

CLINICAL TRIAL OF 'JADIT' IN SUPERFICIAL MYCOSES

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Summary

Jadit ointment was tried in 30 cases of superficial fungal infections. Four clinical types were included in this series. Response to treatment was found good in 30% and excellent in 43%. On the whole 73% of the patients responded well to Jadit which is very encouraging with a topical antimycotic agent. It was well tolerated by all patients and there were no side effects.

Rajasthan is a dry, very dusty and hot part of India. In its atmosphere, the percentage of humidity is very low, still the superficial fungal infections are quite common. The incidence is about 10-15% of the total attendance of Skin O.P.D. at S.M.S. Hospital, Jaipur.

Superficial mycoses exist in this world since ages and search for a suitable and effective superficial antimycotic agent is going on for decades. Patients become fed up and so many of them attempt to burn the affected area by applying lime or acid. They are fond of applying 'Dadruvinash', Zalim Lotion, Betex, or 'Germscutter' in search of cure but many of them get contact dermatitis after such applications.

'JADIT' is a suitable superficial antimycotic agent, which is available as a colourless and non-staining ointment. It contains-Buclosamide 10%, and Salicylic acid 2%. The ointment base is a bland mixture of higher aliphatic hydrocarbons and esters of several higher fatty acids together with monovalent alcohols. The solvent is a mix-

ture of several alcohols, to which castor oil has been added.

Pharmacology

(i) Buclosamide is 4-Chloro-2 hydroxybenzoic acid-N-butylamide. Local tolerability was found to be very satisfactory. Cutaneous application and intra-cutaneous injection in rabbits produced no evidence of irritation. The reliable antimycotic action of Jadit is not significantly impaired even in the presence of tissue protein. This property enables Jadit to penetrate deep into the epidermis and exert an optimum therapeutic action in cases where deeper rooted fungal infections are present.

(ii) Salicylic Acid is a well known keratolytic and antifungal agent, which softens the superficial layers of the epithelium to enable deeper penetration of the ointment, into the skin. The powerful, fungicidal action of Jadit and its penetration deep into the epidemis ensures optimum therapeutic action.

Material and Methods

The present clinical trial was done on 30 patients of superficial mycotic infections, who were picked up at random from the Skin & V.D. O.P.D. of S.M.S. Hospital, Jaipur. None was admitted in

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the hospital for observation. Jadit ointment was issued to more number of cases than mentioned here but defaulters have not been included in this series. All were examined clinically and those with typical lesions positive for fungus were recorded in a proforma. Cases of *Tinea versicolor* were also included. All, except a few suffering from the latter disease complained of mild to severe itching in the lesions. A few gave history of the past local medication including one who was on griseofulvin oral therapy.

Scales were collected from the active border of the lesion and put in 10% KOH on a slide and examined under the microscope for fungus. All showed mycelia and were positive for fungus. No culture methods were adopted. It was tried to include all clinical types of *Tinea* but we could come across four types only, as mentioned in Table-II.

Instructions to patients: They were advised to apply the ointment on the affected parts with the finger and rub a little for a couple of minutes. They were asked to apply it, twice a day, in the morning after bath and at bed time. No antipruritic powders or even face powders were allowed. Cleaning with antiseptics was not desired. Just wash with ordinary soap at the time of bath only. They were called every week for

checkup both clinically and smear examination for fungus.

Clinical Observation

Age & Sex The present series included 23 (77%) adults of the age group 16-30 years. Out of these, 19 were males, of which 12 suffered from *T. cruris*, being the commonest but was not observed in females. The latter suffered from either *T. Corporis* or *T. versicolor*. One female child suffered from *T. Pedis*. Table-I shows much lower incidence in females or possibly they do not report for treatment.

TABLE I
Shows the Age and Sex incidence

Age (in Years)	Male	Female	Total
1-15	1	2	3
16-30	19	4	23
31-45	—	1	1
46-60	1	1	2
Above 60	1	—	1
Total	22	8	30

Clinical types of *Tinea*: *T. Cruris* is the commonest and in *corporis* the sites of the body involved were face, neck, trunk, and axilla. In females it was common on the waist where they tie their 'sari'. *T. versicolor* was seen on the trunk and proximal parts of the arms. Table-II shows the clinical types with their response to treatment.

TABLE II
Shows the clinical types of *Tinea* and the Results

Clinical types of tinea	No. of cases	Result of treatment with 'JADIT'		
		Excellent	Good	Poor
<i>T. capitis</i>	Nil	—	—	—
<i>T. barbae</i>	Nil	—	—	—
<i>T. corporis</i>	10	5	3	2
<i>T. cruris</i>	12	6	3	3
<i>T. pedis</i>	1	1	—	—
<i>T. unguium</i>	Nil	—	—	—
<i>T. mannum</i>	Nil	—	—	—
<i>T. versicolor</i>	7	1	3	3
Total	30	13	9	8

Duration of Illness: The duration of the lesions varied from 3 days to 6 years. Some cases of *T. Cruris* and versicolor were chronic and recurrent. Table-III shows that 43% (13) of the cases reported for treatment early within a week or ten days. It refers to the early consciousness of the people to skin diseases.

TABLE III
Shows the duration of illness.

Duration of illness	No. of Cases	Percentage
Upto 15 days	13	43
15 days to 3 months	9	30
3 months to 1 year	3	10
Above 1 year	5	17
Total	30	100

Duration of treatment: The patients were observed every week and duration of treatment varied from 1 to 6 weeks. Table-IV shows that 19 (63%) cases had taken treatment for 1-3 weeks while 25 (83%) for 1 to 4 weeks. Most of the cases who had responded favourably took 2-3 weeks for cure. Two cases of *T. cruris* and 2 of versicolor took longer. It is encouraging in comparison to griseofulvin therapy which also takes about 2-4 weeks.

TABLE IV
Shows duration of treatment.

Clinical Types	Duration of treatment in weeks					Total
	1 - 2	2 - 3	3 - 4	4 - 5	5 - 6	
<i>T. cruris</i>	6	1	3	-	2	12
<i>T. corporis</i>	4	3	2	1	-	10
<i>T. pedis</i>	1	-	-	-	-	1
<i>T. versicolor</i>	3	1	1	2	-	7
Total	14	5	6	3	2	30

Response to Treatment: It was categorised into three:

- (i) - Poor or no improvement.
- (ii) - Good-the lesions started subsiding satisfactorily and

patches diminished in size with no scales. Itching±.

- (iii) - Excellent-the patches cleared off completely-No itching.

Table-II shows excellent results in 13 (43%) cases and good in 9 (33%). On the whole 22 cases responded well and so the result was good in 73%, which was very encouraging.

Recurrence: 4 cases reported for recurrence after one month of stopping the treatment.

Side Effects All patients tolerated the ointment well and there were no side effects.

Discussion & Conclusion

Jadit ointment proved to be very effective local application for treatment of superficial fungal infections. 73% of the patients responded satisfactorily and in 43% the result was excellent. Thambiah et al¹ reported 100% cure in 12 cases after application of Jadit ointment for 6 days only. Such miraculous results were not obtained by us but 73% cure rate is also very encouraging. Sadana et al² from Amritsar reported cure rate of 36.4% only, which is really discouraging. 8 cases only from their

series responded well. Among our cases 8 out of 30 cases (27%) did not respond.

In our series the patients were asked to apply the ointment twice a day and most of them took about 2-3 weeks for

satisfactory response. Application for 6 days only is not understandable as in the series of Thambiah et al. Because Tinea infection is usually chronic and even after satisfactory response takes some time to clear-off.

Griseofulvin, which is the drug of choice for superficial mycoses, has got its toxicity. Double blind studies should be performed to compare the efficacy of its oral therapy with topical therapy by Jadit. In our series the time taken by the latter is about the same as advocated for griseofulvin orally. So the latter may be avoided and Jadit application should be preferred. The cost will also be much less.

Most of the patients tolerated Jadit well. There were no side effects. It is a

colourless, nonstaining ointment. Its local application is not messy with its cost reasonable and response good. As recurrence is concerned, it is usual with all types of antimycotic agents and is mostly due to reinfection.

Acknowledgment

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REFERENCES

1. Thambiah AS, Rao US and Annamalai R : Clinical evaluation of 'Jadit' in dermatophyte infections : Ind Med Profession, Vol II, 8 : 5142, 1964.
2. Sadana SR, Sarin RC and Kamlesh Kumar: Topical buccosamide in dermatomycosis: Ind J Derm Ven, 38 : 47, 1972.

False

Auto-erythrocyte sensitisation also called 'psychogenic purpura' is encountered in persons who show depression, hysterical and masochistic traits, anxiety and an inability to deal appropriately with their hostile feelings. Increased fibrinolytic activity has been shown to occur in the anxious patient who develop spontaneous bleeding associated with pain. Correl by electrical stimulation of brains of cats and also by transection of brain at various levels has shown that cerebral stimulation shortens the clotting even in heparin treated animals.

Ref : The Physiology and Pathophysiology of the skin, Vol. 2, p. 776.