POLYMORPHIC PRURIGO

A PSYCHOSOMATIC STUDY OF THREE CASES

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Kaufman (1), in 1935, presented a case of Generalized Erythroderma from the Vanderbilt Clinic before the Section of Dermatology and Syphilis of the New York Academy of Medicine. The patient, a Greek male of 43, had a generalized erythematous and lichenified eruption with some discrete infiltrated and lichenified plaques on the trunk. There were also numerous scratch marks. The inguinal lymph nodes were enlarged. Histological examination of a portion of the involved skin showed chiefly a marked acanthosis of the epidermis and a plasma cell infiltration of the corium. The eruption had begun two years previously as papules on the thighs and a month later became generalized. The patient had been admitted to several hospitals during which time the eruption improved or cleared completely only to return shortly after each discharge.

In the broad discussion by Chargin and Rosen as well as other members who had studied this patient or who had observed others with this entity, the following observations were made: The disease begins as a localized acute dermatitis which shortly becomes generalized and then in its chronic course passes successively through distinct phases resembling other dermatological entities; it is associated with an eosinophilia in the blood and with a histological picture of chronic dermatitis suggesting a toxic vascular process; improvement in or freedom from the eruption is seen only with change in environment.

In 1937 Sulzberger and Garbe (2) reported in detail nine similar cases designated as Distinctive Exudative Discoid and Lichenoid Chronic Dermatosis. They emphasized the following features of the disease: An initial localized dermatitis which soon became a chronic generalized polymorphous dermatitis with four predominating phases (exudative and discoid, lichenoid, premycotic and urticarial); intractable itching as the outstanding symptom; unknown etiology; occurrence in healthy middle-aged Jews who were non-allergic and who did not react to percutaneous skin tests nor improve on elimination diets; all were better while in the hospital and a complete change in environment was usually beneficial; all were above average intelligence. Several of the patients were hyperkinetic in type showing labile temperaments and were of either cyclothymic or decidedly neurotic personalities. One patient freely admitted scratching the skin without a stimulus of itching. The authors note that in this patient when the itching was most severe, a crisis developed taking the form of an orgiastic manifestation with a crescendo of wild scratching followed by sudden relief and exhaustion.

Cannon (3), in 1939, presented a paper on Allergic Dermatitis Simulating Lymphoblastoma before the American Dermatological Association. Over a period of twenty-eight years he had observed some eighty cases which began with an insignificant local dermatitis, strikingly similar to that of a contact dermatitis, and then went through various stages resembling known clinical entities including the lymphoblastoma group. It was Cannon's belief that the cause could be traced to definite irritants and allergens and that the process was not basically a malignant one. Eight cases were reported in which the skin lesions and clinical course corresponded to those described previously. His observations differed from those of the previous dermatologists in the following particulars: two of the eight patients were women and one was a gentile; the ages ranged from nineteen to fifty-two years; all had dermatographism and in one an attack of urticaria preceded the dermatitis; three had asthma

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and the skin of four reacted to percutaneous tests. Again the six who were admitted to the hospital were free of the eruption when discharged but the lesions recurred later, however, four of them were completely cured after moving to a warm dry climate. Itching was the outstanding symptom and "frequently so violent that the patient's features were contorted, he seemed unable to speak as though he were in a semi-trance and after a paroxysm of uncontrollable scratching he was left exhausted, relaxed and drowsy." Cannon called attention to the presence of definite psychoneurotic traits in all of the patients.

Five additional cases were recorded by Pascher (4) in 1940 under the title of Exudative Chronic Discoid and Lichenoid Dermatitis. They were all middle-aged Jews without a history of allergy with the exception of one who developed hives from acetylsalicylic acid. The clinical appearance suggested the diagnosis of Lymphoblastoma Cutis. Without admission to a hospital all received subcutaneous injections of a 2 per cent solution of sodium arsenite and two were given autohemotherapy and X-radiation. Two of the patients were cured, two others were freed from this distressing dermatitis but developed transient attacks of urticaria. One of the latter and the fifth patient were free of lesions except for a localized patch of dermatitis. Pascher was of the impression that arsenic effected the cures. No mention was made of the emotional status of these patients.

Sachs and Kirsch (5) made a histological study of the skin of ten patients with this disease. A few pertinent clinical findings were included in the report. Six of the patients were middle-aged male Jews; three were female Jews ranging in age from seventeen to forty-two and one was an Italian male of thirty. All were refractory to local therapy but in some the lesions disappeared without therapy after residence in Florida or Arizona. These authors were of the opinion that with the exception of the early stage of this disease, the diagnosis could be established on the microscopic findings alone.

During the years from 1936 to 1943 one of us observed seven patients confined to the hospital because of this disease. The history, clinical appearance and course paralleled those described previously. Six were middle-aged Jews and one a gentile woman of thirty-two. Four gave a personal or family history of allergy. When admitted to the hospital all had a generalized eruption with one of the previously described phases predominating. They were tired and irritable from lack of sleep and ferocious itching. They were depressed, defeated and burdened by financial and home worries and wanted to get away from everything. The thought of going to the southwest was appealing yet disturbing. While in the hospital five became entirely free from lesions only to experience a recurrence shortly after discharge. Finally all seven went to a sunny dry climate and within a few months all were entirely well. Five of the patients have remained there and are ostensibly cured. The woman of thirty-two became entirely free from her eruption while in the southwest but within two months of returning to a New England state it recurred and has persisted. The seventh patient's history is cited in some detail since it provided the clue to more rational therapy without permanent change of environment. Just prior to his illness he had become a partner in a manufacturing business in addition to carrying on a busy law practice. Both began to fare badly. The patient took a holiday and while on it became intensely interested in a young woman who did not know that the patient was married. Shortly thereafter the patient noted an intermittent erythema in the antecubital areas. His wife became ill about this time and he was obliged to help with the house work each evening. Shortly an eruption appeared on his hands and the erythema recurred on the arms. The patient then went to the sea-shore and while there developed an acute vesicular eruption on the feet. Meanwhile the courtship continued. A dermatologist treated the patient for a fungus infection. This eruption began to spread and another dermatologist made the diagnosis of contact dermatitis. Following additional local therapy the eruption became generalized. The patient was in bed for a month and then was transferred to the hospital. During the first two weeks in the hospital he attempted to carry on his business and practice by telephone. His wife was in constant attendance during most of the day and the young woman was there in the evening. The effect of emotional tension on the patient's skin condition was pointed out to him. He gave up his interest in the manufacturing business
The dermatitis improved slightly. After seven weeks in the hospital the patient flew to the southwest accompanied by his wife. The dermatitis improved slowly and by the end of six months his skin was entirely well. He had decided against a divorce and had renounced the young woman. He then returned to his wife and children in New York where he has remained well and secure for over three years. The ability of this patient to return to his environment and remain well might be attributed to a resolution of his emotional conflicts. The cure of this patient suggested the need of a psychosomatic approach to this disease.

Such a psychosomatic approach to this disease was begun in 1945 when one of us (E. S.) was assigned to the Dermatology Department to investigate the emotional component of chronic dermatitis in a selected group of patients. In this group were three patients with the diagnosis of “Exudative Discoid and Lichenoid Chronic Dermatosis” who were subjected to a combined dermatologic and psychiatric study. The object of the psychosomatic approach was to study the patient as an individual and to investigate his psychological and dermatological patterns including his reaction to family, friends, religion, work, recreation, sex and to his illness. The focus was on the patient’s major drives, his conflicts and emotional tensions, to discover their relation to the dermatitis. The method more or less followed the technique described by Dunbar (6) which was to keep the patient talking and thereby reveal the pertinent forces leading up to the present illness. Therapy was directed towards increasing the patient’s awareness of basic conflicts and of defects in his attempts to meet these problems.

CASE REPORTS

Case 1: A twenty-one year old, single, unemployed Jewess was admitted to the hospital with a chronic wide-spread dermatitis which had not responded to dermatotherapy prescribed at a number of clinics. She had been advised to go to the southwest but felt that she could not leave her family. The patient’s medical history was unimportant with the exception of her dermatitis. There was no family or personal history of allergy. The patient’s initial eruption began a year previously as an itching rash on the anterior chest. It spread to her shoulders and within a month covered the trunk and extremities. This eruption persisted and recently had spread to her face. Itching was intense and was not well controlled by any medication. The patient was normal on physical examination except for a mild generalized adenopathy and a dermatitis. On the right side of the forehead, cheeks and dorsum of the hands were circumscribed areas of reddened skin in which there were a number of excoriated papules and papulovesicles. The arms and legs were covered with a diffusely erythematous and edematous, crusted skin. Scattered over the trunk were grouped papular and follicular lesions many of which were excoriated. The laboratory work included a blood count, sedimentation rate, liver chemistry, Wassermann test, urine analysis, roentgenogram of the chest and metabolic rate. All findings were normal. Skin tests with common allergens were negative except for positive patch tests to feathers and camphor. A biopsy from one of the lesions on the trunk showed the horny layer thinned and the granular layer normal. Throughout the prickle cell layer were focal areas of edema, characterized by hydropic cells and a tendency
toward intraepidermal vesicle formation. The upper corium was moderately infiltrated, especially about the dilated capillaries and follicles. The infiltrate was composed mainly of small round cells, fibroblastic elements and a few eosinophiles. The histopathology was that of a mild inflammatory reaction.

The patient remained in the hospital sixteen days and received the same local medication as previously, together with sedatives. Her feather pillow was covered with an impermeable cloth and although there had been no recognizable contact with camphor the patient was asked to avoid it in the future. There was a consistent improvement in the dermatitis and at the time of her discharge from the hospital the patient had only a few small erythematous papulo-vesicular patches on the arms and legs and itching was minimal.

Psychiatric investigation and therapy were begun on the eleventh hospital day and were continued without interruption for five months in the clinic. There were two one hour sessions a week. Following this the patient was followed at infrequent intervals. The investigation revealed that the patient was born and had lived in a tenement on the lower east side of New York. She was the oldest of four children and recalled her childhood as a rather happy one until the age of thirteen when she became ashamed of the shabbiness of her own home and the environment in which she lived. Since then she had frequently bickered with her parents over this and had made plans to get her own apartment in a better location. She was very closely attached to her mother whom she described as a passive, gentle woman whose main interest was her home and children. The patient complained that her mother was over-protective and indulgent. At first, the patient stated that her father was “wonderful” and had always been very good to her. Later she admitted that he was very strict. She recalled that as a child she was uncertain of his feelings; that at times he would let her kiss him and at others he would roughly push her away. As therapy progressed, resentment and hostility towards him, which was never very far from the surface, became more and more overt. The patient then described her father as being “temperamental, boorish, lacking in manners and a strict disciplinarian.” She decided that the only way to handle the situation was to ignore him completely. The conflicting feeling toward her father was one of the principal problems of therapy.

The patient was graduated from high school at the age of seventeen and since then held successive office jobs during the day while going to college at night. Her ambition was to be a school teacher. She had left her office job six months before admission to the hospital because of her dermatitis. As soon as she was discharged from the hospital, she registered in day classes. A mild exacerbation of the eruption recurred on the hands and arms. When asked if her rash interfered with her school work she replied: “No, if it weren’t for my skin condition I would not have been able to go to college.” The utilization of her illness to realize her ambition demonstrated in a clear-cut fashion the factor of secondary gain.

The patient’s focal conflict was a sexual one. Although twenty-one years of age, she had never been able to attain a mature relationship towards men. Her
impulses in this direction were met with anxiety and guilt and her eruption occurred on an occasion when these feelings were paramount. She went out with men frequently but would not allow intimacies. "I've only let a boy kiss me a few times in my life and have always felt guilty and depressed afterwards." If a man expressed a desire to marry her, she immediately stopped seeing him. Defense against her sexual impulses was flight. The patient's rash started the day after she had gone to her first house party from which she fled as evening approached. She spent many sessions rationalizing her fear of marriage, her main argument being that marriage interfered with a career. She had fantasies about marriage in which she saw herself at the altar with an unidentified man. A blank period followed this and the next picture of the fantasy was the possession of three children over the age of five. "Marriage would be all right if I had a home and a husband who was just friendly. Sex is messy. It's all right for other people but not for me. Even kissing is messy. I'm just beginning to realize that I'm twenty-one and not seventeen. The difference is that now fellows think of marriage."

As the patient gained insight into the nature of her feelings and attitudes, occasional showers of papulo-vesicles appeared on her arms and hands. However, within three months no medication was necessary. After five months of psychotherapy the skin was clear except for three small erythematous scaly lesions on the dorsum of the right hand. Nine months later the patient returned for observation. During this interval her father had died suddenly. Her relationship with him had been quite good recently. Since his death, in addition to attending college, she had taken a part-time job to supplement the family income. There was a change in the patient's attitude and behavior toward men and her ideas about marriage were more mature and realistic. At a subsequent visit, sixteen months after cessation of therapy, the patient was a well-adjusted young woman whose skin had been entirely normal for nearly a year.

Case 2: A fifty-three year old married, Jewish, unemployed automobile upholsterer was referred for admission to the hospital because of a severely pruritic and persistent eruption of three years' duration. The following information was obtained from another clinic where the patient had been treated for two years. The diagnosis of nummular eczema had been made when the patient was first seen with a dermatitis of two month's duration. The following information was obtained from another clinic where the patient had been treated for two years. The diagnosis of nummular eczema had been made when the patient was first seen with a dermatitis of two month's duration. Following the therapeutic application of tar ointment the patient had developed a generalized eruption. Subsequently numerous local medications, autohemotherapy and X-ray treatment had been given to the patient. The laboratory studies which had included a Wassermann test, blood count and skin tests were insignificant with the exception of a positive patch test to oil of cade. Progress had been unsatisfactory and the patient became very upset because of the persistent dermatitis, severe itching and lack of sleep. He visited a psychiatrist who made a diagnosis of neurodermatitis and advised hospital care. During the last few months of his illness the patient had stopped all medication except for frequent applications of vaseline.

When first seen at this clinic the patient appeared to be normal except for
marked enlargement of the inguinal nodes, and the skin lesions. The palms and soles were clear. The rest of the tegument was thickened and pigmented. Discrete lichenified plaques were present over the neck, lower abdomen, buttocks and thighs. In both axillae at the posterior axillary line were groups of erythematous papules. Follicular papules were scattered over the chest and particularly about the mammary glands. On the dorsum of the hands and mid-flexor surfaces of the legs and on the scrotum were discrete rounded erythematous crusted patches. There was a small group of vesicles on the penis. A blood count, at this time, was normal.

The psychiatric study brought out the following facts: The patient was born in Rumania and was an only child. His father had died suddenly at the age of sixty-seven. His mother was seventy-four and was living in Palestine. She suffered from rheumatism. He remembered his parents as gentle, easy-going and affectionate. They were very poor and when the patient was thirteen, it was necessary to send him to a neighboring city as an apprentice in the upholstering trade. There, for the first time, he became aware of the tyranny, oppression and anti-semitism indigenous to the locale. He was determined to come to America, which he did at the age of twenty against his parents’ wishes. After this one burst of aggression he retreated to a passive, submissive role which he accepted without protest. Lacking in aggressiveness, afraid of responsibilities, he has remained at the same occupational level as an automobile upholsterer for the past thirty years, working long hours to make ends meet. He did this without complaint and stressed the fact that he always got along well with his employers. He had a cheerful, outgoing disposition, and made many friends. His sexual adaptation was normal and at no time had there been any evidence of neurotic symptoms. He married at the age of twenty-three and had two sons and a daughter. He was very fond of children and especially affectionate and gentle towards his own, but his wife had assumed the responsibility of their training. At the age of fourteen his oldest son developed dementia praecox and required institutional care for a year. Later this son made a fair adjustment and after two years of service in the Army was discharged because of asthma. About this time the younger son, who was eighteen, suddenly became depressed, hostile towards the family and seclusive. It was in this setting that the patient first developed his skin eruption. He was acutely aware of the significance of his younger son’s symptoms and felt that if he had taken more responsibility for his upbringing this catastrophe might have been averted. This son did not improve and the patient became more worried, slept poorly and finally was forced to give up his work because his dermatitis was widespread and the itching uncontrollable. With both illnesses, the patient had to cope not only with a normal quantity of anxiety attached to the realistic situation, but with the affect accompanying the increased pressure of his basic conflict, a feeling of guilt because he had avoided responsibility and relegated the care of his children to his wife.

The above psychiatric investigation and therapy were begun in the clinic while awaiting a hospital bed but he responded with such surprising rapidity
that it never became necessary to admit him. Within two weeks he had returned to work and in eight weeks, with ten interviews, his lesions had almost completely faded away. Itching during the first five weeks of this period was allayed by Neo-antergan tablets and the application of Lassar's paste. Since the patient was a dependent submissive individual charged with guilt and without adequate insight, therapy was of an active, reassuring and suggestive nature. The patient has remained well for six months without further therapy.

Case 3: A thirty-five year old, married Jewish male was studied during his second admission to the hospital for a generalized eruption associated with uncontrolled itching. Three years previously the patient noted water blisters on his hands and feet and red spots on his body. A diagnosis of scabies was made and the patient was given sulphur ointment. This was promptly followed by a generalized exfoliating dermatitis which was thought to be due to sulphur. Hospital care here led to improvement but the lesions did not disappear entirely. Some months later the patient entered a second hospital with a generalized eruption. After several weeks stay the eruption almost cleared and the patient went to Florida on the advice of his dermatologist. After he had been there a few days he became severely sun-burned and there was an exacerbation of the dermatitis. He returned to New York and was admitted to a third hospital. He remained here six weeks and then returned to Florida where his dermatitis slowly regressed and finally disappeared for a year. Because of the present relapse the patient returned to New York and was again admitted to this hospital. This was the patient's only illness. There was no history of allergy except the sensitivity to sulphur.

When admitted the patient was extremely worn, nervous, shivering with cold and scratching continuously. Examination was normal except for the skin and lymph nodes. The entire skin was dep red, thickened and covered with excoriations. Raised red lichenified plaques and a few small wheals were scattered over the neck and trunk. The arms and legs were covered with swollen red crusted skin. A number of excoriated vesicles were present on the dorsum of the hands and feet. Minute vesicles lined the finger webs. Groups of vesicles were in the lichenified skin of the penis and scrotum. All of the superficial lymph glands and particularly the inguinal nodes were enlarged and slightly tender.

The laboratory work included a blood count, liver chemistry, Wassermann test, urine analysis, roentgenogram of the chest, electrocardiograph, metabolic rate and feces examination. These studies were normal except for a leukocytosis of seventeen thousand with eighteen percent eosinophils. An inguinal node exhibited preservation of its architecture but most of the sinuses were dilated and filled with proliferated reticulo-endothelial and lymphoid cells. The former were also present in the pulp of the lymph node and many of these cells contained a pigment resembling melanin. The changes were interpreted as those of a chronic, non-specific lymphadenitis.

The psychiatric investigation disclosed that the patient was born in New York City, the youngest of five children. He was a chubby child with long curls, and he was called a spoiled brat by all except his mother. The patient referred to
his mother as a wonderful woman whom he loved very much but he complained bitterly because she still treated him like a baby. He felt that her visits to the hospital had been embarrassing to him because she hugged and kissed him repeatedly as she did at home. After he began to recover in the hospital the patient refused to see his mother, frankly admitted that he was superstitious and that seeing her would bring on a relapse of his skin trouble.

The father of the patient had been a soft-spoken, indulgent, religious man who died at the age of fifty-seven and whose death was ascribed to asthma. The patient, who was fourteen at the time, felt that this was one of the crucial episodes in his life as he had been his father’s favorite child and felt closer to him than anyone else. During therapy the patient recalled, with a great deal of guilt, how disturbed his father would become when he found the patient doing the things of which the father disapproved. On several occasions the father’s asthmatic attack developed the same day he had caught the patient smoking or gambling and because of this he always felt responsible for his father’s illness. After his father’s death he lost interest in school, gambled more and began to associate with prostitutes. At sixteen he gave up school because he wanted to be independent and earn lots of money. He worked as an errand boy, clerk, mechanic and truck driver never holding a job very long. At first he would ingratiate himself with his employer and do very well and then his fear and hatred of authority would precipitate an incident following which he would be released or would leave the job. Finally, seven years ago, he bought a taxi business with money borrowed from his family and since that time he had been financially successful.

The patient had many friends and considered himself one of the gang. He was intensely interested in sports but his chief interest was in gambling. He began “shooting dice” at the age of ten and this was still his favorite way of gambling. On several occasions he had come close to losing his business because of gambling and this was a constant source of friction between the patient and his wife. After his marriage he did not gamble for three years. Then he again gambled and won an appreciable sum in a few weeks only to lose it shortly thereafter together with all of his savings. It was within two weeks of this financial loss that the initial eruption occurred. He felt that this skin eruption was punishment for his behavior and his obsessive fear of becoming financially dependent was greatly increased.

Then followed two years of varied treatment as described above during which time he kept his gambling habits from his physicians. It was during the patient’s second and third admission to the hospital, which covered a period of ten weeks, that he came to realize the relationship of his sense of guilt, when gambling, to his skin eruption. Psychotherapy which was begun with the patient’s second admission to the hospital was continued for about six months. After the patient’s third admission to the hospital, his skin was dry and thickened but there were no active lesions and itching was minimal. The bland ointment and Pyribenzamine which had been used in the hospital were continued. Five weeks later the patient stated that never since the onset of his illness had he felt so well.
Then an opportunity presented itself whereby he could make a large sum of money but it would jeopardize the license upon which his business depended. He decided to take the risk and on the third night had the following dream. "About fifteen guys, including Lugosi, Karloff and Chaney came at me and clawed and bit my skin." The patient awoke panic-stricken. He began to sweat profusely, itch intensely and could not stop scratching. Three nights later he had the same dream and fell out of bed. Two days later he returned to the clinic with a recurrence of his dermatitis where he was advised to go to the southwest but four months later he was bed-ridden in his mother's home awaiting admission to another hospital.

This patient would be classified as having a character neurosis. Of focal importance in relation to the skin eruption was his intense conflict between the impulse to gamble and guilt connected with gambling. While gambling he experienced anxiety, looking on the outcome of gambling as a test of himself. When successful, he felt exultant and powerful. When he lost, he felt depressed, guilty and worthless. Gambling was connected with his defiance of parental authority and losing meant punishment for his aggression. Similarly, he felt that his skin eruption was punishment for this behavior.

DISCUSSION

The dermatologic syndrome presented by these patients, while difficult to define, has become recognized as a fairly distinct clinical entity. The etiology remains obscure although a history of personal or family allergy is usual. Some have thought that the dermatitis results from a sensitization to environmental allergens. Explosive exacerbations or spread of the dermatitis have been noted following local applications of sulphur or tar and some of the patients have reacted to cutaneous tests. However, protection from these allergens does not control the course of the disease. Cannon was of the impression that all of the lesions could be due to the scratching of a hypersensitive or dermographic skin. Dermatologists are in agreement, for the most part, on the beneficial effects of hospital care and permanent residence in a sunny dry climate.

Severe and uncontrollable itching together with the prevalence of emotional disturbances has been stressed in most of the previous studies. Experimental studies of the effects of emotional stimuli on the sweat mechanism, finger temperatures, and on whealing in cholinergic urticaria, (Kuno (7), Mittelman and Wolff (8), Grant et al. (9)) have demonstrated the ready adaptability of the skin to respond to affective states. Psychosomatic study of our cases indicates an etiological relationship between emotional conflicts of the patients and their dermatitis. While in a state of marked anxiety and guilt related to a particular conflict an individual develops a mild localized dermatitis that may be or may simulate one of the common dermatoses. This simple dermatitis may go over into a severely pruritic polymorphic recalcitrant dermatitis because of the concomitant affective disturbance of the autonomic control of the skin. Etiologically many factors are probably implicated of which the psyche is only one but its paramount importance is indicated by the major position that psychotherapy occupies in successful treatment.
SUMMARY

Ten patients with a chronic, generalized, polymorphic, itching dermatitis are reported in whom the disease corresponds to that previously described under such varied nomenclature as generalized erythroderma; distinctive exudative discoid and lichenoid chronic dermatosis; and allergic dermatitis simulating lymphoblastoma.

After some months residence in the southwest away from unsatisfactory emotional environment, seven patients became free from this eruption. Of this group, five have remained in the southwestern states and are ostensibly cured. The other two patients returned to the east, one to her old surroundings, where she has had a recurrence of the eruption, the other to an emotionally satisfactory environment where he has remained well. The remaining three patients underwent a psychosomatic study. After therapy two of the three have remained well while living in their habitual environment.

This study indicates that emotional conflict is of singular importance in the evolution of polymorphic prurigo and that psychotherapy is a major factor in its successful treatment.

REFERENCES