A Psychological Profile of Patients Manifesting Warts : (An Egyptian Study)

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ABSTRACT

A total number of 130 patients, sixty males and seventy females suffering from warts were selected from the out-patient clinic of the dermatology department within the age range 15-40 years.

Psychiatric and psychometric assessments were done to the whole sample and the findings compared with those of a group of 70 controls.

Psychological sequelae of warts were found to depend on the patient's personality, the basic type of the skin, predisposing circumstances and the characteristics of emotional reactions. A neurotic personality was found to be more prone to warts. Psychotherapy was of great help for recurrent cases where the warts reappeared in different areas despite proper management. Thus we conclude that continuous co-operation between the dermatologist and the psychiatrist is of great importance and in fact a necessity for the amelioration of the condition.

INTRODUCTION

Warts are infections of the skin and mucous membranes by specific members of the Papova virus group (Rook **et al.**, 1979). Common warts are benign infectious papillomas transmissable from man to man. They are solid elevations with a rough irregular surface caused by hyperplasia of the papillary body and the epidermis. Susceptibility to infection with Cauch disease depends upon an immune response, the commonest immune defect in this case being the depression of the cell mediated response (Rook **et. al.**, 1979). Warts are transferred by direct and possibly also by indirect contact e.g. in schools, gymnasiums, barbers and by auto inocu-

lation. Manual workers show a higher incidence of warts in the hands and females are slightly more affected than males (Nasemann, 1977).

Much has been written on the psychological aspects of skin diseases. Perhaps the earliest significant writing in this subject was that of Broq and Jacquet (1891) with a description of neurodermatitis. Stokes (1930) described the influence of mother fixation and sadomasochistic trends in certain dermatoses patients. Rogerson (1934) described personality disorders in children suffering from eczema. Mackenna (1944) showed that dermatological patients were often anxious, hysterical, narcissistic or obsessional individuals. English (1949) thought that inferiority feelings and need for love were important factors in the aetiology of skin diseases. Obermayer (1955) built the platform that a simple relationship was present between a certain emotional conflict situation, personality structure and skin disease. The emotional conflict situation was described as the trigger phenomenon. The personality structure was the cause of an inadequate solution of the conflict which produced the onset of the disease. The patient proved uncapable of solving his problem adequately without feeling ill, because of special personality traits.

According to the theory of wholism, that postulates that man, his body and his mind constitute an indivisible unity, Okasha (1977) believes that the skin corresponds in each case to the personality of the individual it belongs to, i.e. that certain types of skin go hand in hand with certain types of character.

Viewed from the standpoint of development anatomy, this concept ties in well with the fact that the skin and the nervous system have a common origin in the ectoderm. There are quite a number of phenomena pointing to a relationship between the nervous system and the skin, such as the coexistence of peculiarities of character, a tendency to physical and emotional irritability and a certain distinctive pattern of cutaneous symptoms in one and the same person. Okasha (1977) believes that there are limitations to the extent to which it is possible to diagnose skin diseases as being either definitely of psychogenic origin, partially of

psychogenic origin, conditionally psychogenic, influenced by psychogenic factors, purely somatogenic with no involvement of psychogenic factors, or somatogenic with secondary repercussions of a reactive type.

MATERIAL AND METHODS

A total number of 130 patients, sixty males and seventy females suffering from warts were selected from the outpatient clinic of the dermatology department of the Ain Shams university hospital. All patients were referred to the psychiatrist with no information about the presence or absence of any psychological problems. Every patient was submitted to a structured interview which generally followed the Ain Shams psychiatric sheet. Special emphasis was laid, however, on the psychosocial aspects, positive family history, evidence of psychological precipitating factors, recurrance, methods of previous therapy and the psychological sequelae of the condition.

The ages of the selected group ranged between 20 and 40 years. The younger age group was not included in our sample because they were anxious and frightened from the cautery. It was difficult to interview the latter or to subject them to personality testing. Forty patients underwent psychometric assessment of personality. Two scales were applied :

1. The Eysenck personality inventory (E.P.I., Eysenck, 1964). The questionnaire consists of two scales :
   a) Neuroticism (N.)
   b) Extraversion (E.)

2. The psychasthenia (P.T.) from the M.M.P.I.

Twenty five patients read the questionnaires by themselves, while the remaining fifteen illiterates had the scale read to them.

After the first interview counselling was made with the dermatologist to find the appropriate line of management. Patients with definite psycho-

logical disturbances whether related to the onset of the disease or lesion were given psychiatric help in the form of psychotherapy and drug therapy.

The control group consisted of seventy patients undergoing minor operations in the surgical outpatient clinic of Ain Shams university hospital. They were matched for age, sex and social state.

RESULTS

The ages of our sample ranged between 20 and 40 years with a mean age of 21.4 years ± 5.58 S.D. 48% of our patients admitted having suffered from a severe shock such as loss of a parent, failure at school, financial problems, worry or emotional upset six months prior to the onset. This is highly significant compared to only 15% of the controls. Rarely did patients associate their warts with these facts. The duration of the illness ranged between one month and three years with a mean duration of 21.4 months. Positive family history for warts could be elicited in 42.5% of sample.

Table (I) shows the total results obtained by both psychometric tests. Table (II) reveals the respective findings for females and for males. Norms for normals are presented in the tables. Female - male differences in the scores obtained in both psychometric tests were found to be statistically insignificant.

The typical high N scores (High neuroticism scale) were anxious, worrying individuals, moody and frequently depressed. They suffered from bad sleep and other psychosomatic disorders. They were overtly emotional, reacting too strongly to all sorts of stimuli and found it difficult to get back on an even keel after each emotionally arousing experience. Their strong emotional reactions interfered with their proper adjustment making them react in irrational and sometimes inflexible ways.

Those individuals with high N-scores can be described as "worriers". Their main characteristic is a constant preoccupation with things that

might go wrong and with a strong emotional reaction of anxiety related to those thoughts.

Those with a high Extraversion scale were found to be sociable and needed to be with people. They craved for excitment, took chances, acted on the spur of the moment and were generally impulsive individuals. They always had a ready answer and generally liked change; they were care-free, easy going and optimistic. Those with a low Extraversion scale (Typical introvert) were quiet, retiring, introspective individuals. They were reserved and distant except with intimate friends. They did not like excitement, took matters of every day life very seriously, kept their feelings under tight control, did not easily lose their tempers, were somewhat pessimistic and placed great value on ethical standards.

The psychasthenia (which is one of the nine scales of the M.M.P.I.) discloses the similarity between the subject and patients who are sufdfering from morbid phobias or obsessive behaviours. The high score reflects the subject's self absorption. Those who obtained a high score on this test were found to be anxious, sensitive, sentimental and individualistic as compared to those who obtained low scores. The latter were found to be balanced and self confident.

In our patients, verruca vulgaris were seen commonly on the hands, especially the fingers, and "seed warts" on the scalp or beard. They take the form of thread — like or finger — like projections on the plantar aspect of the foot. They were yellowish papules deeply set into the skin. The flat Juvenile wart is hardly elevated and small, ranging from 1-3 mm in diameter. It usually occurs in large numbers on the face, neck, arms and the back of the hands. Precipitating factors for the skin lesions were encountered in 34% of cases as shown in Table (III).

Clinical evaluation of the patients' personalities was made. 69% were neurotics with a number of personality characteristic in common, attributable to immaturities, weaknesses and faulty evaluation of themselves and their problems as :

1. Inadequacy and low stress tolerance : They look upon themselves as basically inadequate. They need to cling to others for support. Some of them perceive many situations as threatening, which would not be perceived as such by normal individuals i.e. a high degree of threat vulnerability.

2. Anxiety was a pervasive factor which was intensified by the patients' symptoms. He recognized it as irrational but could not control it. Those patients were usually fearful, irritable and they admitted that these lesions sometimes prevented them from making satisfying relationships with other people and made him blind to the feelings of others and to his own in these unsatisfactory relations.

3. Sometimes the patients' behavior was non-integrative. Some of them were dissatisfied and unhappy with their life situations, and suffered a consistently depressive mood (20%). They were tense, pessimistic; they had vague feelings that something was missing or something was going wrong.

History of psychosomatic illness other than the skin lesion was not significantly reported. The former includes indigestion, premenstrual tension, headaches, colitis, vague aches and history of symptom shift.

Secondary psychological symptoms often occur due to the resulting outer appearance. They referred this during psychotherapy to direct or indirect self evaluation, the latter being the result of people's behaviour after seeing the warts.

The net result of psychotherapy revealed that 82% of plain warts were cured by suggestion and supportive therapy with no cauterization or local medications. As regards cases of verruca vulgaris, they were given both psychotherapy and cauterization. Only 30 patients continued therapy; other cases stopped attending the sessions after cauterization. Follow up of thirty cases showed no recurrence after one year.

TABLE I

Psychometric Performance of the Sample as a Whole

Scales	Total sample (Males and females)	Norms for normals
N	15.85 ± 4.46	13.5 ± 4.4
E	10.68 ± 3.43	11.6 ± 3.4
P.T.	24.78 ± 5.65	20.8 ± 5.6
		$p < 0.05$

TABLE II

Psychometric Performance of the Female and Male groups of Patients

Scales	Female patients	Normal females	Male patients	Normal males
N	16.04 ± 4.9	12.95 ± 4.95	15.75 ± 4.29	9.69 ± 5.10
E	9.54 ± 2.59	12.73 ± 5.07	11.5 ± 3.34	13.12 ± 4.95
P.T.	24.4 ± 5.55	20.15 ± 8.40	24.56 ± 6.11	20.9 ± 8.5
	$p < 0.05$		$p < 0.05$	

N : Neuroticism

E : Extraversion

P.T. : Psychasthenia.

TABLE III

Precipitating Factors in the Causation of Warts

	No. of patients
Divorce	4
Death of one of the parents	10
Financial troubles	6
Home troubles	13
Failure in the exam.	4
Troubles at work	7

DISCUSSION

Different mechanisms were responsible for warts, their relation to psychological precipitating factors and their response to psychotherapy.

1. A balanced approach to skin disease is to accept that many of them are caused by physical, chemical or bacterial damage acting singly or in combination with other factors. Whether they are primarily genetic or acquired, of a known aetiology or idiopathic they are often more or less a reaction which to varying extents may be influenced by emotions. A smaller third group is mainly of emotional origin.

2. It is acceptable that emotional influences can affect the skin through the autonomic nervous system resulting in disturbances of sweat secretion, vascular tone or erectores pilorum function. From the physiological point of view the skin possesses a pattern of circulation and secretion that allows the discharge of suppressed anger and anxiety in the form of a skin lesion.

3. It is generally realized that psychodynamic factors under certain emotional conditions can result in changes in the tonus of the capillary vessels and consequently alterations in the skin. One

could logically assume, therefore, that suggestion might induce a spasm in the capillaries and consequent reduction in the blood supply of the wart. It was suggested by Hall (1949) that thromboplastin present in the surrounding tissues and absent in warts may be inimical to the life of the wart and may thus play a role in the changes produced by psychotherapy. Sequeira, Ingram and Brain (1947) suggested that emotional stimuli may affect natural immunity through the endocrine glands. Goldsmith (1936) stated that warts are susceptible to psychogenic influence because they are unstable structures which already have a tendency to spontaneous regression. Bonjour (1929) expressed the belief that suggestion acts by lowering the blood pressure and thereby diminishing the amount of blood reaching the site of the wart (an explanation too simple to be accepted; Obermayer, 1955).

Although the sebaceous glands apparently are not directly influenced by the autonomic nervous system, they may be influenced by it indirectly because their secretions are responsive to changes in skin temperature. Skin temperature changes may be accomplished by vasomotor activity, which is regulated by the autonomic nervous system. Sebaceous glands may also be influenced by secretions of the endocrine glands which in turn are regulated to some extent by the autonomic nervous system as well as the circulatory system.

Other explanatory factors may include specific emotional constellations and personality traits which may be selective to the type and localization of the psychosomatic symptom. Neurotic traits were found to be significantly correlated with the condition (89%). The affects or emotions are expressed in a physical form through physiologic motor or secretory pathways. Besides the visible external signs of emotional expression which employs both the voluntary and autonomic nervous system, there are internal physiologic changes which are mediated by the autonomic nervous and endocrine systems (Alexander, 1950).

4. One of the factors responsible for warts may be the constitutional morbid predisposition or biologic inferiority of certain organs and organ systems. Also the type of emotional situation which the patient is unable to cope with may be influential. The organ inferiority Bauer (1950) spoke of appears to be genotypical, i.e. several members of the same family may exhibit various manifestations of the same disposition, thus leading to a positive family history, which in our sample amounts to 42.5%. The consitutional make up of the skin is an important factor which determines not only the susceptibility to cutaneous disease but also probably the type of dermatosis produced.

It is common knowledge that verrucae may disappear spontaneously. Moreover, it has been proved beyond doubt that verrucae are amenable to therapeutic suggestion (Sinclair, 1959) thereby substantiating the popular belief current in every nation of the world, that warts can be relieved by "magic influence". Carefully controlled experiments done by Bloch (1927) demonstrated the efficacy of suggestive therapy in 44% of cases of veruca vulgaris and 88% of cases of verruca juvenilis. The suggestive therapeutic techniques employed by early investigators varied considerably, e.g. painting of the warts with innocuous coloured liquids was popular.

Many of our patients tried lay therapy as painting warts with a caustic substance, others cut it with razors or burnt it with a hot rod. Some tied the warts with a nylon thread, but when they fell off they recurred again because the peduncle was still present. Most of these methods caused the warts to spread more. Some followed a traditional belief of eating a special kind of food prepared in a special way. This caused the plain warts to disappear in some cases but recurrances were common. The mechanism of disappearance was referred to suggestion or the placebo effect of the food. Post hypnotic suggestion was successfully employed by McDowell (1949). Additional confirmatory reports of successful therapy by suggestion were published by Goldmann (1950).

Belisario (1951) stated that he obtained only a small percentage of

cures by psychotherapy. As regards our patients, during the interview, we always tried to obtain an impression of the motivation of the patient for psychotherapy. Many patients considered the psychiatrist to be an extension of the dermatologist and sometimes this was the only argument used to make them accept the psychiatrist because they usually denied any emotional precipitating factor for their skin lesion. The motivation of the patient for treatment influenced the course of the illness, thus the indication for psychotherapy was not determined by the skin disorder but by the personality structure of the patient, his motivation and his illness behaviour. The rationales for psychotherapy as far as the skin condition was concerned included recurrance of warts despite proper management and in other areas than the previous attacks.

Okasha (1977) believes that even when a skin disorder has been definitely identified as a psychodermatosis, this does not mean that the signs and symptoms will necessarily respond to psychotherapy. It would be wrong to suppose that one can determine whether an attempt at psychotherapy will prove successful or not.

In most cases therapy is a combined one. The skin patient needs drugs prescribed by the dermatologist. Thus continuous cooperation between the dermatologist and the psychiatrist is necessary. They must work harmoniously in the patient's management. Often psychotherapy has to be supported by psychotropic drugs. The best psychotropic drug is still the doctor himself. We started to spend as much time as possible talking with the patient during each visit, thus becoming more and more acquainted with the subject's personality and deeping the confidence in him. The patient who is depressed and discouraged because of his illness must be offered free reassurance and encouragement. Sometimes we help to eliminate causes of friction by interviewing marital partners or relatives in order to give them some understanding of the patient's problems. A patient expects and readily accepts an explanation for his illness on an organic basis, but he may be overwhelmed or feel insulted if it is implied that a psychogenic factor is involved inspite of the presence of definite psychological precipitating factors. Only after the establishment

of full confidence with the patient is it advisable to bring up the subject of referral to a psychiatrist.

CONCLUSION

Psychological sequelae of warts depend on :

a) The nature of the personality, where attention should be focussed on those patients with intense emotional reactions.
b) The basic type of skin of the affected person.
c) The nature of the predisposing and precipitating circumstances.
d) The characteristics of the emotional reaction.

In an attempt to understand how emotional factors operate, it may be suggestod that psychological factors serve to lower the threshold of a normally physically engendered condition or that psychological factors aggravate or intensify physically engendered reactions. Evidence available at the present time suggests that a neurotic personality is more prone to warts.

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موجز البحث

أجريت دراسة على ١٣٠ حالة سنط تتراوح أعمارهم بين ٢٠ ـ ٤٠ سنة وقد تم فحصهم اكلينيكيا خاصة بالنسبة لنوعية الشخصية الاكلينيكية والعوامل النفسية المرسية للحالة واستخدام اختبار ايزنك للشخصية ومقياس السيكاستينيا من اختبار منوسوتا · وقورنت النتائج بعينة ضابطة عددها سبعون شخصا · وكانت الشخصية المميزة للحالات هو الشخصية العصابية واتضحت أيضا زيادة درجات العصاب فى المرضى عنها فى الأسوياء وكانت نسبة العوامل البيئية المرسية ٤٨٪ فى الست شهور التى سبقت بداية المرض· وكانت نسبة الشفاء بالعلاج النفسى والايحائى ٨٢٪ فى حالات السنط البسيط أما الأنواع الأخرى فقد تم علاج ٣٠ مريضا بالعلاج النفسى والكى وتم متابعتهم لمدة عام لم تظهر عليهم أى أعراض مرضية ·

ABSTRAIT

Un nombre total de 130 patients, soixante males et soixante-dix femelles souffrant de verrues ont été choisis de la consultation du département de dermatologie. L'âge moyen dans le groupe de patients variait entre 15 et 40 ans.

Tous les malades de l'échantillon choisi ont été examinés des points de vue psychiatrique et psychométrique. Les résultats ont été comparé avec ceux d'un groupe de contrôle de soixante-dix individus.

On a trouvé que les conséquences des verrues dépendaient de la personnalité du patient, du type de peau de base, des circonstances prédisposantes et des charactéristiques des réactions émotionelles. Une personalité neurotique était plus prédisposée à l'atteinte des verrues. La psychothérapie était d'une grande aide dans les conditions récurrentes ou les verrues réapparaissaient dans des régions différentes malgré l'instauration d'un traitement efficace. Ainsi, on peut conclure qu'une coopération continuelle entre le psychiatre et le dermatologiste pouvait être d'une grande importance même une nécessité pour aboutir à une amélioration de la condition.