

TOPICAL BUCLOSAMIDE (JADIT) IN DERMATOMYCOSIS (22 Cases)

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Besides Grisofulvin (with its inherent toxic effects like S.L.E. syndrome, purpura, agranulocytosis and porphyrin metabolism disturbances, and development of resistance to it by certain strains—Year Book of Dermatology 1962-63), there is no effective parenteral therapy for the dermatophytes which thrive on dead keratinous matter of hair, nails and skin. Therefore, it is natural that a continuous search should go on unabated for a therapy for these fungi, which is more effective, will reduce the duration of treatment, is cheap and is preferably topical but not messy.

Buclosamide (4 chloro-2-hydroxy benzoic acid-N butylamide) has been claimed to be a newer locally acting antimycotic agent. It is marketed under the trade name 'JADIT' ointment by Hoechst Pharm., Ltd. containing 2% salicylic acid and 10% Buclosamide in a base which is a bland mixture of higher aliphatic hydrocarbons and esters of several higher fatty acids together with monovalent alcohols. It is a colourless and non-staining preparation. It is stated to be effective against a wide variety of pathogenic fungi affecting the skin including all known members of the genus *Microsporon*, *Trichophyton*, *Epidermophyton*, several strains of *Candida albicans*, *erythrasma* and *pityriasis versicolor*.

Thambiah et al. (1964) studied the effect of this preparation in 12 cases clinically and observed that itching disappeared in 10 cases after 2 applications

and in the other 2 cases after 3 applications of the ointment. They further claimed that the lesions were cured in 11 cases after 4 or less than 4 applications, though their twelfth case required 6 applications for the cure.

The present study has been undertaken to adjudge the efficacy of this preparation in our cases of Dermatomycosis who constitute nearly 10-11% of the total attendance at our Skin and V.D. outpatient department at V.J. Hospital, Amritsar.

Material and Methods

The present study is confined to 22 cases who were picked up from Skin and V.D. Outpatient of V.J. Hospital, Amritsar during the year 1969. All these cases were positive for fungus by direct examination under microscope in 10% KoH. None of the cases studied could be admitted in the wards for observations on account of scarcity of beds.

The patients were instructed to apply the drug twice a day on the affected areas with the help of the finger. They were further asked to apply the drug in the morning after bath and in the evening without any wash. Each case was asked to visit the outdoor every 4th day to report progress. The progress was adjudged clinically and where necessary by wet smear examination of scrapings in 10% KoH. The case was declared cured when clinically lesions had disappeared on clinical examination and smears had become negative.

Observations

Age and Sex :—Our 22 cases consisted of 17 male adults, 3 female adults, 1 male child and 1 female child. Their ages ranged from 5–55 years.

Duration of Illness :—Duration of illness varied from 4 days to 3 years (Table 1) 12 cases having disease for more than 3 months.

Sites involved :—In 14 cases multiple sites were involved (in 12 cases 2 sites and in 2 cases 3 sites). In the remaining 8 cases only one site was affected involving crural region in 2; buttocks in 2, and neck axillae, face, and abdomen in one case, each (Table 2).

Scrapings for fungus :—In all cases, scrapings examined in 10% KoH revealed presence of fungal mycelia.

Duration of treatment :—The patients were under observation for 6 to 41 days

(Table 3). The treatment was continued till the disappearance of the lesions or the application was considered ineffective or the patient defaulted.

Response to treatment :—No improvement was observed in 13 (59.1%) cases (except that the lesions remained almost of the same size) even when treatment with topical application of Jadit was continued for 40, 30, 28, 27, 25, 24, 22, 19, 18 and 16 days in one case each.

The treatment in other 3 cases could be carried out for 6, 8, 9 days only, as they defaulted afterwards, but without much clinical improvement (Table 4).

Lesions disappeared in 8 (36.4%) cases only – 2 requiring treatment upto 10 days, 2 for 12 and 13 days, respectively, 3 for 21–24 days and the 8th case for 41 days. Out of these 8 cases, multiple sites were involved in 6. In total 14 sites involved in them were cured (Table 5).

Table 1—Showing the duration of illness

Duration	No. of cases	Percentage
Up to 10 days	2	9.1
11 days to 1 month	2	9.1
1 month to 3 months	6	27.3
3 months to 6 months	4	18.2
6 months to 1 year	6	27.3
More than 1 year	2	9.1
Total	22	100

Table 2—Showing the sites involved in 22 cases

Sites involved	No. of sites
Crural region	11
Buttocks	10
Abdomen	5
Face	2
Neck	2
Axillae	2
Thigh	2
Breast	1
Vulvae	1
Hands	1
Feet	1
Total	38

Table 3—Showing the duration of treatment

Duration	No. of cases	Percentage
Up to 10 days	5	22.7
11 to 20 days	5	22.7
21 to 30 days	10	45.5
More than 30 days	2	9.1
Total	22	100.0

Table 4—Showing the effects of ointment on lesions

Response	No. of cases	Duration of treatment in days			Range
		Up to 10	11-20	More than 20	
Disappeared	8	2	2	4	8-41
Reduced	1	0	0	1	30
No effect	13	3	3	7	6-40

Table 5—Showing lesions cured with duration of treatment

Sites	No. of lesions treated	No. of lesions cured	Cure percentage	Duration of treatment required in days	
				Range	Average
Crural Regions	11	5	45.4	8-41	19.2
Buttocks,	10	1	10.0	24	24.0
Abdomen	5	2	40.0	13-27	20.0
Thigh	2	2	100.0	21	21.0
Face	2	1	50.0	12	12.0
Axillae	2	1	50.0	21	21.0
Neck	2	0	—	—	—
Breast	1	1	100.0	10	10.0
Vulvae	1	1	100.0	21	21.0
Hands	1	0	—	—	—
Feet	1	0	—	—	—
Total	38	14	36.8	8-41	18.75

In the remaining one case who had lesions at 3 sites, viz., face, neck and buttocks, lesions only got flattened and that too after application of Jadit for 30 days.

Itching disappeared in 11 cases and got ameliorated in 4 cases. This included 6 cases in whom no clinical improvement of the lesions was observed.

No patient complained of any local irritation during the course of treatment with 'JADIT'.

Discussion and Conclusions :

In contrast to the results described by Thambiah et al. (1964), who have reported 100% cure in their 12 cases after the application of Jadit ointment for 6 days, overall cure rate in our cases has been only 36.3%. Further, duration of treatment required for cure of our cases was much longer than the duration required by their cases for cure. As a matter of fact our one case who had lesions in crural region required continued treatment for 41 days and 3 others for 21-24

days before the lesions could disappear. It is thus evident that 50% of our cured cases required treatment for more than 20 days. It may also be added that whereas Thambiah et al. (1964) advocated a single application in the day, our patients applied that ointment twice a day.

In our series only one case out of ten with lesions on the buttocks got cured whereas in the series of Thambiah et al. all the 6 cases who had lesions on the buttocks got cured with topical Jadit application. This resistance to treatment with topical Jadit of our cases with lesions in the buttocks could be attributed to the fact that they were applying the ointment themselves and did not seek the help of another person with the result that the ointment could not be applied to the lesions on the buttocks properly and therefore did not respond to treatment.

Keeping the above fact in view, if we exclude these 10 cases with buttock lesions, the cure rate even then comes to 58.3% (7 out of 12 cases) of our series and 46.4% (13 out of 28 lesions sites) for the lesions at various sites involved.

This is a preliminary report. Further trial is indicated along with the culture for fungi, as it is possible that the strains involved in our cases might be different and comparatively more resistant to this treatment than those affecting Thambiah et al. (1964) cases.

From the observations described above, one can only say that 'Jadit' ointment is not the final answer for Dermatomycosis, but it may be considered as another alternative topical application in hand to be effective in nearly 50% of cases.

Summary :

'Jadit' ointment was tried in 22 cases. Cure rate had been 36.3% (8 out of 22 cases) for cases and for lesions at various sites cure rate has ranged from 0 to 100%. The factors involved for this variation are discussed.

Acknowledgment :

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REFERENCE :

- Thambiah A. S., Rao U. S. and Annamalai R.: Indian Medi Profession II : 5142, 1964.