

TREATMENT OF PALMOPLANTAR HYPERHIDROSIS

T. R. BEDI

Summary

Alcoholic solution of aluminium chloride (20 percent) commercially available as 'Drysol' in western countries proved highly effective topical treatment for palmo-plantar hyperhidrosis in 8 Patients. The beneficial effect became obvious after 3-4 applications and there were no untoward effects.

Symmetric hyperhidrosis localized to the palms and soles or the axillae is commonly seen in dermatologic practice and often poses a difficult therapeutic problem. Though, in most instances, emotional disturbances are alleged to be the key factor, invariably one fails to demonstrate the so called 'emotional' lesion and even when it is likely to be important, the patient may not be easily persuadable to psychotherapy. The present communication pertains to the therapeutic efficacy of aluminium chloride in alcohol (Drysol®) in the treatment of palmo-plantar hyperhidrosis.

Material and Methods

Eight patients with palmo-plantar hyperhidrosis were studied. Each patient was enquired about the age of onset, marital status, natural course of the disease, any seasonal variation or relation to emotional state, other body area involvement, alcohol intake and family history of diabetes or hypertension. General physical and systemic examination on each patient included special reference to blood pressure, the state of palms and soles—whether warm or cold—and any associated skin lesions. Serum protein bound iodine (PBI) was estimated in all cases.

Each patient was instructed to make sure that the palms and soles were absolutely dry before applying the

drysol lotion containing aluminium chloride (20 percent) in alcohol. The lotion was applied for 2 consecutive nights followed by single weekly applications subsequently. The affected parts were washed the following morning with water and patients were advised not to take any precautions. The results were graded excellent—when sweating was controlled within one month, good—when controlled within 2 months and poor—when it necessitated more prolonged treatment. Failure to control sweating after 4-6 months of weekly regime was adjudged no response. Any side effects complained of by the patient or noted on examination were recorded.

Results

The clinical data and the response to therapy are depicted in the table. Seven of 8 patients were males, their duration of disease varying from 2-20 years and the age of onset from 14-18

Lecturer, Department of Dermatology,
Postgrad. Inst. Med. Ed. Res.
Chandigarh-160012

Received for publication on 22-11-1976

years (Average 16.75 years). All but 2 were unmarried and 5 of the 8 patients had symptoms continuously throughout the year. Case 1 gave history of definite worsening in the summer months and he and case 7 had increased sweating all over the body including the axillae. In 3 patients, symptoms were phasic lasting for days but only one (case 3) of them related this to emotional upset. There was no history of diabetes or hypertension in the family and none of the patients was alcoholic. All patients had cold 'Sweaty' hands and feet. The blood pressure, blood sugar and serum P B I were within normal limits.

Six patients showed excellent response and the remaining 2 showed good response. One patient complained of slight irritation after 4 applications and another noticed pitted keratolysis and peeling of the palmar skin which on further questioning was related to the change of season. None of the patients observed any redness, dyshidrosiform eruption or dermatitis during the treatment. No systemic effects were noticed.

Limited follow-up (6 months) on patients indicates that the lotion may have to be applied once or twice a month to avoid relapses. One of the patients (case 7) indeed stopped medication after a month and has remained asymptomatic for subsequent 4 months.

Excessive dryness of the palms was complained of by him, though, he continued to have increased sweating on the rest of the body.

Comment

Available modalities for treatment of palmo-plantar hyperhidrosis include topical, medical and surgical measures. Topical applications and internal use of atropine like drugs act by anticholinergic effect on sweat glands but produce undesirable systemic side-effects¹. Poldine methosulphate (1-4 percent) in alcohol has been shown to have no effect on palmo-plantar sweating experimentally². Water iontoelectrophoresis requires frequent visits on the part of the patient for consistent effects³ and 1 percent formalin soaks or 10 percent glutaraldehyde in buffered solution is useful but stains the part and contact sensitivity may develop⁴. Surgical measures, chiefly sympathectomy is attended first by anhidrosis and excessive dryness of the parts and later a relapse of hyperhidrosis. Sometimes, compensatory hyperhidrosis results on the other body areas.

Hibbot⁵ emphasized the use of aluminium salts in cosmetic preparations and suggested aluminium chlorhydrate to be most satisfactory. The present investigation clearly shows an equally satisfactory response with aluminium chloride in alcohol. The beneficial

TABLE
Clinical data and response to Drysol in patients of palmo-plantar hyperhidrosis

Case	Sex	Age of onset (years)	Marital Status	Natural course	Seasonal variation	Sweating elsewhere	Emotional lesion	Response to Drysol
1	M	15	Unmarried	Continuous	Worse in summer	Increased	No	Excellent
2	M	14	-do-	Continuous	No	Normal	No	Excellent
3	M	17	-do-	Phasic	No	Normal	Yes	Good
4	F	17	Married	Continuous	No	Normal	No	Excellent
5	M	17	Unmarried	Continuous	No	Normal	No	Excellent
6	M	18	-do-	Phasic	No	Normal	No	Excellent
7	M	18	Married	Continuous	No	Increased	No	Excellent
8	M	18	-do-	Phasic	No	Normal	No	Good

effect becomes obvious after 3 or 4 applications and it appears to persist for considerable time even after the treatment is stopped. It is premature to comment about the long term effects and relapse rates at the present stage of follow-up. The treatment, however

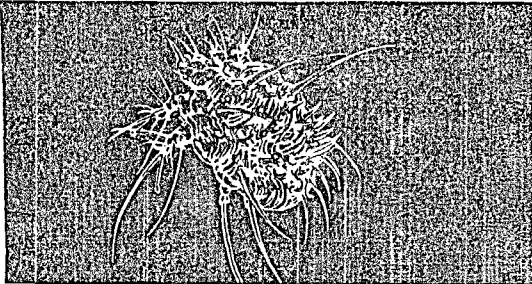
is without side effects and deserves a place in the various therapeutic regimes for this highly perturbing and embarrassing disorder—palmoplantar hyperhidrosis.

Drysol^R was obtained from Person & Covey Inc. U. S. A.

REFERENCES

1. Champion RH: Disorders of sweatglands In Text book of Dermatology 2nd Ed Rook A, Wilkinson DS & Ebling FJG, Blackwell Scientific Publication, Oxford, 1972, p 1517.
2. Grice KA and Bettley FR: Inhibition of sweating by Poldine methosulphate (Nacton), Brit J Dermatol, 78, 458, 1966.
3. Levit F: Simple device for treatment of hyperhidrosis by Iontophoresis. Arch Dermatol, 98,305, 1968.
4. Juhlin L and Hansson H: Topical glutaraldehyde for plantar hyperhidrosis, Arch Dermatol, 97,327, 1968.
5. Hibbott HW: Hand book of cosmetic science. Pergamon, Oxford, 1963.

in the
treatment of
SCABIES
and
PEDICULOSIS

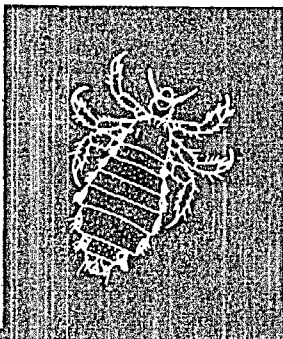


'ASCABIOL'*

Benzyl Benzoate Emulsion

in its effectiveness, ease of application and short duration of treatment, commends itself to physician, nurse and the patient.

Detailed information is available on request.



M&B May & Baker

* trade mark

MAY & BAKER (INDIA) PRIVATE LTD
Bombay • Calcutta • Gauhati • Indore • Lucknow
Madras • New Delhi • Patna

617