'VALLERGAN' AN ADJUVANT IN THE MANAGEMENT OF ITCHING DERMATOSES

Tansukh Raj Dhariwala*

Itching is a common symptomatic manifestation of skin disease and, its control remains one of the most difficult problems in dermatological practice. Pruritus is a disagreeable sensation which excites the desire to scrach, thus creating the vicious cycle of 'itch-scratch-itch'.

It is obvious that treatment directed towards the cause or disease underlying the itching is the best way to relieve the symptom. But, the relief of this symptom becomes all the more difficult because the causes of pruritus are diverse and often not known. Therefore, it would be to advantage to have an effective systemic anti-pruritic agent which would relieve the itching making the patient comfortable while allowing the skin lesions to heal.

The physiology underlying the pathogenesis of itch is not well understood. It is presumed that peripheral chemo mediators acting on peripheral nerve filaments are liberated by a wide variety of stimuli and noxious agents. Some observers suggest that itching is a subthreshold pain sensation, while others regard itching as a distinct sensory modality. It is well known that lowering of the itch threshold can be caused by psychological factors. Tense, irritable, agitated or anxious patients complain of itching far more than placid,e motionally, intergraded subjects (Cairns, 1968). The vasodilatation of the skin vessels which occurs at night coupled with general physical relaxation tends to make itching of varying aetiologies worse, late in the day and at night The itching of psychogenic cause is often worse at night but so too is the itching of scabies (Beare, 1969).

"Evanescent pruritus is normal, but when it is not relieved by mild scratching or rubbing, itching becomes pathologic" (Jayaram and Raju, 1963). Irrespective of the pathogenesis of itching, a chain of events seem to occur which prolong and intensify not only the sensations of pruritus but also its susceptibility. "Successful management requires the interruption of the vicious cycle at some point effectively" (Jayaram and Raju, 1963).

In recent years phenothiazines have aroused considerable interest in the management of pruritus. Trimeprazine ('Vallergan'), is pharmacologically intermediate between promethazine ('Phenergan') and chlorpromazine ('Largactil') and is largely devoid of the anti-adrenaline action of the latter with anti-emetic and sedative actions comparable to those of chlorpromazine. It is a more potent antihistaminic and anti-pruritic than promethazine.

Its anti-pruritic effect has been demonstrated by various workers such as Goldberg and Diamond (1959), Anderson and Chalmers (1959), Kroll (1961) Pittelkow (1960), and Mulay et al (1968).

*Director, Skin Hospital, Katni, (M. P.).
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The aim of the present study is to determine the efficacy of 'Vallergan' as an anti-pruritic agent in patients suffering from various dermatoses in which pruritus was the most prominent symptom.

Material and Method: 84 Patients suffering from various dermatoses as shown in the accompanying table were selected at random for the trial. There were 12 children ranging in age from 2 to 12 years and 72 adults ranging in age from 12 to 47 years. The subjective symptom of itching was graded in terms of severity as mild, moderate and severe itching.

Patients were followed up at weekly intervals and their progreas in intensity of itching was recorded. The patients were also asked regarding the pattern of their sleep before and after therapy.

'Vallergan' was administered orally to adults as 10 mg. tablets and to children as a syrup containing 2 mg. trimeprazine per ml. Adults as a routine were given 1 tablet thrice daily and the dosage was altered according to the severity of the itching, response and tolerance. In children 'Vallergan' was given as a syrup in a dosage of $\frac{1}{2}$ to 1 teaspoonful twice daily.

The results with 'Vallergan' were graded as follows :—(a) *Excellent* if complete relief of itching was obtained. (b) *Good* if itching was considerably diminished. (c) *Fair* if some relief of itching was obtained and (d) *Poor* if there was no relief.

Observations: With one exception 'Vallergan' produced fair to excellent results in all the patients. Twenty nine per cent of the patients obtained excellent relief; in 55 per cent the response was considered good; in 15 per cent fair and in 1 per cent the result was considered poor.

The details of the diagnosis, the number of cases and the response to 'Vallergan' therapy are set out in the accompanying table

Table 1.

'Vallergan' : An Adjuvant in the management of Itching Dermatoses.

			Results of Vallergan Therapy			
	No. of Cases	Diagnosis	Excellent	Good	Fair	Poor
Adults (12 to 47) years)	39	Atopic Eczema (neurodermatitis)	8	23	8	—
	2	Urticaria	—	1	1	—
	5	Contact dermatitis	1	3	1	—
	2	Lichen simplex chronicus	—	2	—	—
	4	Lymphomas (Varied)	2	2	—	—
	2	Dermatophytosis	—	2	—	—
	4	Pityra-is rosea	3	1	—	—
	3	Pruritus ani	—	1	1	1
	1	Poikiloderma	1	—	—	—
	2	Senile pruritus	1	1	—	—
	2	Dermatitis herpetiformis	—	2	—	—
	5	Pruritus vulvae	—	4	1	—
Children (2 to 12 years)	1	Stasis dermatitis	—	1	—	—
	7	Chicken pox	7	—	—	—
	5	Atopic eczema	1	3	1	—
	84		24	46	13	1

In some patients the effect was striking:

(a) A patient with Hodgkin's disease who had continuous itching and insomnia for days together was able to sleep for 12 hours following the administration of one 'Vallergan' 10 mg. tablet and his pruritus was completely controlled by further use of the drug;

(b) A patient with lichen planus had intense pruritus and obtained complete relief of the symptom although her lesions remained visibly unchanged;

(c) Seven children suffering from chicken-pox who received 'Vallergan' had complete relief from the pruritus. The course and symptoms of the illness showed a remarkable change and the patients became more active mentally;

(d) The effect on itching accompanying atopic dermatitis in both adults and children was found to be fairly promising.

Side effects: The only side effect observed was drowiness which could be overcome by adjusting the dosage. In many patients drowsiness was found to be present only for the first few days.

Discussion: The anti-prutitic effect of 'Vallergan' has been demonstrated by Goldberg and Diamond (1959), who observed excellent to good relief of pruritus in over 70 per cent of the cases. A double blind study of trimeprazine was undertaken by by London (1959) in a series of 104 patients aged from 10 to 88 years. The patients were all suffering from severe pruritus associated with common dermatological, allergic or systemic disorders which generally had been present from one week to several years. In the trimeprazine series 38/58 patients showed excellent response, 9/58 showed a good response, in 5/58 the results were fair and in 6/58 the results were poor.

In another double blind trial by Smith and Curwen (1961) it was observed that about 50 per cent of the cases obtained substantial relief with trimeprazine.

It has been confirmed by workers in different parts of the world that the majority of the patients with pruritus associated with many dermatological diseases obtained relief from this symptom with trimeprazine therapy. The patient stopped scratching or or otherwise aggravating inflamed areas, so that secondary excoriation and erythema subsided, secondary infection reduced, and protective dressing were no longer necessary. Further, this anti-pruritic effect together with the sedative action of trimeprazine, allowed a return to the normal sleep pattern especially when the itching was severe at night. Trimeprazine was of additional value in those cuses in which the itching was associated with, or appeared to be accentuated by an emotional stress or nervous tension.

So far as the sleep factor was concerned normal sleep was reported in almost all cases. In some patients drowsiness may be desirable rather than be a limiting feature in the drug action. In a comparative trial by Mulay et al (1968) it was observed that phenobaritone sodium produced more soporific effect with less antipruritic effect while 'Vallergan' had a specific antipruritic effect apart from its central sedative action.

In another comparative clinical trial, Jayaram and Raju (1963) compared the effects of 'Protamyl', 'Phenergan' and 'Vallergan' in bringing about relief from pruritus associated with common skin diseases. 105 patients received 'Protamyl', and 112 patients with 'Vallergan'. It was observed that 'Vallergan' produced 100 per cent relief in patients suffering from scabies/pediculosis; 63 per cent relief in atopic dermatitis/neuro-dermatitis and 30 per cent in the urticaria group. The authors noted that drowsiness was a distinct side effect only in the beginning and was reduced after continued use.

'Vallergan' appears to be a promising oral antipuritic agent and in view of its specific antipruritic effect and its efficacy in relieving/reducing pruritus associated with different dermatological conditions, it would be worthwhile considering further extensive studies with the product.

Summary: 84 Patients with different dermatological conditions presenting with pruritus as their main symptom were given 'Vallergan' in order to determine the efficacy of this product as an antipruritic agent. It is observed that trimeprazine tartrate ('Vallergan') has a specific antipruritic effect and is beneficial as an adjuvant medication in the treatment of different dermatological conditions associated with pruritus. It enables better management of the skin conditions. Trimeprazine is of additional value inasmuch as it restores the normal sleep pattern and is of further value in those cases in whom the itching is associated with or appears to be accentuated by emotional stress or nervous tension.

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