# A TENTATIVE CLASSIFICATION OF PSYCHOLOGICAL FACTORS IN THE ETIOLOGY OF SKIN DISEASES\*

## ROBERT BRANDT, M.D.

#### INTRODUCTORY REMARKS

The role of psychological factors in the causation of skin diseases is still rejected by many dermatologists. It is true that only now there is beginning, in several places, a systematic investigation which will furnish the final decision about this subject. This can be done only by co-operation between dermatologists and psychiatrists.† It seems, however, that both critical clinical observation and detailed exploration of single cases and problems have supplied enough facts to be of help in our work. Their acceptance by dermatologists may be facilitated if we could arrive at a convincing conception and usable presentation.

From this viewpoint, a classification of psychological factors in dermatology is proposed. It is intended to be practical enough to arrange, for our better understanding, what is already known, yet flexible enough to allow the insertion of future investigation. The knowledge itself is not augmented by adequate classification.

The psychodynamic explanation is the ultimate goal; a list of the dermatoses that are potentially caused or influenced by mental forces would seem to offer an appealing avenue of approach for dermatologists. Both principles, however, are not suitable for this classification. A similar emotional constellation may act as a causative factor in very different dermatoses, and very different emotional forces are influential in the same dermatological picture. The mental factor, where it is present at all, may be so in a variable degree between decisive and just recognizable. It seemed preferable to start from the one question that is foremost in the dermatologist's mind. Granted that emotions are the cause, or part of the cause, of some dermatoses and granted that neuro-physiological investigation demonstrates the pathway for the chain of events, what is the psychosomatic mechanism by which the emotion is transformed into bodily happenings? Accordingly, we will base our classification on the manner in which a mental factor may cause or influence a skin disease.

Generally, two types of mechanism are accepted, the non-symbolic concomitant vegetative reaction as e.g. increased blood pressure in rage, and the meaningful involvement of the sensory organs or the muscular apparatus. (The latter is of no direct significance in dermatology but acts as an intermediary in the production of skin diseases as through scratching or other damage by the patient's action.)

In the skin (at least more so than in other organs) a third mechanism must be recognized. Here, emotions translate themselves so strictly into somatic events that we are able to translate back, that is: to infer from the appearance of the skin the presence of certain emotional factors. The diagnostic features are even specific. The pinkish redness in embarrassment differs from the dark redness in strong anger, the livid appearance in rage. And the combination of perspiration with hyperemia of the face has another meaning than the combination of sweating and pallor.

But there is a much more important difference from psychogenic vegetative reactions in other areas. The individual almost always becomes conscious of reactions that have occurred, and is aware of the fact that they are recognizable as such by others. Therefore, they are not only passive concomitants of emotions, but are their meaningful expres-

<sup>\*</sup> From the Department of Dermatology and Syphilology, Medical College, Cincinnati. (Director, Dr. Leon Goldman.)

<sup>†</sup> A long-range investigation is under way as a joint project of our department and the Department of Psychiatry and Neurology (Director, Dr. Maurice Levine). An extensive bibliography, purposefully omitted here, will accompany the report on this investigation. Received for publication May 19, 1949.

sion, and thus fall easily under the power of tendencies which want to demonstrate or utilize or, perhaps, to suppress them. Consequently, vegetative processes in the skin lend themselves to conversion, certainly to a higher degree than in other organs. On the other hand, suppressive counter-tendencies may explain why frank psychogenic diseases of the skin are rarer than in other organs despite such a ready psychosomatic mechanism. An emotional factor can easily "sneak in" on the stomach and establish somatic disease. In the skin, which is practically never outside our consciousness, the establishment of a purely psychogenic, but at the same time distinct and lasting, lesion requires a comparatively high degree of emotional disturbance.

(It need hardly be added that expressive vegetative reactions in the skin, although firmly anchored in the individual experience and consciousness, are fundamentally inherited.)

In the following classification, the characterization of each group will be based on accepted or self-evident facts, if this is feasible. Where individual cases are described, it was tried to make the selection as little debatable as can be hoped for in this subject. Discussion of the psychological factors is not the topic of this paper. Such was used only where it was necessary to prove that a case qualifies as psychogenic or where the assignment to a group depends on the discussion of the psychodynamics as in groups 7, 8 and 9.

The almost complete avoidance of psychoanalytical terminology is intentional. To keep the classification within its scope it was necessary to base it on facts that are, it is hoped, acceptable within the limits of our specialty. There is also danger in the glib use of these terms. They often serve to display a knowledge which the author does not possess, moreover they lead an easy path to attempts at psychological interpretation and (still worse) exploration that are far beyond what is permitted to, let's say, a dermatologist. It seems unnecessary to emphasize that most of what we know or hope to know in psychosomatic understanding is psychoanalytic in fact as well as method.

#### CLASSIFICATION

## 1. Nonspecific elicitation

This is comparable to other factors that facilitate the outbreak of a disease. The best example is *herpes simplex*. Fundamentally, an infectious disease, this lesion can be elicited by fever, sunburn, an upset stomach, but also by a mental stimulus. The latter need not have specific meaning and the same patient may be afflicted 1–3 days after a quarrel, after receiving bad news or following a sleepless night.

A similar explanation is valid for other instances where a *time*-relation between emotion and the outbreak of the skin disease can be established, but where there is no specific relation between the emotion and the character of the skin disease, so that the latter has no psychological meaning or purpose and cannot be understood in psychological terms. It is the strength of the emotion, not its character, that counts; and the turmoil may be over at the time of the appearance of the skin lesion.

Here belong some cases of alopecia areata, lichen planus, rapid graying of the hair, etc.

Where such diseases recur or are protracted, occasionally a more specific effect of a mental factor can be established which relegates the case to Group \$\%7\$.

# 2. Sensory neurosis

This can be understood without resorting to a special psychosomatic mechanism. Some conditions, as acarophobia, are more mental than skin diseases.

The most important sensory neurosis, however, "nervous" pruritus, is so intimately related to the skin that it will always belong in dermatology. I wish to emphasize that the diagnosis of psychogenic pruritus should not only be made upon the lack of objective clinical findings, but from a definite mental constellation. It is not possible to state, on the ground of routine work in dermatology, how often uncomplicated cases happen. For the purpose of this classification it is enough that such instances exist.

The psychological genesis is different in generalized, vulvar and rectal psychogenic pruritus, but they all can be classified under the heading of Sensory Neurosis.

# 3. Damage to the skin by acts of the patient

Psychologically, this group is interesting and diversified and so are the acts and the clinical pictures they produce. Self-inflicted lesions are bizarre and mostly do not resemble a known skin disease. Effects of scratching are recognizable as such in the beginning, but may later completely resemble a bona fide eczema. Perhaps, a certain disposition of the skin is required for such a development. Yet even so, and even where a somatic condition is present, when the manipulations by the patient exceeds the usual, the end result must be considered as predominantly psychosomatic. Here belong extensive and protacted scratching orgies after chigger-bites, the exceriated acne of young girls etc.

Washing eczema in a compulsion neurosis is, dermatologically, not at all different from one that is acquired by necessity, from heavy housework. The psychogenic factor is not recognizable from the clinical appearance and this is still more so in cases of seemingly legitimate dishpan hands or the sequelae of excessive body care, where a neurotic drive is in the background. Nevertheless, all those are completely or partly psychosomatic conditions.

## 4. Involvement of the skin via another organ ("By detour")

Here, the psychosomatic mechanism acts upon an area other than the skin. The subsequent chain of events leading to affliction of the skin is somatic, no different from a skin disease that originates with a non-psychogenic internal disease.

Ulcerative colitis is a good example. The psychogenic character of some cases has been established. Papular rashes and urticaria that occur in this disease are explained by resorption through the ulcerations and are, therefore, non-psychogenic somatic sequelae of a psychogenic somatic disease.

The mechanism may not be recognizable at first glance as in the following case.

A young actress repeatedly broke out in hives during the trying days before first performances. Diarrhea always preceded the rash by one or two days and so probably was its main cause. Outside of these episodes of tension she had neither urticaria nor diarrhea. This case contains several problems. What interests us here is that a psychogenic skin disease may be so only by detour.

Since emotional influences on internal organs are now widely investigated,

some light should also fall on dermatology in this special connection. The cases mentioned above and some minor indirect skin disturbances (perleche in nervous anorexia, acute perianal dermatitis in neurotic diarrhea) ascribe to the gastro-intestinal tract a special role in the mechanism of psychodermatoses by detour.

But, perhaps, this seems only so, because emotional disturbances of the gastrointestinal tract are better known than those of any other system, except for the cardiovascular. The following case, e. g., points to the ovary as the primary site of the psychosomatic disturbance.

A 30 year old woman became amenorrheic during a severe conflict and this amenorrhea was diagnosed as neurotic. During this time, lanugo hair started to grow on her face and reached a considerable development. When her mental condition was over and menstruation had come back, the lanugo hair receded.

# 5. Pathological increase of the inherent psychosomatic reactions of the skin

This group is comprised of psychogenic hyperidrosis, especially of hands, feet and axillae; oiliness or dryness of the skin concomitant to certain mental constellations, particularly tension and depression respectively; exaggerated blushing. These conditions can be considered skin diseases when they exist in an excessive degree, and they are designated as a special group because they must be differentiated from the next group, to which they are precursory.

The psychosomatic connection may be of a more concomitant character as in hyperidrosis of some persons when it appears in all kinds of tension, or more specific as in persons whose palms start to sweat when the mental stimulus concerns their hands, e. g. while waiting to shake hands with a superior.

# 6. Skin diseases as somatic sequelae to pathological increase of the inherent psychosomatic reactions of the skin

The dermatosis can be a direct sequela of the psychosomatic reaction as in the following case.

Case 1. A young women who had been treated for a recalcitrant patchy eczema of her palms and fingers appeared, on her first visit, to be obviously tense. Clinically, she presented scaly crusty patches on the palms and palmar aspects and side of her fingers. There was also severe hyperidrosis. In addition to mild topical medication, bellergal was prescribed. On the next visit she was considerably improved and was also apparently rested and less tense. The patient volunteered the information that she had been terribly worried about her husband in the Army, but that she felt much calmer now.

When the lesions, as was to be expected, recurred, together with hyperidrosis and a continuous state of anxiety, the development from mental stimulus to hyperidrosis to vesiculation to eczematization could be discerned.

It was necessary to do something about the patient's troubles. Although her husband was in the States, she had not seen him for more than a year, and there was a strong possibility that he might be sent overseas without a furlough. With the aid of the American Red Cross, a furlough was granted and patient was rapidly improved. Six years later the patient reported, on my inquiry, that her husband had not gone overseas at all, and that she had had no recurrence.

The psychiatric analysis of this case would probably start where the dermatologist left off, but since this patient got well by "environmental management," further exploration would not only be unnecessary but possibly harmful. What interests us here, the psychosomatic mechanism characteristic of this group, is, however, well demonstrated.

Psychogenic hyperidrosis may act as a cause of skin disease in a less direct way, especially by preparing the soil for dermatophytosis. The share of the mental influence, where such exists at all, varies widely from an occasional exacerbation under stress of a more or less permanent disease to instances where hyperidrosis and clinical dermatophytosis appear largely from mental causes. The latter may be rather specific.

Case 2. A 28 year old man who did not suffer from either hyperidrosis or dermatophytosis in the Army, but developed both during separation, had several recurrences and each of them was in time relation to stress or trouble which, in turn, could be traced back to a domineering and ambitious mother. (These facts were not obtained by direct exploration but by casual conversation with the patient.) When, once, I mentioned the remarkable fact that he did not suffer from "athlete's foot" during active service he showed surprising insight by answering: "Over there, I didn't have a worry in the world." This patient had been Second Lieutenant in a combat unit.

This disease is, fundamentally, not a "nervous" disease, but an infectious one. But we may term it as, predominantly, psychosomatic, because a mental stimulus, by producing hyperidrosis pedum, allowed the latent infection to become clinically manifest. In spite of this characterization, neither direct psychotherapy nor environmental management was indicated, and treatment up to the final cure was purely dermatological.

These two cases were described more in detail, because emotionally caused changes in sweat and fat secretion are not limited to well-defined instances. Often they seem to initiate minor skin lesions, and also to interfere in skin diseases that are not psychogenic, as for instance contact dermatitis.

As an example of emotional hyperemia of the skin with resulting lesions, rosacea should be mentioned. The incidence of mental influences in this condition cannot be determined at this time. It is not possible to state that there are cases with exclusively emotional etiology. We can, however, say that where emotional influences are impressive, the psychosomatic mechanism just mentioned is instrumental.

## 7. Utilization of pre-existent diseases for specific mental aims

We have already mentioned certain skin diseases that are elicited by emotions, any emotion, in a non-specific way. (Group 1.) We have also discussed instances where a non-psychogenic skin disease is elicited or promoted as a sequel to the specific action of the inherent psychosomatic mechanism of the skin. (Group 6.) There are, however, instances in which a specific psychological purpose is accomplished by the appearance or re-appearance or perpetuation of a fundamentally non-psychogenic disease, without the interference of this mechanism.

Some cases of herpes simplex, especially of the genitals, belong in this group. This condition, which not too seldom is elicited by non-specific mental stimuli, can also on rare occasion have a specific meaning. It is known, since Polland's

report and perhaps longer, that a married man may have herpes genitalis only after extra-marital, but not after marital intercourse. I had one patient in which this happened with great regularity and with different partners. If we point to the feeling of guilt and the wish to be punished, we have only the probable dynamic interpretation of the mental stimulus. The psychosomatic mechanism can hardly be explained at all. Diminished resistance is not sufficient, because of the appearance under a very specific condition. We can, perhaps, make the preliminary assumption that a disease that has reappeared several times may become so much channeled that it acquires the quality of the inherent psychosomatic reactions of the skin.

Emotional elicitation of psoriasis and seborrheic dermatitis by specific mental constellation has been reported. If this is confirmed, such cases call for a similar explanation.

Emotional influences in acne have repeatedly been mentioned, but there are no systematic reports available. Fundamentally, acne is not a psychogenic disease. By using the term loosely, we may call it an endocrine disease, but mental influences are noteworthy. Here, we don't mean the sometimes enormous turmoil that is caused by acne, nor the complex mental troubles of adolescence that seem to be prominent in these patients because this disease gives excuse and explanation for failure, timidity, hostility, resentment of parents etc. Therefore, the demonstration of more or less severe neurotic traits and even their apparent connection with acne is not enough to assign significance to this group. But there are instances in which every flare-up is obviously elicited by a specific emotional cause, as resentment against the mother, the wish to get out of a date of which the patient is scared, or the fear of life generally, which in turn may partly have been caused by the disease. Sometimes the specific psychological stimulus works through an act of the patient, as by irregular care, indulgence in forbidden food; but in many cases such factors cannot be discovered. The demonstrative character of these flare-ups is always conspicuous and what would lend itself better for this purpose than such a disease at such age?

As to the psychosomatic mechanism, we can, in addition to the hypothetical channeling, refer to the fact that fat secretion is under emotional influence and belongs to the inherent psychosomatic reactions of the skin.

Summarizing the characterization of this group, we may say that the mental stimulus uses certain non-psychogenic diseases for occasional psychological purpose, without causing them primarily. Herein is the difference from the next group.

## 8. Decisive role of emotional factors in the very creation of the disease

This group comprises instances that are psychologically meaningful and wher neither the inherent psychosomatic mechanism (Group 6) nor a pre-existent non-somatic skin disease (Group 7) could be resorted to for an explanation. The pertaining conditions are mostly allergic in a wide sense.

Allergists have accepted the purely mental causation as well as cure of some cases of allergy, and psychiatrists have proved this genesis in detail by psycho-

analysis of selected cases. For the purpose of classification it is, therefore, not necessary to enter into a discussion about the actual existence of such a mechanism although much uncertainty exists as to the general importance of influences of this kind.

Two cases are presented briefly for a better characterization of this group.

Case 1. A 32 year old woman had repeated attacks of hives, with free intervals of weeks and months. All kinds of tests and removal to the hospital did not reveal any possible cause, except for pork. This was the only food after the intake of which the hives showed some time-relation to the meal. Outside of the periods of hives the patient could eat pork.

Patient suffered very much from itching, but bore it cheerfully. She was perfectly cooperative, and rather urged than restricted office and house calls and hospital stay for elimination tests. This pleasent attitude seemed to refute the diagnosis of a psychogenic origin, which was tempting to make because of the negative results of all the studies. As it is, this behaviour should have aroused suspicion as much as any outward signs of tension. It turned out, that patient's husband, otherwise a satisfactory provider, used to go on drinking sprees of several days' duration and longer, and that the periods of urticaria coincided with these excesses. When the husband came home, bedraggled and repentant, the patient was quick to forgive, and was free from hives during the shorter or longer intervals.

It was, then, easy to understand her behavior. She did not resent her disease because it gave her all she needed, if she could not have her husband, to whom she was much attached: importance, when she felt humiliated; care, when she was lonely; an affliction of the skin, when she was deprived of sexual gratification; a disease, for which she could blame her husband; the possibility to spend money on herself, when her husband did not earn any and wasted his savings. All these points came out clearly when the patient felt inclined to discuss the subject.

The opportunity to unburden herself did not help the patient, except for a short momentary relief. The hives recurred with the repeated external situation. I lost track of this patient after, at her request, I had a conversation with her husband. This was a failure to keep in mind for future reference.

Case 2. Two sisters, 18 and 20 years old, were seen with a similar itching eruption of small almost skin-colored, scratched papules. Scabies could be excluded. The eruption had first appeared in the younger sister after wearing a new dress. A possible cause common to both sisters could not be discovered. The younger girl was well in a short time under topical applications. In the older one, the eruption was fluctuating, but did not leave her completely for months. Itching was persistent even when only a few papules were present.

A definite diagnosis could not be made. The patient seemed tense and an influence of the obvious family situation was considered. The girls were orphans and lived with relatives. The younger sister was strikingly pretty, was much in demand socially. The older one was plain and stayed mostly at home after work. This situation was taken into account and, in addition to topical and occasional sedative treatment, the patient was encouraged to talk of herself. This she did freely and with a clear description of the fact mentioned, but without any verbal hint of a resentment. The rash disappeared after occasional recurrences.

After an interval of several months, patient returned because of continual attacks of urticaria. This eruption appeared shortly after her sister had become engaged. The result of elimination tests was negative. Mechanical urticaria was so strong, that scratch tests could not be performed, and pressure produced definite hives. On re-examination of the circumstances, it was found that hives appeared almost only where pressure was exerted, on the arm that leaned against a table, on the thighs that pressed against a chair.

Antihistaminic drugs and other treatment gave only slight relief and the condition persisted. Then, the patient did not return for several weeks, when she called and apologized for it. She had not returned because on the one hand treatment did not seem to help, on the

other hand she had been busy. She reported that she was completely free of hives, and, incidentally, engaged. The hives did not recur, except for a short attack immediately before the wedding.

These two cases are not allergoses in the strict sense, and were intentionally so chosen. Where positive tests prove the true allergic character of a skin disease, it is more difficult to decide whether a mental factor was the primary cause or only superimposed. Especially in an allergic disease of long standing, it is a psychiatrist's job to prove the case. This type of exploration should not be done by a dermatologist.

The characteristic of this group is that the emotional factor "creates" the disease in the skin. This is only a descriptive term and does not actually explain the psychosomatic mechanism. A true explanation is hard y possible, but we can at least try to determine the direction in which to look.

The psychological situation in these 2 cases contains two trends which may shed light on the psychosomatic mechanism: a demonstrative quality (which, of course, is shared by many other psychodermatoses) and an erotic component.

We have, then, a certain resemblance to the two groups of instances where an emotion specifically causes visible changes in the skin, the inherent expressive reactions and the reactions in the genital area.

Although the diseases in this group are caused directly by a specific emotional stimulus, they do not represent unequivocally, the content of the mental constellation, which differentiates them from the next group.

# 9. Appearance of a dermatosis that reproduces the content of the emotional stimulus

As stated in the introductory remarks, the inherent psychosomatic mechanism of the skin permits the utilization of vegetative functions for conversion phenomena. But because of suppressive countertendency, a very strong emotional force is necessary to produce definite examples of this kind, which, therefore, are rare.

Consequently, the carriers of such phenomena will mostly present character traits that are apt to confuse the observer and suggest to him other possible explanations: intentional deception, unconscious mechanical production of the lesions, false interpretation of skin eruption of other origins.

Religious stigmata are the most impressive example. The lesions are different from the kind that may be produced by another cause as e. g. psychogenic urticaria. Their location depicts exactly what they represent. The rare cases that have been accepted are well documented, so that none of the possible other explanations is valid. We can, therefore, take them as a proof that a psychosomatic mechanism as postulated for this group actually exists. With respect to our professional purpose, however, we have to find such cases in the dermatological material. Reports in the literature give a few examples, but I had opportunity to personally observe the following case.

A 24 year old woman, who had previously been my patient, came to the office because of an insignificant eczematous patch on her right hand. Before leaving, she took a costume jewelry necklace out of her purse to put it on. As an explanation she reported the following story: She had received this piece as a gift from another woman. There was profound dislike between the two, but because of the business connection of the husbands the present was made and accepted. It was not worn until the necessity arose, which was at a social meeting which was to take place shortly after the office visit. The patient was very much upset and exclaimed: "I am afraid to wear this thing. The woman would rather poison me than give me a present." She evidently hesitated to leave the office. After a few minutes she complained of burning on her neck. She took the trinket off, and there was an erythematous wheal all around the neck, in the exact position of the necklace. A reaction to the material was the first consideration, but the psychological explanation was so likely, that the patient herself recognized it without prompting. After a short discussion the rash disappeared and the necklace could be worn without consequence. Nevertheless, it was discarded.

The psychodynamic interpretation seems obvious. The eruption served two purposes, to be excused from wearing a necklace with such dangerous qualities and to demonstrate the other woman's sinister designs. The emotion was strong, but not deep-seated, and so its unconscious expression by way of a conspicuous skin disturbance was soon overcome by a conscious counter-tendency, as stated before.

Psychosomatically, the eruption was a perfect picture of what the patient could expect if the necklace actually had been poisonous. This places the case definitely in this group.

As to the question: "How does the mind do it?" we would not dare to give an answer beyond what was said before, especially about the possible mechanism in Group 8. The similarity with hypnotic experiments is evident.

It should be added that this patient was highly emotional and imaginative on the one hand, had presented allergic and vegetative reactions on the other hand (hives, spastic colitis, short attacks of vasomotoric rhinitis).

#### COMMENT

In this classification, one disease is omitted that is perhaps the most important instance of emotional influences in dermatology: atopic dermatitis. The three main components of this disease, neurotic features, systemic allergy, and a special response by the skin to diverse stimuli, have variously been proposed as the primary cause. It is not unlikely that all three are parallel expressions of a constitutionally peculiar reactivity, and influence each other in varied ways. Each factor is cause as well as sequel and atopic dermatitis becomes difficult to classify. It is rather a probing ground for all the types of psychosomatic mechanism in dermatology.

This complex picture may serve to remind us of transitions which exist between our groups. In the dermatitis of the hand, an emotionally conditioned flare-up may be explained differently by neurotically increased work, more reckless or even meaningful damage to the hands, diminished care, increased perspiration, decreased resistance from non-specific emotional causes, and specific emotional stimulus. Often these factors seem to work together and cannot easily be separated.

In any classification, decisions have to be made between main characteristics and less important features, and the former take their significance from the

question that interests us. It could be said e. g. that case 1, of Group 6, belongs in Group 8, because the disease was *created* by the emotional stimulus. The mechanism, however, was based on perspiration, an inherent psychosomatic mechanism of the skin and, in our endeavor to understand the genesis of these diseases, this is the main point of interest.

Further investigation, of course, may change the designation of individual diseases. Should, e. g., seborrheic dermatitis be completely explained as a sequel to increased fat secretion or should emotional fat secretion here and in acne act via a hormonal mechanism, these diseases would fall in another group than they are assigned to in this paper. But this has no bearing on the general principle of classification.

#### SUMMARY

A classification of emotional influences in skin diseases is proposed. It is based on the psychosomatic mechanism that is instrumental in various conditions.

- 1. Non-specific mental elicitation, comparable to other factors that facilitate the outbreak of a disease. Typical example: Some cases of herpes simplex.
- 2. Sensory neurosis. This can be understood without resorting to any psychosomatic mechanism. Typical example: "Nervous" pruritus.
- 3. Damage to the skin by acts of the patient in sensory or other neurosis. Typical example: Washing eczema in compulsion neurosis.
- 4. Involvement of the skin "by detour" i. e. consequent to primary involvement of another organ. Typical example: Eruptions in psychogenic ulcerative colitis.
- 5. Pathological increase of the inherent psychosomatic reactions of the skin. Typical example: "Nervous" hyperidrosis of the hands.
- 6. Production of a skin disease via the inherent psychosomatic reactions. Typical example: Recrudescence of dermatophytosis of the toes resulting from psychogenic hyperidrosis.
- 7. Utilization of a non-psychogenic skin disease by mental forces. Typical example: Certain cases of herpes simplex where recurrence happens from a specific mental stimulus.
- 8. Direct mental influence in the production of the skin disease (chiefly allergic). Typical example: Urticaria that appears in a specific situation.
- 9. Symbolic production of a skin disease, as a conversion phenomenon. Typical example: Religious stigmata.