. Only patients who had a positive potassium hydroxide preparation and a positive fungal culture were included. **RESULTS:** Seven healthy prepubertal children, 2 to 9 years of age, were identified with WSO. All cases were proved to be caused by *T. rubrum*. Six patients had associated tinea pedis, and five had a family history of tinea pedis. Topical antifungal therapy was partially effective in some cases. **CONCLUSION:** This report documents the existence of WSO in prepubertal children. All cultures grew *T. rubrum*. Although onychomycosis is not as common in prepubertal children as in adults, it may be underrecognized.

### 2. Neonatal *Torulopsis glabrata* fungemia.

*Authors(s): Reich-JD; Huddleston-K; Jorgensen-D; Berkowitz-FE*

*Source: South-Med-J. 1997 Feb; 90(2): 246-8*

#### ABSTRACT:

*Torulopsis glabrata* is a yeastlike fungus that has recently become recognized as an important opportunistic pathogen. Only four cases of *T. glabrata* infection in neonates have been reported. We report two cases of fungemia caused by this organism in premature infants. Both patients were treated with amphotericin B and survived the fungemia, but one patient later died of bacterial sepsis. Both patients had been treated with surfactant, artificial ventilation, intravascular catheters (arterial and venous), broad spectrum antibiotics, and hyperalimentation, which appear to be risk factors for *T. glabrata* fungemia. A review of the literature indicates that *T. glabrata* is susceptible to amphotericin B and 5-fluorocytosine and is resistant to fluconazole. In addition, it is less susceptible to ketoconazole, clotrimazole, and itraconazole than is *Candida albicans*. We recommend that *T. glabrata* infections be treated initially by reducing iatrogenic risk factors and beginning amphotericin B therapy. If necessary, 5-fluorocytosine should be added to the drug regimen.

### 3. Butenafine 1% cream in the treatment of tinea cruris: a multicenter, vehicle-controlled, double-blind trial.

*Authors(s): Leshner-JL Jr; Babel-DE; Stewart-DM; Jones-TM; Kaminester-L; Goldman-M; Weintraub-JS*

*Source: J-Am-Acad-Dermatol. 1997 Feb; 36(2 Pt 1): S20-4*

#### ABSTRACT: CONCLUSION:

Butenafine applied once daily for 2 weeks is effective in treating tinea cruris. The proportion of patients cured increased between the end of treatment and 4 weeks after treatment.

### 4. Treatment of interdigital tinea pedis with a 4-week once-daily regimen of butenafine hydrochloride 1% cream.

*Authors(s): Tschen-E; Elewski-B; Gorsulowsky-DC; Pariser-DM*

*Source: J-Am-Acad-Dermatol. 1997 Feb; 36(2 Pt 1): S9-14*

#### ABSTRACT: BACKGROUND:

Butenafine hydrochloride, a potent new benzylamine with fungicidal activity, has been extensively studied and approved for topical use in Japan. Results reported here are from one of the first major North American butenafine clinical trials. **OBJECTIVE:** We evaluated butenafine in the treatment of tinea pedis in a controlled, randomized, double-blind trial. **METHODS:** Of 80 patients with positive fungal cultures, 40 applied butenafine 1% cream and 40 applied vehicle to the affected area once daily for 4 weeks. Efficacy was assessed during treatment and 4 weeks after. **RESULTS:** Significantly more patients using butenafine than using vehicle had mycologic cure (butenafine, 88%; vehicle, 33%) and effective clinical response (butenafine, 78%; vehicle, 35%). Differences between treatment groups were greatest ( $p < 0.001$ ) 4 weeks after treatment. **CONCLUSION:** Butenafine applied once daily for 4 weeks resulted in an effective clinical response and mycologic cure of tinea pedis during treatment. Patients continued to improve for at least 4 weeks after treatment.

### 5. Successful treatment of primary cutaneous *Aspergillus flavus* infection of the hand with oral itraconazole.

*Authors(s): Epstein-MD; Segalman-KA; Mulholland-JH; Orbegoso-CM*

*Source: J-Hand-Surg-Am. 1996 Nov; 21A(6): 1106-8*

#### ABSTRACT:

Primary cutaneous *Aspergillus flavus* infections of the hand are exceedingly rare. Usually, these infections are present in severely immunocompromised patients suffering from lymphoreticular malignancies. The majority of cases result in invasive systemic infections and often culminate in death. We report a case of primary cutaneous *A. flavus* infection in the hand of a patient immunocompromised only by non-insulin-dependent diabetes, who ultimately was cured of this infection with oral itraconazole.

### 6. [Diagnosis, clinical aspects and therapy of early chromoblastomycosis in a case example]

*Authors(s): Mayser-P; Grunder-K; Qadripur-S; Kohn-FM; Schill-WB; de-Hoog-GS*

*Source: Hautarzt. 1996 Sep; 47(9): 693-700*

**ABSTRACT:**

Despite the availability of modern antimycotics, which produce high cure rates in early infections, the therapy of advanced chromoblastomycosis is still unsatisfactory. An initial chromoblastomycosis caused by a hitherto unidentified species of the genus *Phialophora* was diagnosed in a 46-year-old teacher. The organism was isolated twice at an interval of 6 weeks from a partly psoriasiform, partly verrucous lesion on the 4th toe. The infection was apparently acquired 4 years ago during a holiday at Cape Verde. Treatment with itraconazole (Sempera). 200 mg/day, and amphotericin B (Ampho-Moronal) cream for 6 weeks initially resulted in rapid regression. However, 4 weeks after cessation of therapy, the *Phialophora* species was cultured again from skin scrapings. Complete healing was achieved after re-treatment with itraconazole for 20 weeks at the same dosage in combination with topical amorolfine and local hyperthermia. Until now, no relapse has occurred. The present case demonstrates that this rare disease, which mainly occurs as a traumatic mycosis in the rural population of tropical regions, must be included in the differential diagnosis of psoriasiform or verrucous skin lesions and also included in the list of diseases which may be acquired while on vacation in exotic locations.

**7. Treatment and prophylaxis of tinea infections.**

**Authors(s):** Pierard-GE; Arrese-JE; Pierard-Franchimont-C

*Source: Drugs. 1996 Aug; 52(2): 209-24*

**ABSTRACT:**

Topical antifungals remain the most commonly recommended treatment for many superficial dermatophytoses. Active compounds include imidazoles, morpholines and allylamines, with a few other miscellaneous drugs. The recent development of new generation oral agents (fluconazole, itraconazole, terbinafine) has enhanced the armamentarium against difficult-to-treat tinea. The antifungal efficacy and pharmacokinetic profiles of these drugs allow shorter durations of treatment and the innovative use of intermittent pulse regimens. The modern formulations fully meet the requirements of being well tolerated, involving little risk and acting specifically against relevant pathogens. However, the response rates to date do not always come up to the high expectations offered by in vitro studies.

**8. Disseminated infection with *Trichosporon asahii*.**

**Authors(s):** Itoh-T; Hosokawa-H; Kohdera-U; Toyazaki-N; Asada-Y

*Source: Mycoses. 1996 May-Jun; 39(5-6): 195-9*

**ABSTRACT:**

*Trichosporon* fungaemia and disseminated, purpuric, papular skin lesions developed on the head, trunk and extremities of a 5-year-old female with acute lymphocytic leukaemia. Histopathologically, the skin lesions demonstrated dermal budding yeasts. She died despite treatment with antifungal drugs. The isolate from the blood was further identified morphologically and physiologically as *Trichosporon asahii*, based on the revision of the genus *Trichosporon* by Gueho et al. (1992). According to the new revision, *T. asahii* is the only taxon regularly involved in systemic mycoses, so that most of the isolates previously reported as *T. beigelii* (formerly, *T. cutaneum*) in human deep mycoses are now thought to belong to *T. asahii*.

**9. Cutaneous alternariosis: role of corticosteroid-induced cutaneous fragility.**

**Authors(s):** Machet-L; Jan-V; Machet-MC; Vaillant-L; Lorette-G

*Source: Dermatology. 1996; 193(4): 342-4*

**ABSTRACT:**

*Alternaria* is a very common and saprophytic fungus. Cutaneous infection is rare and about 71 cases have been described, mainly in Europe in immunocompromised hosts. We report a case of dermal alternariosis occurring in a woman treated with corticosteroids for dermatomyositis. The cutaneous lesion consisted of an erythematous and scaly plaque on the leg measuring 2 x 2 cm. Cutaneous biopsy showed hyphae and round inclusions stained with PAS and Gomori-Grocott within a polymorphous granuloma. Cultures of cutaneous biopsies grew *Alternaria* sp. HIV1 and HIV2 serology was negative. The patient was treated by local excision and corticosteroids were decreased. One-year follow-up showed no recurrence. Cutaneous alternariosis is an opportunistic infection, the disease has been described mainly in patients treated with systemic corticosteroids (39 cases out of the 71 reported cases) or local corticosteroids (3/71) and in patients suffering from Cushing's syndrome (7/71) but rarely in HIV-infected patients (3/71). Cutaneous fragility induced by hypercorticism is an important cofactor permitting direct inoculation from the environment.

**10. In vitro susceptibility of *Malassezia furfur* against azole compounds.**

**Authors(s):** Schmidt-A; Ruhl-Horster-B

*Source: Mycoses. 1996 Jul-Aug; 39(7-8): 309-12*

**ABSTRACT:**

The minimum inhibitory concentrations (MICs) for 30 isolates of *Malassezia furfur* of four azole compounds-bifonazole, climbazole, clotrimazole and ketoconazole were determined as these substances are used in the topical therapy of *M. furfur*-associated skin conditions. *M. furfur* is a lipophilic fungus with complex growth requirements; Climbazole and ketoconazole showed similar in vitro activity against *M. furfur*, with bifonazole having slightly lower, and clotrimazole the lowest in vitro activity. These findings may be explained by the extremely low water solubility of the last two compounds; the results have yet to be correlated with the in vivo efficacy of these substances.

**11. Tinea capitis in adults.**

**Authors(s):** Aste-N; Pau-M; Biggio-P

*Source: Mycoses. 1996 Jul-Aug; 39(7-8): 299-301*

**ABSTRACT:**

Between 1973 and 1994, 17 cases of tinea capitis in adults were observed in the Dermatology Clinic of the University of Cagliari (Italy). The patients were all women (age range 17-76 years) and came from the district of Cagliari. At the time of referral, they presented with a disease duration varying from 8 to 10 months. The main clinical feature was scalp lesions, but in two cases mycotic lesions on the face were also present. The following dermatophytes were isolated: *Microsporum canis* (eight cases), *Trichophyton violaceum* (four cases), *Trichophyton mentagrophytes* (four cases) and *Trichophyton verrucosum* (one case). Systemic treatment with griseofulvin or

terbinafine led to complete recovery in 40-50 days. In discussing the pathogenesis and transmission mode of the disease, the authors hypothesize that endocrine disorders influencing the secretion and composition of sebum may facilitate dermatophyte invasion of the scalp in the adults.

### 12. Onychomycosis due to *Scopulariopsis brevicaulis*: clinical features and response to systemic antifungals.

**Authors(s):** Tosti-A; Piraccini-BM; Stinchi-C; Lorenzi-S

*Source: Br-J-Dermatol. 1996 Nov; 135(5): 799-802*

#### ABSTRACT:

Six cases of *Scopulariopsis* onychomycosis, including four patients with onychomycosis exclusively caused by *Scopulariopsis brevicaulis* and two patients with a mixed nail infection (*S. brevicaulis* + *Trichophyton rubrum* and *S. brevicaulis* + *T. interdigitale*), are reported. Four patients presented with a typical distal subungual onychomycosis characterized by subungual hyperkeratosis and onycholysis of the distal nail plate. In two patients, *Scopulariopsis* infection produced a total dystrophic onychomycosis associated with painful periungual inflammation. Three patients were treated with four pulses of itraconazole, 400 mg daily for 1 week a month, and three patients with terbinafine, 250 mg daily for 4 months. The mycological examination 8 months after discontinuation of treatment showed that one patient was mycologically cured whereas the remaining five patients still carried *S. brevicaulis* in their nails. The clinical examination at the end of the follow-up period showed a complete cure of the nail abnormalities in only one patient.

### 13. Treatment of onychomycosis and tinea pedis with intermittent itraconazole therapy.

**Authors(s):** Del-Rosso-JQ

*Source: J-Am-Osteopath-Assoc. 1996 Oct; 96(10): 607-9*

#### ABSTRACT:

A 40-year-old woman had a 10-year history of dermatophyte-related toenail onychomycosis (*tinea unguium*) and dry-type *tinea pedis*, which had failed to respond to previous therapy with topical antifungal agents or oral griseofulvin. The patient was successfully treated with four cycles of intermittent itraconazole therapy (that is, 400 mg/d for 1 week per month for 4 months). At the end of this time, the *tinea pedis* had resolved and the onychomycosis improved significantly after four cycles were completed. Twelve months after the onset of therapy, both conditions had resolved completely according to both clinical and mycologic criteria. Itraconazole was well tolerated, with no side effects reported. These observations suggest that itraconazole intermittent dosing is a highly effective therapy for the treatment of onychomycosis caused by dermatophyte organisms, because it provides a high cure rate after only a short course of therapy.

### 14. Onychomycosis. New therapies for an old disease.

**Authors(s):** Gupta-AK; Scher-RK; De-Doncker-P;

**Sauder-DN; Shear-NH**

*Source: West-J-Med. 1996 Dec; 165(6): 349-51*

#### ABSTRACT:

The newer generation of antifungal agents such as itraconazole and terbinafine are more effective than the older therapies, griseofulvin and ketoconazole, in the treatment of dermatophyte pedal onychomycosis. Itraconazole can be administered as continuous dosing, 200 mg per day for 3 months, or in the form of pulse therapy, 200 mg twice a day for 1 week per month for 3 consecutive months. Terbinafine is given as continuous dosing, 250 mg per day for 3 months.

### 15. Oral terbinafine in tinea capitis in children.

**Authors(s):** Gruseck-E; Splanemann-V; Bleck-O; Ring-J; Abeck-D

*Source: Mycoses. 1996 May-Jun; 39(5-6): 237-40*

#### ABSTRACT:

*Tinea capitis* is a disease that frequently affects children. In most cases systemic antimycotic treatment is necessary. Griseofulvin is still the drug of choice, but requires prolonged periods of treatment (several months). To estimate the efficiency and tolerability of terbinafine for treatment of *tinea capitis* in children, four patients (aged 3-9 years) with *tinea capitis* proven by culture were treated with terbinafine at a dose of 125 mg a day for different periods (4-10 weeks). Isolates were subjected to minimal inhibitory concentration testing against terbinafine and griseofulvin. In all four cases terbinafine treatment resulted in complete remission. The clinical response was accompanied by negative culture results on follow-up. Terbinafine was well tolerated in each case. Determination of the minimal inhibitory concentration confirmed the excellent *in vitro* activity of terbinafine against dermatophytes. Controlled studies involving a larger number of children are necessary to answer questions concerning dose and duration of terbinafine treatment as well as the frequency and severity of drug-related side-effects.

### 16. Disseminated cryptococcosis with cutaneous lesions.

**Authors(s):** Mostafa-WZ; Ishak-EA; Ekladios-EM; Arnaout-HH

*Source: J-Dermatol. 1996 Mar; 23(3): 209-13*

#### ABSTRACT:

A case of disseminated cryptococcosis in an HIV-negative patient presenting with cutaneous lesions is described for the first time in Egypt. The patient, a 16-year-old male, presented with cough, expectoration, loss of weight, and cutaneous lesions, mainly on the face and trunk. The lesions consisted of vegetating crusted plaques discharging purulent to sanguinous fluid and flattened, shiny, erythematous to brownish plaques. Anorexia, headache and personality changes soon followed. Histopathological examination of lesions was highly suggestive of a deep mycosis, particularly cryptococcosis. The fulminant disease advanced with central nervous system involvement. The progression was not arrested when systemic antifungal therapy was administered late in the disease course. Pathological examination of lungs, liver, pancreas and spleen revealed disseminated infection with no evidence of other underlying pathology. Disseminated cryptococcosis is a morbid infection, rare in an area where heightened awareness and raised index

of suspicion will surely allow earlier diagnosis, management and better prognosis.

**17. Cushing's disease associated with empty sella: a clinical case treated for years with ketoconazole]**

**Authors(s): Spagnolli-W; Ramponi-C; Davi-MV; Francia-G**

*Source: Ann-Ital-Med-Int. 1996 Oct-Dec; 11(4): 275-8*

**ABSTRACT:**

Cushing's disease and empty sella without evidence of pituitary adenoma are rarely observed. To our knowledge, there is very little documentation on long-term therapeutic follow-up with the steroidogenesis inhibitor ketoconazole. A 48-year-old woman with uncontrolled insulin-dependent diabetes mellitus, severe hypertension, and clinical findings of hypercortisolism was referred to our hospital. Endocrine evaluation of adrenocortical function evidenced hypothalamic-pituitary-hypercortisolism, and excluded adrenal tumor or an ectopic corticotropin source. Magnetic resonance imaging disclosed an empty sella turcica but not pituitary adenoma. The patient was treated with a steroidogenesis inhibitor, ketoconazole (600 mg daily) which reduced urinary cortisol excretion to within the normal range. Serum cortisol levels also returned to normal in the morning but not in the evening. The patient has continued on ketoconazole therapy for the past 7 years, with neither side effects nor tachyphylaxis. The reduction of cortisol secretion brought about significantly improved control of diabetes mellitus and hypertension, although signs of hypercortisolism have persisted. Radiographic studies of the hypophysis during follow-up have not evidenced adenoma.

**18. Efficacy of ER-30346, a novel oral triazole antifungal agent, in experimental models of aspergillosis, candidiasis, and cryptococcosis.**

**Authors(s): Hata-K; Kimura-J; Miki-H; Toyosawa-T; Moriyama-M; Katsu-K**

*Source: Antimicrob-Agents-Chemother. 1996 Oct; 40(10): 2243-7*

**ABSTRACT:**

ER-30346 is a novel oral triazole with a broad spectrum of potent activity against a wide range of fungi. In the present study, we investigated the therapeutic effects of oral ER-30346 on experimental local

infections caused by *Aspergillus fumigatus*, *Candida albicans*, and *Cryptococcus neoformans* and compared them with those of itraconazole and fluconazole. In experimental murine models of pulmonary aspergillosis, candidiasis, and cryptococcosis, ER-30346 reduced the numbers of CFU in the lungs significantly compared with the numbers of CFU in the lungs of the controls ( $P < 0.05$ ). ER-30346 was as effective as or more effective than itraconazole against pulmonary aspergillosis. Against pulmonary candidiasis and cryptococcosis, ER-30346 was more effective than itraconazole and was as effective as fluconazole. ER-30346 was also effective against pulmonary candidiasis caused by fluconazole-resistant *C. albicans*. In mice with intracranial cryptococcosis, ER-30346 reduced the numbers of CFU in the brains significantly compared with the numbers of CFU in the brains of the controls ( $P < 0.05$ ) and was more effective than itraconazole and as effective as fluconazole. In an experimental model of oral candidiasis in rats, ER-30346 reduced the numbers of CFU in oral swabs significantly compared with the numbers of CFU in oral swabs from the controls ( $P < 0.05$ ) and was more effective than itraconazole and as effective as fluconazole. Thus, ER-30346 shows efficacy in murine aspergillosis, candidiasis, and cryptococcosis models. Further studies are needed to determine the potential of ER-30346 for use in the treatment of these infections.

**19. Pruritic papular eruptions and candidiasis due to HIV infection.**

**Authors(s): Uchigasaki-S; Baba-S; Kakinuma-H; Suzuki-H; Sawada-S; Kasori-J; Okamoto-T**

*Source: J-Dermatol. 1996 Aug; 23(8): 572-6*

**ABSTRACT:**

We present two patients with refractory papular eruptions and severe candidiasis. Both of them are positive for *Treponema pallidum* and have suffered from pruritic papular eruptions (PPE) that had resisted therapy for years. Also, candidiasis appeared in the mouth, at intertriginous sites, and on the feet. The clinical features suggested immunodeficiency, and HIV tests were positive. Histologically, the specimen from the PPE lesion showed perivascular and perifollicular mixed cell infiltration. The fungus was identified by both Parker-KOH-mount examination and mycologic culture as *Candida albicans*. The pruritic papules were healed almost completely with oral antihistamine and topical corticosteroid treatment, and the candidiasis mostly disappeared after treatment with topical antifungal agents alone. We learned from these two cases that refractory PPE and severe candidiasis indicate a need for HIV testing.

# THE GULF JOURNAL OF DERMATOLOGY & VENEREOLOGY

## NOTES FOR CONTRIBUTORS



The Gulf Journal Of Dermatology and Venereology is published biannually by The League Of Dermatologists in the G.C.C. States, and will accept original articles on different fields of Dermatology, STD's and Andrology.

### Manuscripts

- \* Should be addressed to the Editor, Dr. Hassan Al Abdulla, P.O. Box 3050, Hamad Medical Corporation, Doha, Qatar. Fax: (+974) 393058
- \* Two copies of all elements of the paper are requested All the matter should be typed, double-spaced with wide margins, on one side of each sheet only.
- \* The paper should have the following arrangement: 1. Title page; 2. Abstracts; 3. Text; 4. References; 5. Legends; 6. Tables; 7. Figures and 8. Arabic summary of the abstract and title if possible. Title page should bear the author(s) name(s), degrees, affiliation(s), and the address to which reprints are to be sent.

### Tables and Figures

- \* Refer to figures as Fig. and give Arabic numeral.
- \* Submit 2 copies of each photograph and drawing on glossy paper of good quality.
- \* Use black ink for charts (line drawings).
- \* Identify figures on back by author's name and number of figure.
- \* Start tables at top of new page.

### References

- \* All references in text must be identified by superscript Arabic numerals in the order in which they appear in the manuscript. When referring to a reference, type the last name of the author followed by its reference number. If referring to two authors, use both Last names, otherwise type the last name of first author followed by "et al".
- \* In Reference page, list the references in order of appearance in the manuscript. When referring to a periodical type last name followed by initials, title of paper, periodical name abbreviated as in the original one, year of publication, volume, pages. Type all authors if 3 or less, otherwise type the first 3 authors followed by "et al.". e.g. Breathnach AS, Wyllie LM. Electron microscopy of melanocytes and melanosomes in freckled human epidermis. *J Invest Dermatol* 1964;42:389-394. When referring to books, type name of author(s) (as above), title, edition, place, publisher, year, page referring to. e.g Mckusick VA. Mendelian inheritance in man. 7th Ed. Baltimore: John Hopkins University, 1986: 1228. If the book has contributors, type the name of author(s), title, in: e&ors, title of book, place, publisher, year, page referred to e.g. Vickers CF. Topical corticosteroids. In: Fitzpatrick TB, Eisen AZ, Wolff K, et al. eds. *Dermatology in general medicine*. New York: McGraw-Hill, 1987: 2540-2545.
- \* If manuscripts are prepared on IBM PC or compatible computer using word for windows, a 3-1/2 or 5-1/4 inch diskette copy of the article will be appreciated by the publisher.