

# The Psychological Aspects of Vitiligo

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*Dermatologists are likely to be confronted with patients who present with a wide range of psychiatric issues and problems. Writers on psychocutaneous medicine have described a variety of conditions that represent the interplay between the psyche and the soma. Vitiligo is one such disease and will be the focus of this article. Specifically, 3 areas will be examined: (1) the psychological impact vitiligo has on patients, (2) how psychological factors contribute to the etiology and course of the illness, and (3) the benefits of offering adjunctive psychological treatment. By exploring these aspects of vitiligo in more detail, I hope to illustrate the profound importance psychological factors play in this disease and the value of incorporating a psychological approach in its treatment.*

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The first documented case study of psychocutaneous disease appeared in 1155 AD, when the physician to the prince of Persia speculated that his patient's psoriasis was caused by the young man's anxiety about succeeding his father to the throne.<sup>1</sup> However, the term *neurodermatitis* was not coined until the late 19th century by Brocq and Jacquet,<sup>2</sup> and it took more than 60 years before Wittkower and Russell<sup>3</sup> published their seminal work, *Emotional Factors in Skin Disease*. In the last 20 years, the publication of empiric studies and case reports has significantly increased. Reviews by

Gupta and Gupta<sup>4</sup> and Koo et al<sup>5</sup> have shown the ways in which an individual's emotional state has a direct effect on diseases of the skin; how skin disease can manifest itself as a symptom of a person's emotional world; and, finally, how patients can have intense emotional reactions, such as depression, shame, and guilt, to the often stigmatizing presence of skin disease.

Although clinical articles that detail how psychological interventions can be effective in the treatment of skin disease have always been evident in the psychoanalytic literature,<sup>6,7</sup> more recently, the dermatology literature has been the site of these types of articles, as well. For example, Brosig et al<sup>8</sup> described the case of a 34-year-old woman whose urticaria appeared when she began to recall being sexually abused as a child. While undergoing a brief course of psychotherapy, the patient reported that as a result of remembering previously repressed events and their emotions, her skin symptoms had disappeared. In addition, these kinds of clinical successes have been supported by increasingly persuasive experimental work. A controlled study of more than 100 subjects by Ehlers and colleagues<sup>9</sup> has shown that patients with atopic dermatitis who receive psychological interventions experience greater improvement in their skin and use less topical steroids than patients who receive standard dermatologic treatment. Moreover, short-term group therapy,<sup>10</sup> hypnosis,<sup>11</sup> and psychotropic medications<sup>12</sup> have all been effective interventions in both case reports and controlled experimental studies, along with standard dermatologic care, in the treatment of a variety of skin disorders.

In the early 1900s, it was not unusual for a psychiatrist to participate in dermatology clinics, as dermatologists were among the first group of physicians to emphasize the role emotions could play in physical illness. Unfortunately, this practice has fallen out of favor, despite the fact that surveys show that up to 80% of patients in a dermatology practice exhibit psychiatric symptoms.<sup>13</sup> Although a fully

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integrated practice may not always be possible, I hope that this article will illustrate the importance psychological factors play in vitiligo and the value of incorporating a psychological approach in its treatment. This article will focus on 3 areas: (1) the psychological impact vitiligo has on patients, (2) how psychological factors contribute to the etiology and course of the illness, and (3) the benefits of offering adjunctive psychological treatment.

### **Psychological Sequelae of Vitiligo**

Ann is an extremely attractive, 22-year-old Indian woman who was referred to me after seeking dermatologic treatment at our clinic. When I first met her, she was sitting calmly in a chair. She was fashionably dressed, and her round face and piercing brown eyes were framed by beautifully braided hair. At first glance, I noticed nothing unusual about her appearance, and though I knew she was here because of her vitiligo, her condition was not immediately apparent. As we began to talk, I observed a small white patch under her nose. When she told me that her lips were affected, I realized that what I had originally thought was artfully applied 2-tone lip gloss was actually a vitiligo lesion. As Ann became more expressive, her hands emerged from her lap, and the extensive depigmentation of her fingers was immediately apparent. Later, she told me that she had stopped going to the beach because much of her back and torso were completely white.

As the interview continued, Ann became tearful. She stated that she was quite depressed. She could not eat or sleep and found that studying for her tests at school was next to impossible. She hated the way she looked and felt miserable and hopeless. Ann volunteered that she often thought of dying but was too scared to actually do anything. She commented that I was the first person who seemed to realize how upset she was about her vitiligo. The physicians she had seen previously had told her there was little they could do to affect the course of her illness, but quickly added that she was “so pretty, it didn’t matter.” Her family and friends also minimized her concerns and assured her nobody really noticed.

Although it is true that vitiligo is not painful and causes no physical limitations, many patients will, if asked, report on the profound way this disease affects their lives. Studies show that two thirds of patients with vitiligo feel embarrassed, and more than one half report feeling socially anxious, ill at ease, and unable to interact with members of the opposite sex.<sup>14</sup> In addition, 15% of patients state that vitiligo directly interferes with their sex life<sup>15</sup>;

they feel ugly in front of others and self-conscious about the ways in which they must hide their depigmented areas. This is especially true during the warmer months when they feel they must dress in lighter, more revealing clothing. Thus, many patients like Ann dread the summer, when going to the beach or even walking down the street in shorts and a T-shirt is upsetting. One young woman said that the only summer she had enjoyed was the one she had spent in the Middle East, where religious custom dictates that women be covered.

In one study of more than 600 people, 59% of patients reported an incident in the past 3 weeks in which their vitiligo had made them feel bad.<sup>16</sup> More than 50% of patients had been stared at, and 16% had overheard rude remarks, such as “Yuck, what’s wrong with him?” or “People like that shouldn’t go out in public.”<sup>17</sup> All the patients I interviewed described similar incidents. One man told of how when he holds the handrail on the subway, the person next to him often moves his or her hand away. In another study, 75% of patients reported that strangers ask them questions about their skin.<sup>14</sup> One patient told of how a complete stranger came up to her on the street, and, in a loud voice, started asking intimate questions about her appearance, including “Do you have that in your privates?” In addition, 13% of patients with vitiligo say they have encountered job discrimination.<sup>17</sup> These instances illustrate the powerful stigma associated with skin disease and the ways in which people with vitiligo are affected on a daily basis.

The psychological sequelae of vitiligo are obvious. Imagine the effect on your own self-esteem if everywhere you went, people stared and reacted to you as if you were diseased, infectious, and damaged. These interactions can begin to confirm for patients their worst fears about themselves, as self-doubts and insecurities intensify. What might have started as a small patch of skin balloons into full-blown self-condemnation. Surveys have shown that up to 40% of patients with vitiligo are depressed and have significantly lower self-esteem than a matched sample of patients without skin disorders.<sup>14</sup> This may even underestimate the incidence of depression, as up to 40% of patients in one survey appear to have adopted a passive attitude toward their disease and undertaken little or no treatment.<sup>14</sup> Although these individuals ignore their symptoms, it may be that their passivity and denial are in fact symptoms of depression. Patients with vitiligo may become immobilized by the psychological aspects of their disease, thus limiting their lives and making them unable to take advantage of available treatments.

### The Role of the Mind in the Development of Vitiligo

To this point, I have described the psychological sequelae of vitiligo, what it means emotionally to have this disease, and the ways in which this disorder can have a profound effect on the lives of our patients. However, the interaction between the psyche and the soma is not unidirectional. Numerous studies and case reports have documented the ways in which the mind can affect the skin, and how the skin can reflect our emotional world and express a wide range of psychological issues and conflicts.

Because the skin and the central nervous system share embryonic origins, there are inherent organic connections between the psyche and the skin that may manifest at both micro and macro levels in a variety of ways. Examples of this type of relationship are apparent in everyday life. Most of us blush when we are embarrassed, or we produce goose bumps when we are excited. Moreover, most dermatologists are familiar with patients who report that their eczema or psoriasis flares under emotional distress. Yet, assigning the psyche more than an adjunctive role in the development of skin disease may seem more problematic. Moreover, certain diseases like vitiligo, which do not wax and wane in severity, may be considered more organic than psychological. However, a psychocutaneous medicine perspective suggests that most skin diseases have some psychological component. Although the proportion of variance causing the phenomenon may vary widely from disease to disease and from person to person, the 2 subsystems do not operate independently and cannot be artificially dichotomized. One model for explaining how this interrelationship occurs suggests that individuals inherit a predisposition to certain diseases or disorders. These remain dormant and only appear when triggered by specific psychological or biologic events. It is the unique confluence of internal and external factors that leads to the manifest appearance of any disease.

In vitiligo, psychological factors might trigger the disease. For example, it is thought that vitiligo occurs as a function of autoimmune deficiencies and that catecholamines<sup>18</sup> and serotonin metabolites<sup>19</sup> can directly influence depigmentation. Psychologists have known for some time that the autoimmune and endocrine systems are impaired in patients with anxiety and depression and that serotonin plays a critical role in depression and depression-related symptomatology. Thus, the biologic subsystems for vitiligo and depression and anxiety have clear links. Therefore, it is not hard to imagine that an event that causes depression or anxiety may influence

autoimmune or serotonin functioning, which in turn can result in depigmentation.

Papadopoulos et al<sup>20</sup> used this data as a starting point for a fascinating study in which they showed how life events can trigger the onset of vitiligo. Almost 100 people diagnosed with vitiligo for less than 3 years were recruited and compared with a clinical sample of patients with disfigurements unrelated to psychological factors. Results showed that patients with vitiligo experienced a statistically significant number of stressful life events in the year preceding the onset of their disease compared with the matched control group. Specifically, patients with vitiligo experienced a higher frequency of loss or bereavement, more injuries and illnesses, and greater changes in their eating and sleeping habits than those in the control group.

One of the most striking findings in this study was that more than 40% of patients with vitiligo reported the death of a relative or close friend in the year preceding the first appearance of the disease. Related to the impact of loss, more than 25% of patients reported relocating, a change in life circumstances that can be characterized by loss of friends, family, and familiar surroundings. These experimental findings, that traumatic life events may result in the appearance of vitiligo, support the case reports in the literature and are consistent with my clinical experience, as well. Several of my patients associate the onset of their vitiligo with emigration to the United States, with the hardships entailed in adapting to a new culture and the loss of their family and social support system. Another patient noted that his vitiligo began when he went away to college. Finally, one patient reported that several months after his mother died and he left his hometown, he became aware of several small areas of depigmentation. These remained stable for some years, but the disease exploded when his 9-year marriage ended.

Indeed, patients with vitiligo experience greater changes in eating and sleeping habits, as well as a greater incidence of sexual difficulties; those findings are extremely relevant to the hypothesis that one's psychological world can result in the appearance of vitiligo.<sup>20</sup> The study also indicated that 25% to 35% of patients with vitiligo manifest what are considered classic vegetative signs of depression before the outbreak of the disease, and 16% reported sexual problems.<sup>20</sup> Thus, although the study did not specifically ask about depression, it would appear that a large number of patients were experiencing depressive symptoms, and it can be presumed that many were in fact clinically depressed. How these depressive equivalents were

related to the other life events they were experiencing is unknown. Consequently, even though the exact pathway in which traumatic experiences, depression, and vitiligo interconnect may not be evident, that these phenomena coexist and mutually influence each other seem beyond question.

One case may help illustrate some of these points. Ahmad is a tall, strikingly handsome 44-year-old man who grew up in a well-to-do family in the Middle East. His father was a successful professional, and he and his siblings were sophisticated and well educated. After completing a degree in engineering, Ahmad spent several years traveling and working as a consultant for the oil industry. Nearing age 30, his parents began pressuring him to marry. Although he was reluctant to do so, family and custom prevailed, and a wedding was arranged with a woman he had never met from another well-to-do family in his city. Ahmad married, and then, leaving his parents and siblings, emigrated from the Middle East to the United States with his new wife. Although initially determined to make his marriage work, he quickly realized he neither wished to be married nor to raise a family. Furthermore, he did not think he would ever come to love his wife. However, he felt he had few options. He joined a firm, had a child, and settled into a suburban life. Saddened at the loss of his freedom, and envisioning a life he did not wish to lead, a low-level depression ensued, and the first outbreak of vitiligo appeared. Over the years, as the vitiligo slowly spread, he became more ashamed, depressed, and isolated. He went from being outgoing to shy and morose, and his inability to socialize and connect with clients severely limited his professional success. When he came for treatment, he had become paralyzed, stuck in a life he did not want and feeling unable to change.

In this case, we see how the vitiligo may have been triggered by depression, but the psychological meaning is equally compelling. It can be hypothesized that the vitiligo appeared as a reaction to this man's loss of his ideals and the life he wanted for himself. The vitiligo also served as punishment, payment for the guilt he experienced for not pursuing his own life and for not loving his wife and being the man his father wished for. As these conflicts grew and hardened over time, the vitiligo increased in severity, which only worsened his mood and self-esteem. Although it is impossible to know for sure, it is quite possible that if psychological treatment had been introduced earlier, this man may have found a different way of coming to terms with his life. He might no longer have needed to express his psychological conflicts

through his skin, and, in conjunction with a decreased depression, this might have resulted in a much more attenuated case of vitiligo. Finally, I would like to discuss the different ways in which psychological treatment can be useful for treating patients with vitiligo.

### **Psychological Interventions and Treatment**

An intensive psychoanalytic approach may allow for a deeper understanding of how vitiligo can mutually influence one's character and life choices. A treatment intervention along these lines offers the patient with vitiligo the opportunity to rework unconscious conflicts, so that they no longer are expressed wordlessly through the skin. It can substantially decrease depression and drastically improve overall psychological functioning. However, this type of psychological intervention is one of several that can not only improve patient's lives but also is likely to slow the progression of the disease considerably and may even reverse the depigmentation process. In fact, case reports and at least one experimental study show how this can occur.

If vitiligo is related to autoimmune deficiencies, then psychological treatments, which have been shown to improve autoimmune function, play an important role in the treatment of this skin disorder. One anecdotal case report illustrates this point quite dramatically. A female patient sought treatment for vitiligo that had appeared soon after she married and moved away from her family to live with her husband and his parents. After undergoing 6 hypnotherapy sessions that focused on her depression, shame, and guilt, the patient's lesions virtually disappeared. This case reflects the role that hypnosis can play in improving immune system deficits but also the way in which the mind can be mobilized to address specific bodily manifestations.

In more empirically based research, Papadopoulos et al<sup>21</sup> studied the effect of psychotherapy in patients with vitiligo. Those patients were compared with a matched, no-treatment control group. The treatment group received 8 weeks of psychotherapy. All study participants were assessed at 8 weeks and at 5 months. Results indicated that although all subjects experienced significant psychological distress before treatment, the group that received psychotherapy showed notable improvements in self-esteem, body image, and quality-of-life scores at both 8 weeks and 5 months when compared with the no-treatment control group. What was so stunning about this study is that the lesions of 3 of the subjects in the experimental group decreased

more than 25% in size, and none of the subjects in the treatment group experienced any worsening of their disease. However, 3 subjects in the control group exhibited lesions that increased more than 50% in size. Although the number of subjects in this study is small, it provides strong, albeit preliminary, experimental support for the hypothesis that psychological intervention can alter the course and even decrease vitiligo lesions.

## Conclusion

Patients with vitiligo, more so than most dermatology patients, struggle with issues of shame and low self-esteem. Many become socially isolated and limited in their life, and significant numbers experience clear indications of clinical depression. Thus, a comprehensive treatment for patients with vitiligo should include some type of psychological intervention as a response to the psychological sequelae that can occur as a result of the disease. Moreover, persuasive data indicate that psychological treatments can slow the progression of vitiligo and may even decrease the size of those areas already affected. In our integrated clinic, we have found these patients highly receptive to the opportunity to talk about their disease either in small support groups or in individual sessions. In addition, in those patients for whom a more drastic treatment intervention is being considered, such as full-body bleaching, a psychological evaluation to assess the readiness of undergoing such a procedure has been extremely valuable. Finally, other patients have used their vitiligo as an opportunity to open a window into their psychological experience and initiate a process of more intensive psychological exploration.

An expanded understanding of the psychological aspects of vitiligo, and an awareness of the wide range of psychologically oriented treatment options available, are critical in helping these patients, whose psychological deficits and emotional vulnerabilities can make them extremely difficult to treat. The integration of a psychocutaneous medicine perspective not only broadens our understanding of these individuals but also offers the possibility for a more comprehensive and effective treatment.

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