ANXIETY AND HYPERHIDROSIS

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Summary

Palmoplantar hyperhidrosis is a very common problem. It is frequently seen in young adults. In almost all cases it is not possible to determine the cause. It is usually attributed to anxiety or emotional factors.

We studied anxiety in 32 patients using Hindi version of Middlesex-Hospital-Questionnaire and compared with normal controls. We did not find any difference between the two groups.

Anxiety perhaps is not a major etiological factor in palmar and plantar hyperhidrosis.

The primary idiopathic hyperhidrosis is by definition a diagnosis of exclusion. Hyperhidrosis of palms and soles in association with generalised hyperhidrosis may be produced secondary to recognised entities like hyperthyroidism hypoglycemia, hypoxia, obesity. menopause, pregnancy and pheochromocytoma[1].

Emotional or mental activity is said to increase palmoplantar sweating. Thermal stimuli may aggravate this condition. Mental or emotional stimuli usually trigger this type of sweating and in some patients deepseated emotional disturbances may be found. In some there may be no primary emotional disorder[2].

Mackenna[3] has tried to correlate certain skin conditions with specific personality types. He suggested that patients with hyperhidrosis often have morbid anxiety. Rook and Wilkinson (1972) have classified hyperhidrosis with dermatological conditions perpetuated by demonstrable psychosomatic mechanism[4].

In the light of the above points, the present study was contemplated to endeavour and understand the relationship of anxiety in the patients suffering from hyperhidrosis and correlate relationship between the two, if any.

Material and Method

Patients attending the Dermatology and Venereology Out-patient department of Sir Sunderlal Hospital, Banaras Hindu University, Varanasi with complaint of Hyperhidrosis constituted the material for this study. Only patients suffering from palmo-plantar hyperhidrosis alone with no associated systemic disease were chosen.

The period of study was from January 1974 to August 1975. During this period 32 patients were studied.

In every case detailed history was taken giving emphasis to duration, family history of hyperhidrosis, history

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of any long febrile illness and nature of hyperhidrosis i. e., whether 'continuous' or 'phasic'. Complete physical and systemic examination was done to exclude any systemic disease.

Patients were then given Hindi version of Middlesex Hospital Questionnaire to fill up[5,6]. It is both an inventory and self-rating scale. It was used to assess any anxiety in hyperhidrosis patients. It is a short clinical diagnostic self rating scale for psychoneurotic patients. The test gives quantitative clinical profile. It consists of six sub-scales having 8 questions each. The subscales are :

1. Free Floating Anxiety (FFA)
2. Obcessional traits and symptoms (OBS)
3. Phobic anxiety (PHO)
4. Somatic concomitants of anxiety (SOM)
5. Neurotic depression (DEP)
6. Hysterical personality traits (Hys)

Observations and Results

Age distribution

In the present study there were 32 patients with hyperhidrosis. Their ages ranged from 7 years to 55 years, average age being 20.5 years. Large majority of patients were between 11 and 30 years of age. Family history of hyperhidrosis was elicited in 8 patients (Table 1).

TABLE 1

Age Distribution

Age groups	No. of patients
5—10 years	1
11—20 ,,	14
21—30 ,,	14
31—40 ,,	2
41—50 ,,	—
51—60 ,,	1
Total :	32

Duration of Hyperhidrosis

Duration of hyperhidrosis in these patients was highly variable, ranging from 1 year to 25 years (Table 2). Nine adult patients reported hyperhidrosis since childhood.

TABLE 2

Duration of illness

Age groups (years)	Duration of illness (years)
0—1	1
1—2	7
3—5	6
6—10	4
11—25	5
16—20	5
21—30	3

TABLE 3

Normal M. H. Q. Scores in comparison with hyperhidrosis patients.

	Normal			Hyperhidrosis patients				
	(N. 120)			(N = 32)				
Scale	Mean	S.D.	S.E.	Mean	S.D	S.E.	T value	P value
FFA	4.5	3.0	0.2739	5.35	5.15	0.8848	0.9177	>0.05
OBS	7.8	2.7	0.2465	7.47	3.16	0.5426	0.5537	>0.05
PHO	4.4	3.0	0.2739	3.64	2.60	0.4475	1.44	>0.05
SOM	4.7	3.1	0.2831	5.32	2.53	0.4340	1.19	>0.05
DEP	5.3	3.0	0.2739	4.64	2.66	0.456	0.80	>0.05
HYS	4.2	2.1	0.1917	3.85	1.88	0.3232	0.936	>0.05
Total	30.9	11.3	1.0319	30.29	10.17	1.74	0.3015	>0.05

Scores of hyperhidrosis patients (in Hindi version of MHQ) were compared with those of heterogenous groups of identical sex and age normal individuals[5].

Difference in average values between normal and hyperhidrosis patients was found to be statistically insignificant for total score and all subscale scores (Table 3).

Discussion

The hyperhidrotics did not differ from normal population in their scores of M. H. Q. in the present series. There are, however, reports of other workers who have correlated hyperhidrosis of palms and soles with morbid anxiety[3]. Rook and Wilkinson[4] have viewed hyperhidrosis as dermatosis provoked by demonstrable psychosomatic disorders.

In 1967 Engles and Wittkower have stressed that hyperhidrosis may not be considered as strictly psychogenic. This is a multicausal disorder determined by a combination of constitutional and acquired factors of which emotion is but one[7].

Thus we believe that emotional factors have been given undue importance in the etiology of palmar and plantar hyperhidrosis. This is partly because some workers had not tried to find out if anxiety was the effect or the cause of this condition. Srivastava et al in 1975[8] found anxiety levels higher among patients in general. Increased sweating does occur during emotional states, but this does not mean that patients with hyperhidrosis have a functional disorder.

Thus palmo-plantar hyperhidrosis may not be a simple symptom but manifestation of an extremely complicated neurophysiological processes in the patient.

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