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DERMATITIS GESTATIONIS

THE HISTORY OF A RECURRENT

DERMATOSIS



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DERMATITIS GESTATIONIS ;

THE HISTORY OF A RECURRENT DERMATOSIS.¹

BY JAMES C. WHITE, M.D.,

Professor of Dermatology in Harvard University.

I PURPOSE to give a brief account of the changes which have taken place in the skin of a young married woman during the past two years. I first saw her in November, 1886. She was then twenty-two years old. Her general health, and the condition of her skin, had been perfectly normal until after the birth of her first child in July of that year. Three weeks after that event, from which she made a good recovery, there appeared upon her front chest a "fine rash," which her attending physician called an eczema. Three days after its outbreak she visited the seashore and ate some clams, and on the following day her whole skin became intensely red, and a few wheals made their appearance, accompanied by great itching. The affection was supposed by the family to be nettle-rash, but as it persisted Dr. Whittier was called, who has kindly given me the following account of her condition at that time:—

"I first noticed across the upper portion of the chest in front, and not dependent upon any disturbance in the breasts, a pronounced erythema, with papular elevations and wheals, varying in outline

¹ Read by invitation before the Obstetrical Society of Boston, January 12, 1889.



and in length from a few lines to nearly an inch. The entire surface conditions were associated with slight constitutional disturbance (fever, etc.), but with a degree of heat and irritation very difficult to allay or control. My period of observation of Mrs. X. covered about six weeks. During this time, beginning on the chest, and quite rapidly at the outset, and more slowly as the extremities became involved, the eruption invaded the whole surface of the body, but did not involve to any particular extent the face or scalp. About the waist and genitals, on the inside of the thighs and forearms, the redness was extreme, and papules and vesicles abounded with exudation and desquamation, and most intolerable burning, itching, and painful sensations. I concluded that the disease in its entire stages was an intense urticaria, dependent upon parturition and some error in ingesta or digestion, and that later on, and because of the intense local irritation, much aggravated by a lack of power of control on the part of the patient (it was impossible to keep her from scratching), a true eczema was set up. The treatment was local and constitutional, and a wash of zinc oxide with lime water was most satisfactory, while iron, quinine, and strychnia in the earlier stages gave place to Fowler's solution later on."

I first saw Mrs. X. as an out-patient at the skin department of the Massachusetts General Hospital nine weeks after her confinement, whither she had been referred to me by Dr. Whittier. Her face then presented appearances which would have been regarded as those of an ordinary eczema of subacute type, viz., papules, excoriations, and scales, with diffused redness and considerable cell infiltration. The general surface elsewhere, however, exhibited manifestations of chronic urticaria, areas of fugi-
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tive erythema, and sparse wheals. The skin in all parts returned to a normal condition in two or three weeks under a soothing local treatment.

Second Attack. — Six months after her recovery, during which time the patient remained in good health in all respects, I was called to see her. I found her in bed, with a skin of an intense redness everywhere. Upon the limbs were a few wheals. There was a sensation of great heat and itching over the whole surface. She complained of slight nausea, headache, and frequent chills. The tongue was somewhat coated, and the pulse a little accelerated. Thirty-six hours previously she had eaten roast pork, and twenty-four hours afterwards the cutaneous symptoms had begun to manifest themselves, without marked signs of intestinal disturbance, and rapidly developed to the condition present at my visit. The indications at that time were those of a universal urticaria rubra. The skin was everywhere thrown up into firm, white, and prominent ridges on scratching it (dermographismus). On the following day I found that the general erythematous condition had persisted, but that the intensity of the redness had somewhat abated. The skin still itched exceedingly, and wheals of various sizes occasionally appeared. The constitutional disturbance was less. The uniform redness remained three or four days, and wheals appeared with diminishing frequency for the same period. Then an abundant desquamation over the whole surface followed, which continued several days, after which the skin recovered its normal condition. During this attack the only tissue changes or lesions were the erythema, wheals, and scales. The case appeared to me throughout to be an exceptional form of urticaria.

Third Attack. — At Easter, 1888, I was again called

to see Mrs. X. She was then two months pregnant. She had eaten two days previously a lobster salad, and in the course of the following twenty-four hours her skin had assumed the same condition as at the last attack. It was universally of an intensely red color, and presented numerous wheals of various sizes. There were also large areas of œdematous swelling, especially upon the legs. There was very little gastric disturbance, but hypercatharsis following the administration of some laxative before I saw her. She complained chiefly of itching and chilliness. On the fourth day a few of the wheals had assumed a bullous condition, so that by confluence some of the blebs were of considerable size, and later were converted, by the removal of their coverings through contact with the clothing, or by decubitus, into moist, denuded areas. Excoriations were also developed by scratching. The general erythema subsided after a few days, and was succeeded by desquamation. By the end of the second week all cutaneous symptoms had disappeared.

Fourth Attack.—Mrs. X. remained well during her pregnancy until a week before the birth of her child, which took place November 8, 1888. On November 1st, without any known imprudence in diet, she had several chills accompanied by repeated vomiting. On the following day her skin became universally reddened, and presented here and there small water blisters, which became larger. There was much itching, and later slight scaling. The process was not seen by any physician, and the skin had returned to its natural condition before confinement. November 11th, three days after delivery, which was normal, the secretion of milk ceased, and on the following day, November 12th, a burning sensation was experienced in the back of the neck, which spread rapidly over the whole surface. The

skin became at the same time intensely red everywhere, and very irritable. There were repeated chills and vomiting. On the fifth day after delivery, November 13th, large bullæ appeared upon the back, leaving raw, bleeding, and very painful surfaces. On November 15th she was seen by Dr. Tilden in consultation, who reported the presence of small vesicles upon the shoulders in addition to the intense general hyperæmia of the skin. Dr. C. M. Jones, the attending physician, states that at this time the lochial discharge was brownish, but not offensive. She had had after delivery a vaginal douche of corrosive sublimate, and later one of the same composition within the uterus. The temperature at this period varied from 101° to 104° .

November 16th the patient was admitted to the Massachusetts General Hospital under the care of Dr. E. N. Whittier, who kindly permitted me to see her daily. I found her on the next day in bed. The skin universally was of an intense redness, shining and tense, as if scalded. A few moderate-sized blebs were seen, but no small or clustered vesicles, nor were any well-marked wheals present. The upper portions of the back presented large areas denuded of epithelial coverings, from which serum and blood were oozing freely. The patient's general condition was feeble; pulse 120, respiration 30, temperature 103° . She was enveloped in cloths soaked in liquid vaseline, as scalded patients are there treated. By my advice lard beaten up with rose water was substituted for this dressing, spread thickly upon cotton cloth, and with this was mixed boracic acid for application to the denuded surfaces. Quinine had been given since her admission, but this was omitted for fear of its possibly irritant action upon the skin. On the 19th the general hyperæmia had much diminished in intensity, and

the denuded areas upon the back and shoulders had not increased in size. Fresh bullæ had appeared, scattered over the trunk and limbs especially, but they were smaller than at first. Their contents were sero-purulent, but in one upon the ankle they were hæmorrhagic in character. On November 21st the skin over the nates and lower back seemed to break down under the pressure of decubitus, as if necrosed, and was converted into a nearly uniform shallow ulceration, which bled freely on changing dressings. Small pustules began at this date to appear in great numbers upon the backs of the hands and forearms, and upon the lower legs. There was an improvement in the patient's general condition, her strength was greater, and her appetite stronger. On November 23rd but little general hyperæmia was left. The denuded surfaces upon the shoulders were nearly healed, and the extensive ulcerated areas over the lower back were assuming a healthy appearance. New crops of small pustules were developing over the limbs, and a few deep furuncular processes had appeared upon the left breast. On the 26th the face also was thickly occupied by the small pustular efflorescence, and upon one cheek two additional furuncles were present. The pulse, respiration, and temperature had by this time nearly regained their normal state. The patient was removed from the bed to a couch. On the 28th fresh crops of superficial pustules were appearing, chiefly upon the head and arms, with a few new furuncular lesions. The excoriated and ulcerated surfaces had nearly healed. The general surface of the skin, when not kept covered by the lard dressing, was in a state of desquamation.

From this date no new changes took place in the condition of the skin except those of slow involution, and on December 4th she left the hospital. On

December 14th the skin was still desquamating in a few parts, and the pruritus continued. It had regained its natural color. There were no new pustules, but the seats of the old ones were still marked by a deep redness. Three new large boil-like processes, however, had appeared upon the right wrist. At my last visit, on December 21st, the skin had returned to a normal condition.

To this account of the cutaneous affection of Mrs. X. must be added that of three of the four nurses who were in attendance upon her in this last attack. Nurse one had charge of her before her admission to the hospital. Nurses two and three were constantly employed in changing the dressings and turning her in bed. All of them had develop upon the backs of fingers, hands, or wrists from two to four firm, deep-seated, indolent, furuncular abscesses during the second week of the patient's attack, which were very painful, and disappeared slowly after poulticing and evacuation by incision. There was no constitutional disturbance in any of them. In the fourth nurse, who was also in constant attendance upon her in the hospital, and engaged in the same duties as the others, there were no such manifestations. It should be added that the three affected nurses were accustomed to handle all sorts of surgical dressings, and that their hands had never previously exhibited any such manifestations; also that there were no irritating qualities in the dressings employed.

How then shall we interpret this history of Mrs. X.'s cutaneous condition of the past two years? We have a young woman, who before marriage and during the first pregnancy had had a perfectly healthy skin. Three weeks after a normal confinement an acute universal dermatosis developed, apparently an urticaria, and later a vesicular efflorescence of

an eczematous type at least. When first seen by me the affection had lasted six weeks, and the appearances at that time were those of a subacute eczema of the face and a chronic waning urticaria of the rest of the general surface, all of which rapidly disappeared under treatment.

Six months later an apparent intense general urticaria rubra appeared, followed by universal desquamation, the whole process lasting ten days.

One year subsequently, during the second month of her second pregnancy, there was essentially a repetition of the previous attack, excepting the occurrence of bullæ also.

Lastly, a universal erythematous condition, followed by desquamation, a week before the end of the same pregnancy, and a recurrence of the same four days after delivery, with subsequent cutaneous changes of much severer grade, more diversified type, and more serious constitutional disturbance than in the preceding attacks.

Two of these, the first and last, occurred soon after delivery, the third took place during early pregnancy, whilst the second and third followed immediately the ingestion of articles of food which not infrequently produce similar gastric, constitutional, and cutaneous disturbances. Three of them were, therefore, connected with pregnancy. In all of them a universal and intense erythematous state of the skin was the first cutaneous manifestation, followed in each instance by general desquamation. In the first three, wheals were the subsequent most prominent and persistent lesion. Vesicles or bullæ were present in all but the second attack, that, namely, which occurred during the quiescent state of the uterus. In the last the inflammation of the cutaneous tissues was so intense as to cause very extensive destruction of the vitality of the outer

layers, marked by denudation and shallow ulceration over wide areas; and later there were developed successive crops of superficial pustules in great numbers over the head and extremities, and a few deeper seated furuncular processes.

Now what do these manifestations indicate or suggest? Where should we place such an affection in our list of skin diseases? The first three attacks might be called urticaria rubra, and possibly the prodromal symptoms of the last might also be thus explained. In the third, and perhaps also in the first one, the vesicular or bullous efflorescences might be regarded, too, as indicating an urticaria bullosa. In the first attack the moist lesions were regarded as of an eczematous nature by Dr. Whittier, and when I first saw Mrs. X. the condition of the integument of the face seemed to warrant the correctness of this diagnosis. An eczema may indeed follow an urticaria, induced by the pruritus and scratching associated with the latter. But urticaria is seldom accompanied by so persistent and general a hyperæmia, or followed by such a universal desquamative process, as were present in each attack, or by such deep necrosis of the skin as in the last one. Neither do such successive outbreaks of impetiginous efflorescence ever, nor furuncular lesions ordinarily, follow true urticaria. It is evident that we have here some dermatosis more than an ordinary urticaria in the first three attacks, while in the last one there were no lesions typical of its presence. In the last attack the impetiginous and furuncular character of the lesions points to a possibly septic process, and the constitutional disturbances in its early history, the high temperature, rapid pulse and respiration, and chills, would seem to confirm such an influence. The occurrence of similar furuncular processes upon the hands of

three of the four nurses who were in attendance upon the patient seems moreover to indicate its infectious nature. Indeed this latter conclusion seems to be inevitable. Other than these, however, there were no symptoms of a septic or pyæmic process in the general condition of the patient. Such forms of universal scarlatiniform erythema, followed by desquamation, have been frequently observed in pyæmia, and in one instance at least associated with urticarial lesions. Such forms of erythema, too, are well known after surgical operations. The universal cutaneous hyperæmia, and the subsequent purulent lesions in the patient, and the infection of the nurses, might then be plausibly regarded as positive indications of a septic or pyæmic dermatosis in the former; but no such theory can possibly explain the identical erythematous condition and desquamation which have been present in all the attacks.

Have we, then, any well-recognized disease of the skin characterized by erythematous, urticarial, vesicular or bullous, impetiginous, furuncular, and desquamative lesions, and accompanied by pruritus, chills, and occasionally by rapid pulse, respiration, and high temperature? We may certainly call the case a multiform dermatitis, but is it an example of that very versatile affection, not yet sharply enough defined, by Duhring called dermatitis herpetiformis, more correctly in my opinion dermatitis multiformis, and more particularly that form entitled by Brocq dermatite polymorphe prurigineuse recedivante de la grossesse, the herpes gestationis of others? It is in this latter group, I believe, we must place it. The case is a striking illustration of the polymorphism of the cutaneous lesions of the disease. It demonstrates, too, the narrowness and inaccuracy of the title herpes gestationis, inasmuch as it never

exhibited, under my observation, the small grouped vesicles which are typical of herpes, and occurred once independently of pregnancy or its sequelæ. It shows, moreover, how we have in the latter condition a pronounced impetiginous dermatosis without a feature suggestive of Hebra's impetigo herpetiformis.

The following analysis of some of the points in the twenty-two cases collected by Dr. Brocq may be of special interest to members of this society. These cases received various titles by the observers under whose care they occurred, such as herpes gestationis, pemphigus, pemphigus pruriginosus, herpes circinatus bullosus, acute pemphigus, pemphigus hystericus, dermatitis herpetiformis, hydroa gestationis, peculiar eruption during pregnancy, and erythema gestationis.

The occurrence of the disease during pregnancy took place in the first month once, in the third month five times, in the fourth month three times, in the fifth month five times, in the sixth month once, in the seventh month three times, and in the eighth month once. After delivery the eruption appeared on the second day in one case, on the third day in three cases, on the fourth day in one case, and on the fifth day in one case. The period of development varied greatly in successive attacks in the same individual. The disease occurred in two pregnancies in five individuals, in three pregnancies in four individuals, in four pregnancies in one individual, in six pregnancies in two individuals, and in eight pregnancies in one individual. The tendency to an increasing intensity in the severity and duration of the dermatitis in successive attacks was observed. The cutaneous manifestations occurring after delivery were generally graver than those noticed during pregnancy.

It has not been my purpose before this society

to consider the much discussed questions of the pathology and etiology of this interesting group of affections, but to confine myself to a brief record of the case. Mrs. X. has shown that she has a skin which, under the impression of irritating ingesta, and the conditions of pregnancy and childbirth, apparently normal in themselves, may be thrown into a state of universal dermatitis multiformis. The rare features of the case are the necrosis of the cutaneous tissues over large areas through the intensity of the inflammatory process, and the demonstration of its infectious character in one of the attacks by the simultaneous development of purulent lesions upon the hands of the attendants.

Post scriptum. — January 7th Mrs. X. called upon me and exhibited an extensive urticaria of ordinary type, that is, well marked wheals of various shape and size, or white elevations surrounded by a red halo. There were no other cutaneous phenomena, nor was there any constitutional disturbance. She stated that since my last visit the skin had remained in a healthy condition until the previous evening, when the above manifestations presented themselves. Her diet for the preceding forty-eight hours had been of the simplest nature.

On inquiry she stated that the first attempt at sexual intercourse since confinement, a few days previously, had been very painful and was immediately followed by severe uterine colic, which was only relieved after a duration of twelve hours by an injection of morphia. The catamenia appeared for the first time since delivery on the following day.

This attack of urticaria lasted but twenty-four hours. Its source may well be referred to the revival of uterine agitation.

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