

Concerning the diagnosis, no difficulty can exist, it seems to me, if we are in the habit of studying cutaneous disease from the standpoint of anatomy and pathology, and more particularly the latter. This classification of skin diseases, upon the basis of general pathology, is not only the most scientific, but what is of more importance, is also the most practical and useful for our daily dealings with these diseases. The affection before us belongs manifestly to the atrophies, the process at work being essentially degenerative and atrophic in its phases. This point established in our minds, there remains merely to find a place for it in this class, and it plainly must be grouped with atrophies of the true skin. Such forms of atrophy are comparatively rare, the true skin not being prone to take on atrophy as a primary process. The several affections of this kind which may be classed together are atrophy of the skin proper (*atrophia cutis propria*); *maculae et striae atrophicæ*; *morpheæ*; and some forms of *scleroderma*, the two latter affections sometimes coexisting.

The treatment of these cases is generally unsatisfactory, the prognosis, however, depending a good deal on the variety of the disease present and on the stage of the process. In some cases arsenic internally is useful, but in the patient before us local inunctions with stimulating ointments and oils, with massage, electricity, and frictions will probably prove more beneficial.

THREE CASES OF DERMATITIS HERPETIFORMIS ORIGINATING FROM CAUSES CONNECTED WITH THE UTERINE ORGANS.

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THE admirable work done by Dr. Duhring and supplemented by Brocq has so familiarized the symptomatology of dermatitis herpetiformis that the diagnosis of the cases of the disease presenting themselves has become a matter of comparative ease. The same degree of progress has not, however, been made in our knowledge of the etiology and pathology of the dermatosis, nor does there exist unanimity of opinion in regard to its nature; so that the careful recording of all cases furnishing details bearing upon these points is of the greatest importance, in order that, in time, a critical and comparative analysis, and perhaps the formulation of conclusions satisfactory to all, may be made in regard to the pathogeny and nature of the process. For this reason I would report the following cases, which present many features of interest and importance.

CASE I. (Demilt Dispensary.)—Female, aged thirty-five years, intelligent and bright; consulted me July 19, 1890, giving the following details in regard to herself and the cutaneous disease from which she was suffering. Her general health had always been good, but at the age of twenty-five she had had an attack of gastric dyspepsia, and off and on since then there had been occasional returns of the same trouble. Married at twenty-four, she has had three children—an interval of five years occurring between the first and second, and of four years between the second and third. The skin disease had begun in the third month of this last pregnancy, appearing first upon the feet, and then rapidly becoming universal, under the form of intensely pruritic "hives," as large as a fifty-cent piece, which appeared in successive crops. When about five months pregnant, her husband died and she experienced intense worry and anxiety, as she was thus obliged to provide for both herself and her children. The eruption immediately became aggravated, fresh crops of lesions of various types appearing, the pruritus and subjective discomfort becoming almost unbearable, and all the distressing circumstances surrounding her culminated in a miscarriage at the seventh month. Temporary amelioration of the cutaneous process ensued, but only for a short time, for in a few weeks a severe relapse occurred, and the course of the disease ever since has been one of alternate outbreaks and periods of comparative ease and quiescence. These latter, however, would always be shortened by mental or moral irritation of any kind, by anger, or by increased worry and anxiety—a fresh outbreak occurring or an aggravation of existing symptoms ensuing. After her miscarriage she became a wet-nurse, and pursued that occupation until about May 1, 1890. For several months previously she had been much worried and very despondent, because her earnings had not been sufficient to support her children, and in April, 1890, the severest attack of the disease began to appear. Prior to this outbreak, erythematous patches and groups of papules and vesicles alone had appeared, but in this relapse, and for the first time, bullæ also occurred more or less generally over the body. The disease had now existed nearly two years, but her functional health had been very good, except that there were occasional attacks of dyspepsia.

When the patient was seen by me, this last outbreak had subsided to a considerable extent. There were still, however, numerous lesions over the body, especially on the extremities, and the pruritus was still intense in character. On the surface, papules and small vesicles arranged in groups of variable extent were seen, while here and there were irregularly-shaped, tense and flaccid bullæ. Numerous crusts and scratch marks, and diffuse and small circumscribed pigmented areas, the site of former lesions, were also present.

While the patient was under observation, a marked feature observed both before and during an outbreak was excessive general hyperidrosis, but especially of the hands, feet, and axillæ. A number of relapses also occurred, and they varied in intensity and extent as well as in the type of the lesions—papules alone, or papules and vesicles, or both and bullæ. The pruritus and burning sensation was at times only slight, but then again would attain such a pitch as to bring on a severe hysterical attack, and after this an outbreak would regularly follow, consisting of groups of vesicles and papules or erythematous patches. While she was under my care, the patient's material circumstances did not

improve; her worries and anxieties persisted; she was despondent and melancholic, given to brooding, and she obtained benefit from no form of treatment used. Undoubtedly these mental and moral disturbances nullified all attempts at improving her condition, for, as they had previously done, they continued to call into existence new outbreaks of the process. The patient was seen by me continuously until in September, 1890, she ceased her visits. She was practically then in the same condition as at first, and the disease followed the same course as during the previous two years. Recently, however (March, 1892), the woman returned most unexpectedly to tell me how she was. She stated that from the time I had last seen her she had not followed any treatment, but in December, 1890, considerable amelioration of her material circumstances had come about; her two children were taken care of by her husband's relatives, and she was thereby relieved from her constant worrying and anxiety on their account. She also obtained a better situation and earned enough money to support herself well, to obtain proper food, and to enjoy life. As a result, there was a diminution in the intensity of the process, relapses became infrequent, and about April, 1891, entire cessation of all the objective and subjective manifestations of the disease occurred. Since that time she has remained absolutely well, and, in fact, when I saw her she was in perfect health; the cutaneous surface was without a trace of the former trouble beyond slightly pigmented areas here and there.

From the clinical history of this case it can be seen that the primary lesions were erythematous patches of various sizes—in fact, the patient pointed out similar ones at the time I first saw her—which remained in association, or were quickly replaced by papules and vesicles appearing in successive crops, all being accompanied from the beginning by the most intense pruritus and burning pain. When these features, the clinical course of the process, and the condition—pregnancy—under which it arose are taken into consideration, the dermatosis agrees so closely with the herpes gestationis of authors that there can be no question but that it primarily represented an example of that cutaneous affection, though in its subsequent history it differed in some particulars from other recorded instances of the same disease. It is thus the first and only case which from its very inception ran a chronic course, persisting with undiminished severity for an indefinite period of time after pregnancy had terminated, while all the other cases in literature underwent a temporary aggravation after delivery, to gradually disappear at the end of a few weeks, and a chronic course became instituted only after a series of successive attacks developing during successive pregnancies.

It does not, however, appear to me difficult to explain this deviation in type. The reason for it, I would find in the neuropathic condition of the patient, induced by the severe mental and moral emotions she experienced in the fifth month of pregnancy, by the death of her husband, by the worries and anxieties entailed upon her by the inadequate

support furnished her children by her own work, and by the miscarriage in the seventh month, a condition which was not terminated by the emptying of the uterus, but one which persisted not only unchanged, but even in an increasing degree for very many months after. It is to the existence of this neuropathic state and the constant repetition of the mental and moral emotions, the anxieties, etc., that I would, therefore, ascribe the persistence of the process and the unceasing occurrence of relapses after the termination of the pregnancy. In other words, the primary cause—the pregnant uterus—being removed by the miscarriage, the cutaneous process in all probability would, as in the other recorded cases, have disappeared, but the mental troubles then coming into play as secondary exciting causes, the disturbed conditions of which the skin affection was the expression were kept up, and the persistence and chronic course of the dermatosis was the result. The importance of these circumstances in connection with the process was not judged from the patient's assertion and observation alone, but I myself noted so repeatedly and regularly the occurrence of relapses and an aggravation of the cutaneous symptoms after any increased worry, anxiety, or mental emotion, that no other conclusion could be reached but that a most intimate connection existed between the dermatosis and disturbances of the nervous system, brought about through the channels of the mental and moral faculties. In consequence, it appears to me perfectly logical to conclude that if these factors operated at one time in the manner mentioned, they must have had the same influence at other times also, and, therefore, it would be perfectly justifiable to ascribe to their occurrence the persistence of the process after the termination of the original inducing cause.

The herpes gestationis of authors has been claimed by Dr. Duhring not to be an independent disease by itself, but to be merely a phase of his dermatitis herpetiformis—a claim, moreover, recognized and allowed by Brocq in his analysis of the whole subject; and, judging by this case, I would certainly accept the opinions of both of these dermatologists. I would do so for the reasons that, when the patient came under my care and while she remained under my observation, the case in its entire symptomatology and behavior was absolutely undistinguishable from any case of dermatitis herpetiformis the outcome of any other cause than pregnancy, and furthermore, its entire clinical history from the very first presented those marked features attached to that form of cutaneous disease, as shown by its chronicity and frequent relapsing, its multiplicity of lesions—erythematous patches, vesicles, papules, bullæ; its intense subjective symptoms—pruritus and burning pain, and its marked rebelliousness to treatment. Under these circumstances, it would be difficult to include the case in any other category than the one mentioned, even though its primary inducing cause was pregnancy

and not some other factor. My own cases of dermatitis herpetiformis—eighteen in number—have, however, shown me that there is not needed for the production of the process any one single or specific cause, but that in a person possessing a certain degree of predisposition almost any exciting factor may so disturb the equilibrium in the nervous system that the dermatosis develops. In fact, such diverse exciting causes as mental shock and emotion, malarial fever, the menopause, etc., have been in my cases the determining influence in the production of the process, and if these could act in that manner, there can be no objection whatever to regarding pregnancy in the same light. A further corroboration of the view that influences originating in the generative tract—of which pregnancy would be one—can be productive of the dermatitis herpetiformis of Duhring is furnished, moreover, by the following two cases of the disease, which have been under my care, and in both of which the menopause was the exciting factor.

CASE II. (Private practice).—Female, aged fifty-three years; seen by me in August, 1891. She stated that she had always enjoyed good health, although of nervous temperament, anæmic, and usually a little below par. Her menstruation had always been regular, but she had had ulceration of the os uteri for several years after the birth of her second and last child, twenty-nine years ago, and also ever since a most profuse leucorrhœa and a lacerated cervix. She was accustomed to take daily cold baths during menstruation, but not at other times. The climacteric began in April, 1889, the appearance of the menses becoming irregular, the flow scanty and finally ceasing, not to return, in July, 1890.

The cutaneous process first appeared in May, 1890, and since that time she has not been free from its manifestations, with the exception of two months, when she had an attack of erysipelas of the face and head. The disease was not so severe while the periods still came, but it became very much aggravated as soon as they had entirely stopped. The first lesions developed at the bend of each elbow as erythematous patches, which became covered with vesicles; then similar phenomena over the knees, then upon the back, and finally cropping out generally over the entire surface. Both halves of the body have always been affected, but the right half invariably more severely than the left. All these manifestations have been accompanied by the most intense pruritus and burning sensation, increasing at night and when in any way she became heated or excited. Since the primary outbreak the patient has experienced relapse after relapse, separated by longer or shorter intervals of comparative ease—papules, vesicles, bullæ, and more lately erythematous patches appearing in successive crops or more or less mixed together. Her general health has remained about the same, that is, she was not robust but could not complain of any particular illness. When she came to me, constipation was present, and she stated that for some time she had passed urine very frequently and abundantly, and had occasionally noticed a "brick-dust" sediment. The urine on examination showed the presence of urates, uric acid, and oxalate of lime crystals, but no albumin, sugar, or renal epithelium or casts.

The cutaneous efflorescences were distributed generally over the entire

surface of the body, the mucous membranes of the mouth and vagina being entirely free, and having always been so. They consisted of groups of papules or papules and vesicles, while here and there were single pea-sized bullæ, or a group of several of these, and widely distributed were discrete and grouped small and large areas of pigmentation, the sites of former lesions and groups of lesions. The vesicles were for the most part flattened, angular, and irregular in shape, quite resistant and not rupturing easily, and the bullæ presented very much the same characteristics, though on a larger scale. The pruritus and burning pain were complained of intensely, as they deprived the patient of sleep and rest. Since the case has been under observation there have been periods of improvement and others of aggravation; crops of lesions having the characteristics mentioned above have succeeded each other at irregular intervals, the patient at times covered with the eruption, at others presenting only a few groups of vesicles or papules and bullæ; but yet the agonizing subjective sensations have persisted without change or abatement, and only temporary relief has been obtained from treatment.

In January, 1892, she experienced a most intense relapse, which developed immediately after taking "laughing gas" for the extraction of some teeth. More lately (March, 1892), another severe outbreak manifested itself, after grief and the natural emotion caused by the death of her mother. On the whole, it may be said that there has not been any material change in the patient's cutaneous disease since its inception.

CASE III. (New York Skin and Cancer Hospital; Dr. Bulkley's service.)—Female, forty-eight years of age; first seen by me in January, 1889. She had been married twenty years, but had never become pregnant. She had always been of neurotic temperament, easily frightened, subject to attacks of melancholia, and a sufferer from severe neuralgias—facial and occipital—for twenty years. The inception of the menopause was dated by her in April, 1886, and her last period had occurred in May, 1887. The earliest cutaneous symptom noticed by the patient was a most severe burning and itching of the entire skin, which came on in the first part of June, 1887, and which at the end of from two to three weeks was followed by the appearance of bullous elevations as large as a 25-cent piece, first on the legs and then on the arms. While these were still present, outbreaks of papules and vesicles began coming out and have kept appearing in rapidly-succeeding crops, but no bullæ have reappeared. When the case was seen by me the process had been in existence about eighteen or nineteen months, and it had become universal. There were groups of papules and of vesicles of variable size, erythematous patches and pigmented areas distributed without arrangement over the entire cutaneous surface, which, in addition, was thickened and infiltrated and scratched in every direction. The burning pain and pruritus were intense and paroxysmal in character, and during the paroxysms the patient suffered from excessive thirst and consumed large quantities of water.

While the patient remained under observation the dermatosis pursued the same course as it had hitherto, that is, successive crops of vesicles, papules, or areas of erythema would appear, preceded or accompanied by the same severe subjective symptoms. No abatement or relief seemed to be obtained from treatment, and when she was last seen the process was in every particular *in statu quo ante*.

We thus find in these two cases the same major clinical characteristics as were observed in the one which primarily developed under the influence of pregnancy, and, in fact, in their entirety they agreed accurately with the latter, though differing from it in their initial moment of causation. I do not think that there can be any doubt but that Cases II. and III. were examples of dermatitis herpetiformis of Dühring, inasmuch as clinically their mode of behavior, their objective and subjective symptomatology were precisely such as pertain to that of dermatosis; and this being the case, it cannot but be evident that the process can and does originate under the influence of conditions, other than pregnancy, existing or arising in the generative organs.

It would appear to me justifiable to ascribe to the climacteric the rôle of being the exciting cause of the dermatosis in these two cases, for the reason that, notwithstanding the existence of a neuropathic condition in the patients, of a lowered nervous and general systemic tone for a long period of time, yet they were able to withstand all the noxious influences surrounding them and in operation, and they succumbed only after they had been subjected to the additional severe strain produced by the manifold changes occurring in connection with the menopause. The clinical history given by these cases would lead me, therefore, to regard all these factors existing for years prior to the climacteric as instituting a predisposed condition of the general system, while the menopause itself acted similarly to a nervous shock or mental or moral emotion—that is, as the determining cause which produced the final changes necessary for the development of the disease. In what manner the pregnant uterus or the climacteric act in calling the dermatosis into existence, it is difficult to state, except speculatively. In view, however, of the manifold neurotic disturbances which arise under the influence of these conditions, there are strong presumptive reasons for believing that the action of these exciting causes is through the nervous system, their effects being manifested in a reflex manner, and the cutaneous symptoms being simply an objective expression of a neuropathic condition induced by the disturbances having the uterine and generative organs for their seat. It would certainly appear as though the nature of the influences under which the process in Case I. continued after the miscarriage, demonstrated that the dermatosis was the outcome of disturbed conditions induced in the nervous system; besides this, the clinical history—to judge from the constant aggravation and relapsing of the dermatosis upon the repetition and recurrence of the same influences—pointed out that a most intimate connection existed between the objective and subjective symptoms and any and all disturbances taking place in the nervous system; or, in other words, the cutaneous manifestations were purely the objective expression of the neuropathic condition. No better proof of this view can be desired than

was furnished by this patient's case, since the disease persisted without change as long as those influences operating upon the nervous system lasted, but disappeared after their removal and cessation, the woman regaining her health and remaining free from the dermatosis. A stronger proof, I repeat, of the neurotic nature of the process than this could not, in my opinion, be obtained; and it is one which I have observed in a number of my cases, in which similar conditions were in action, and in which removal of these latter was likewise followed by entire relief from the process; when they recurred, so did a more or less extensive relapse become manifested. In Cases II. and III. similar observations were made as in Case I., though in a minor degree; that is, independent of the climacteric, influences in the former similar in nature to those noted in the latter excited likewise the same effects, and were followed by relapses, etc. In these two cases, the material conditions of the patients were better than in Case I., so that the repetition of the neurotic disturbances was not so frequent nor so intense in character, but, nevertheless, their occurrence would be invariably signaled by outbreaks and aggravation of the cutaneous symptoms.

When these facts are repeatedly observed, and not alone in these three cases, but also in many others, and they are taken in conjunction with the neuropathic etiology furnished by the majority of the patients, with the intensely marked evidences of disturbed sensory innervation—pruritus, burning pain, neuralgias—invariably present, it certainly seems to me that there is every reason and ground enough to conclude that the process is a dermato-neurosis, the outcome of disturbances produced in the nervous system by one cause or another. In another article upon this subject I have already committed myself to that belief, and certainly the more cases of the disease that I see and the more I study the dermatosis, the more convincingly do the array of facts presented by them strengthen and corroborate the opinion expressed.

In regard to the treatment of dermatitis herpetiformis, my experience has certainly shown me that there are no drugs which exert any influence upon its manifestations. In view of the conditions under which the cases originate and their behavior after development, this failure is what would be expected; so that, beyond remedying whatever functional or other disturbances of health which may be present or arise in the course of the disease, I can see no result to be obtained from the administration of medicines. Of course, if the etiological elements of causation can be reached by drugs, then certainly those indicated should be exhibited; but, unfortunately, such cases have not come under my observation. On the contrary, the only good results which have been obtained by me have been in such cases as permitted the removal and avoidance of all influences, surroundings, or circumstances which acted in any way detrimentally upon the nervous system, or caused a disturb-

ance of whatever nature in it. In consequence, the treatment should, in my opinion, rest upon the basis of the case's etiology, and be directed with a view to guarding the patient from every emotion, shock, or occurrence which might act in the manner mentioned. If this cannot be done, I would not expect the dermatosis to be helped, but to continue indefinitely, relapsing and recurring as often as the patient was exposed to one or another of such influences, though it is perfectly possible that in some instances the process may terminate of its own accord, the individual ceasing to react to the causes mentioned as primarily being so actively determinative of the eruption. As evidence I would advance, besides the two cases previously reported by me,¹ Case I. in this paper and Cases I. and IV. in another article already published.² In these, the clinical histories show that the patients got well when the influences surrounding them were removed or guarded against, but not before, notwithstanding that medication of all kinds was made use of. On the other hand, Cases II. and III. in this paper, and two others in the one just referred to, have persisted and continued irrespective of treatment, and in them it was not possible to remove or prevent the repetition of the various factors and other circumstances productive of the relapses. It seems to me, therefore, that the disease has to be dealt with upon the broad therapeutical basis mentioned, and its treatment not limited to the exhibition of one drug after another; rather let entire attention be given to the removal of all the etiological exciting and determining factors appearing to participate in the production and persistence of the process.

Locally, a certain amount of benefit can be obtained from treatment, in so far that relief from the distressing and oftentimes agonizing subjective symptoms can be given. The eruption is also by this means to a certain extent diminished in severity, by lessening the scratching and wounding of the skin by the patient—thereby increasing the inflammatory changes. Ichthyol has given me by far the best results of all substances used or tried, and patients have invariably obtained so much relief from its application that they have strongly objected to any change being made. I have not, however, observed that it had any influence in preventing new outbreaks or had any other action but that of giving relief to the intense suffering caused by the pruritus and burning.

¹ *Journal of Cutaneous and Genito-Urinary Diseases*, September, 1891.

² "Some Cases of the Dermatitis Herpetiformis of Duhring, etc.," *New York Medical Journal*, May 28, 1892.