

REVIEWS, ABSTRACTS, NOTES, AND CORRESPONDENCE

THE PURPOSE AND FATE OF A SKIN DISORDER

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This paper will present the history of a woman whose life has been marred by the appearance of a disfiguring skin disorder, and my knowledge of her emotional processes during the period when this skin condition was recurrently present. My observations and contact with the patient cover a span of seventeen years.

The patient, Elaine, was the older of a family of two children, born in a central Ohio village of about two thousand. She and her sister Margaret lived with their parents in a secure and well-adjusted relationship for the first ten years of her life. At that time their mother died, and her death was followed within two years by that of their father. This early period of Elaine's life was characterized by the following circumstances: (1) The household was highly religious; there was never any confusion permitted between right and wrong. Our patient emerged from her early training with a highly developed conscience and a great sense of responsibility. (2) At the age of seven years, the patient was taught to masturbate by a maid who was sometimes entrusted with her care. This period of masturbation left her with a strong sense of guilt, almost obsessional in character. (3) The loss of her father and mother at a fairly early age tore from her the fine sense of security in which she had always basked.

On the death of her father and mother, the care of the patient and her sister was entrusted to a maiden aunt of rather advanced age. The parents had left little financial provision for the children, so the aunt herself provided the major part of their maintenance from the time Elaine was twelve years old until she had finished high school and secretarial school. This dependence upon an aunt for her livelihood increased Elaine's sense of being a burden which was still further enhanced by the maiden aunt's constant reminder to the children that she was devoting her life and substance to their rearing and maintenance.

When Elaine and Margaret had finished high school, the household was moved to the city, where Elaine might take secretarial training and Margaret attend the state university. During the next two years, during which Elaine alternately worked and attended secretarial school, she had almost no social contact with men. She devoted her time exclusively to her education and to Margaret, seeming almost as preoccupied

in Margaret's finding appropriate male companionship as Margaret herself. In many ways she assumed the mother rôle for Margaret, making all Margaret's clothes, cooking meals for her and even preparing dinners for Margaret and her fiancé. In every way she took care of Margaret as a mother might for her daughter. Elaine indicated that she had no interest in marriage, no intention of ever having a mate. She was disdainful of any suggestion that she have dates or let her sister include her in mixed parties. Life during this period was somewhat difficult for both girls because of the aunt's increasingly irritable disposition and her untiring effort to make the girls feel indebted to her and dependent upon her for her care and financial aid in maintaining them.

After two years in the city, Margaret married. Although the man was one of whom Elaine thoroughly approved and while she felt greatly relieved that "Margaret's future was all taken care of" she also felt terribly alone. It was as though her daughter, not her sister, were being married. Elaine then accepted a position as secretary in a business concern in a small town, a hundred miles or so away.

Eighteen months after starting this position, she developed on her face a violent and extensive case of acne rosacea. It was at this time that I first saw Elaine as a patient. The lesion was already extensive, covering the major part of the forehead: an irregular, raised indurated, violently red mass, in which there were several pustules, and in two areas large pus sacs. Other large patches of the lesion appeared on the left cheek and under the chin. In addition to showing this skin manifestation, Elaine was losing weight and complained of fatigue. She was immediately referred to an excellent medical clinic. During her contacts there she was constantly under observation and treatment by a leading dermatologist; two additional dermatologists were consulted frequently on the case. Every sort of therapy known or suspected to be beneficial in acne rosacea was employed. Included in this battery of therapeutic measures were x-ray, ultraviolet light, scarification, typhoid vaccine, various dietary régimes, an iodine-free diet, and rest. In addition to attendance by dermatologists, she had a very careful examination by a competent internist and remained under his supervision for two months. Careful search for a source of infection was made. After two years of care at the

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medical center, there was no appreciable change in the skin condition, although Elaine had regained some weight and energy.

The possible existence of an important psychic factor was revealed in repeated conversations I had with Elaine at this time. Six months before the onset of the acne rosacea, Elaine was becoming increasingly intimate with a sixteen-year-old high school boy, nearly eight years her junior. Both Elaine and the boy believed they were in love and seriously contemplated marriage. Two months before the appearance of the acne, they indulged in their first intercourse, from which Elaine did not experience full gratification. After this experience she was torn by a sense of guilt and the fear that she had become pregnant. She missed the following menstrual period. Despite her desire to possess Joe, she was quite aware of the difficulties that a continued relationship with him would entail. Since Joe was but sixteen and had completed only the first two years of high school, marriage could not be undertaken for at least two or three years. Because of the difference in their interests, the lack of enthusiasm of his parents for the match, and the critical attitude of his schoolmates toward the affair, she realized that the odds were heavily against his maintaining interest in her until marriage was feasible. She was faced then with continuing a sexual relationship which was irreconcilable with her conscience and which filled her with a terrible sense of guilt. In addition, the smallness of the community made her every meeting with Joe a subject for gossip. For two months after she had decided that this relationship must be terminated, she struggled to break it off, and it was toward the end of this period that the acne rosacea appeared.

Discussion of the situation with Elaine a short time after the appearance of the acne rosacea and only a few weeks before she was to give up her job because of it, brought out the following facts: (1) Tremendous conflict existed between her desire for sexual gratification and the remonstrance of her conscience at the means and situation by which she had sought such gratification. This conflict between id and super-ego was resolving itself in favor of super-ego. Her conscience was rigid in its unwillingness to permit a pattern of sexual behavior which conflicted with the sex taboos of the family and culture in which Elaine had grown up; therefore, this sexual expression could not be countenanced. Even in marriage the sexual aspect was of questionable respectability. (2) A strong fear of pregnancy had developed, accentuated by a two-weeks' delay in the menstrual period following intercourse. This fear heightened her anxiety and guilt over the relationship. (3) There was, along with the decision to give up Joe, a certain fear that she might not be able to make the sacrifice. Life became a struggle

to sustain her decision not to see him again, and many times decision wavered under her desire. Had Elaine deliberately selected some means to prevent a continuation of her relationship with Joe, she probably could not have found a more effective method than the terrible disfiguration of her face which resulted from the acne. The running pustules, pus-stained gauze, and flame-red surrounding tissue would have effectively repulsed any male. Furthermore, had Elaine elected a punishment for herself for the behavior she viewed as wicked, it would have been difficult to find anything more devastatingly unpleasant to her than the messy and repulsive appearance of her face.

She gave up her job and returned to live with her aunt. Eighteen months later this aunt, who was now quite senile and for whom Elaine was caring, died. Elaine moved into a one-room apartment which she managed to maintain on her small savings and a tiny inheritance from her aunt. Margaret was happily married and lived in another section of the country. It was three years after the onset of the acne before Elaine again held a job; for most of that time she avoided contacts with people and stayed as closely as possible within the four walls of her apartment. During the last three months of that three years the acne gradually disappeared. It was as if the super-ego had exacted sufficient penance. True, Elaine had tried various measures—diets, x-ray, etc.—during the three years, but there was no evidence that any of these had any important effect on the course of the acne. It seems probable that its disappearance was not associated with the effectiveness of any therapeutic measure.

Elaine immediately sought and obtained a job as secretary. Her general health improved, she gained some small amount of weight, and her face continued clear. There was no recurrence of the acne during the next four years. Then she had a moderately severe outbreak of the condition again. A discussion of the situation with her at that time brought out the following facts: She had had little contact with men during the entire period following the affair with Joe until about six months prior to the date on which I talked with her. During the months previous to our conversation and previous to the recurrence of the acne, a bond had been growing between her and her employer, a man somewhat older than she, with a wife and two children. This man, Bill, and Elaine had much in common; they often worked together evenings and increasingly they liked and confided in each other. Bill's home adjustment was far from ideal. His present station in life was far below that to which he had aspired and to which his ability and initiative would seem to entitle him. He had failed always in realizing his full potentialities because of a violent temper and an inability to work well with other people. Elaine found that Bill was

becoming the subject of sexual fantasies and that she was becoming very fond of him. Upon two or three occasions the affection was expressed physically, although in each instance it stopped short of intercourse. Again Elaine's super-ego exerted itself. Bill's wife and children were dear friends of hers; she was to all intents and purposes a member of his family; she could not let this affair with him grow to the point of betrayal of his wife and children. Again she had need to protect herself against her "weakness." It was during this period of conflict and anxiety, as well as heightened but ungratified sexual desire, that the acne rosacea reoccurred. The acne was present this time for about eighteen months but in a slightly less severe state than had originally been the case. Therapy again was of no avail. Elaine continued her work, and six months after the onset of this condition, Bill resigned his job in the company and sought employment elsewhere. Shortly afterward he became ill and spent a number of months in a hospital. These changes effectively terminated the growing relationship between Elaine and Bill, and disappearance of the acne followed within six weeks. Again, if Elaine had attempted to erect some barrier between herself and Bill, it would have been difficult to find one more effective than the acne. And had she wished to punish herself for desiring Bill, again the acne would have been a most effective measure. Because of her sensitivity about her appearance, it did have a major part, along with Bill's change of business and his illness, in separating the two.

Elaine's face remained entirely clear for five years. Again the acne appeared, in less severe form than the initial lesions but to a degree which, nevertheless, was markedly disfiguring. When Elaine sought help on the matter she readily admitted that for four months she had been having sexual relations with a man who was married and had three children, and that her life was again in a turmoil. Her maturity had brought about a growing rebellion against the early sex taboos. There was an increasing conviction that she had a right to some sexual life, regardless of the conditions under which it was pursued. This time she was definitely unwilling to give up the sexual expression she was enjoying, yet she was flagellating herself with the thought that she was destroying the home of another woman—although in this situation one she did not know. A conflict still raged between desire, and conscience and taboo. She had reached largely of her own accord the conclusion that there was a direct relationship between her conflicts and the appearance of the acne.

During the few hours which were available for therapy, Elaine showed some evidence of being willing to accept certain tenets. The first of these developed from her being asked to examine critically the damage

she had done to the home of the wife of her sexual partner. During the course of this appraisal, she volunteered the following facts: that Fred and his wife had had little in common for at least three or four years before she had known him; that no sexual relations had existed between Fred and his wife for at least many months before Elaine's meeting him; and that Fred had already been contemplating a divorce. Concern for the welfare of the children, plus the fact that a divorce in that tiny and highly religious community would have cost him his teaching job, were all that had prevented his starting suit. Elaine suddenly saw herself, then, not as one who was breaking up a home, but rather as one who, while acquiring something vital to her own life, was actually insuring that home's continued existence. She recognized that under these circumstances the only harm her relationship to Fred could do him or his family would be the shame and community condemnation caused in the event it was discovered. But since she and Fred lived in different communities and did have legitimate occasion to see each other on business, they could, by being discreet, almost certainly avoid the discovery of their meetings and their real relationship. If Elaine could completely accept this analysis of the relationship, there remained only the fear of pregnancy. Effective means of contraception could eliminate that source of anxiety.

During the three months following our brief sessions, Elaine proceeded to elaborate on the subjects we had discussed, to talk them over with Fred, and to digest them thoroughly. She emerged from this period of self-therapy having accepted fully the fact that no basis existed for any suffering she had endured from her super-ego. Her ego was now strong enough so that she could discard the taboos of her early childhood and her parents' world and fulfill her libidinal drives in a way appropriate to the reality situation. She was intellectually convinced that the continuation of her relationship with Fred was entirely justified and emotionally she accepted this solution. The last vestiges of the acne were fading from her face when she came to me to explain the conclusions she had reached. Since then four years have elapsed, during which she has maintained the relationship without interruption and without recurrence of the acne.

In any attempt to interpret the possible relationship of this girl's acne rosacea to her emotional status, there must remain a great deal of speculation. Acne rosacea appears to start as flushing of certain portions of the face. Tobias says "acne rosacea is due to a reflex circulatory disturbance involving the forehead, cheeks, and V of the neck. These are known as 'flush areas.' . . . Predisposing factors include . . . colitis, high blood pressure, emotional neuroses" (3). It is interesting to note that in Tobias' discussion of etiology, he not only

mentions "emotional neuroses" but also high blood pressure and colitis, two conditions themselves considered psychosomatic diseases, and perhaps other manifestations of the neurosis expressed as acne rosacea. Rothman in his excellent discussion of the rôle of the autonomic nervous system in cutaneous disorders has emphasized the mechanisms through which a dilatation of the cutaneous arterioles may be accomplished either as an adrenergic or cholinergic process. Emotions may then effect such vasodilation either as an adrenergic or cholinergic response. The fact that both types of responses may produce cutaneous vasodilation is not helpful to us, however, in attempting to assess the nature of an emotional state which, in the case described here, seemed to be associated with if not the cause of the skin pathology. Anxiety resulting from pressure of conscience could produce an adrenergic vasodilation. So could fear of pregnancy. Sexual excitement might perhaps produce either. The nature of the lesion does not, then, offer a physiological basis for discriminating between possible emotional sources of the basic cutaneous vasodilation.

Rothman suggests that responses of cutaneous strictures to autonomic nervous stimulation from emotional sources is of short duration. Pilomotor vasodilation, vasoconstriction, and increased sweat and subcutaneous secretion resulting from emotional changes are very temporary. Blushing, while severe and recurrent, never lasts for any great period of time, and the same thing applies to emotional sweating. He feels, therefore, that while emotional states are often very important in influencing the course of a skin disease, they probably are not the basic cause of the disease. It may be well to question that thesis. Are the skin manifestations of emotional processes necessarily short-lived or have we not learned to recognize the chronic ones? Emotional stress may cause violent stimulation of the gastro-intestinal tract with diarrhea or vomiting of a few hours' duration. It may also when present as a chronic anxiety state express itself in chronic mucous colitis or chronic spastic constipation. The immediate vascular response to fear is an increased tension and a very temporary but marked increase in blood pressure. Chronic anxiety, however, when present in individuals of the proper constitutional type may express itself as a chronic benign hypertension. There are many other examples of immediate and prolonged responses to emotional states. Would it not be rational to suppose that emotional stresses expressed through the autonomic system to cutaneous structure might be either chronic or temporary, just as they are in other parts of the body? If such is the case, are we failing to recognize these more prolonged or chronic responses? Perhaps acne rosacea, for example, could be a chronic and localized vascular

disturbance of emotional origin. Secondary infection, of course, tends to occur anywhere when vascular disturbance interferes with normal circulation. Pustules and indurated areas therefore are not difficult to explain. They may be no different from the inflammatory changes of a peptic ulcer or ulcerative colitis. Again one may presume a constitutional factor. Rothman says "The individual difference in quality and intensity of the autonomic responses to emotions have their seat more often in the peripheral neuron and in the effector organs rather than in the center. A person who blushes easily responds also with increased local dilation to heat stimuli, and bashfulness is not necessarily the main feature of his personality. A person who experiences goose flesh when listening to a gruesome story responds more readily with piloerection to cold than others do" (1). This concept implies again the constitutional factor in the choice of somatic expression of a neurosis.

That the skin condition described in this paper is influenced if not caused by certain aspects of the patient's emotional state is strongly suggested by the temporal correlation of the two. If the rôle of emotions in the etiology of acne is accepted, it may be assumed that the pathology is a vascular response to an anxiety state. The possibility of the emotions expressing themselves in a more meaningful or purposeful manner might even be considered. Sulzberger, in his discussion of Rothman's paper, describes the rather remarkable abilities of a patient seen by him and by Rothman during their studies with Lesser. This patient made his living by going from one medical school to another demonstrating his voluntary control of his autonomic nervous system. Sulzberger says, "He could produce goose pimples almost anywhere at will. He could accelerate or depress his heart rate at will. . . . He could dilate and contract his pupils. He could simultaneously cry on one side of his face and laugh on the other . . . I . . . asked him how he brought about these things. He said he had to visualize for instance plunging a part into cold water in order to create the piloerection response to that part. And that he had to think of heat being applied to a certain part of the body in order to produce sweating of that part" (2).

Such voluntary control of autonomic action by area in certain unusual patients suggests, of course, the possibility of the unconscious mind expressing itself selectively through autonomic controls to the skin of any section of the body. Is it possible that Elaine's emotional responses of guilt and shame were expressed in the skin of her face because there they exacted the atonement necessary for her "sin," and might have strengthened her will to forego behavior which her conscience could not tolerate?

SUMMARY

This is a case report of a woman whose life was marred by a severe and disfiguring skin disease, one considered by leading dermatologists to be due to a cutaneous circulatory disturbance. The original appearance of the condition and its recurrence coincided with periods of severe emotional stress associated with sexual problems. Any one of the following interpretations of the significance of this relationship might be made.

1. That the relationship was a coincidence.
2. That the emotional distress was disturbing to all metabolic processes and nutrition, and that the acne rosacea was only one aspect of such a generalized disturbance.
3. That the acne resulted from autonomic-induced cutaneous vasodilation, incident to periods of disturbed emotional state.

4. That the acne was a purposeful action of the unconscious, a punishment and a safeguard, accomplished through autonomic control of the cutaneous vascular bed.

The title of this paper suggests that Elaine's acne rosacea may have been a purposeful process. However, while it is my intention to suggest and discuss this possibility, I do not wish to imply that it is necessarily the correct one.

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EIGHTH SERVICE COMMAND POSTGRADUATE MEDICAL EDUCATION

NEUROPSYCHIATRIC CASE REPORT

CASE NO. 12—JULY 1944

PRESENT ILLNESS

The patient, a 26-year-old soldier, was referred to the Consultation Service of a replacement training center on January 18, 1944 by his dispensary surgeon because of "nervousness, blurring of vision, and weakness of thighs." Comment from the surgeon was that the soldier had appeared on sick call three consecutive days with the same complaints; that the "nervousness was not on the outside but on the inside, such as possibly a neuro-circulatory asthenia syndrome." At the time of referral the soldier was in his ninth day of training, having arrived at the training center on January 9, 1944.

PERSONAL HISTORY

The patient was born August 7, 1917.

Education: Completed the eighth grade at 14 years and got along well.

Employment: Worked on a farm until two years before, and after that was employed in a packing company in Montana as a butcher at a salary of 90 cents per hour. He said he quit two months before induction, on account of his nerves.

Habits: No drinking, smoked moderately. No arrests.

Interests: Liked swimming, hunting, fishing, and dancing. Never cared for any kind of ball games. Said he had always been sociable, had many friends, and liked to be with people.

Marital History: Married on July 1, 1939 in Montana. Wife, 28 years old, had had an ectopic pregnancy two years

before. Couple lived alone until the patient's induction, and since then the wife had been living with her parents in Montana.

Illnesses: At the age of 12 years the patient was kicked in the right ankle by a horse, suffering a sprain; but he had had no trouble with the foot since. At the age of 13 years he was cut by a wire on the inside of his left hand and stitches were necessary; no difficulty with the hand since. He had gonorrhoea in 1938, for which he received medical treatment. The patient claimed he had had a goitre since the age of 14 years.

He felt that he had been in the present nervous condition since the age of 15 years and said, "I get excited and get in a cold sweat. I never could go to a spooky movie. If anyone hollered at me and bawled me out I would be set off." However, he said he got along fairly well until about two years before when he began having "spells," which came on at varying intervals of from one every six weeks to several times a day. He described the attacks as follows: He had a dizzy and weak feeling, a blurring of eyesight, and then a feeling of numbness went up his legs and he felt that his legs were being drawn upward. There was no lapse of consciousness and no feeling of mental confusion. The duration of an attack was about a minute, and the attack was followed by a feeling of weakness which lasted a few minutes. He had never fallen down and had had no sensation of falling. The attacks were brought on by excitement or any emotional strain. They were apt to occur during an exciting movie, after a funeral, or after he had worked too hard. The patient said they were frightening to him and he dreaded their occurrence. Since they began, two years before,