Study Letters

Cognitive behavior therapy for psychosocial stress in vitiligo

Sir,

Vitiligo is associated with significant psychosocial burden and patients are likely to benefit from psychosocial interventions. In this study we utilized an intervention module based on cognitive behavior therapy to relieve the psychosocial stress in vitiligo patients and tried to assess its feasibility in general dermatology practice.[1]

Approval of the institute ethics committee was obtained. The techniques used in our module were psychoeducation, relaxation/breathing with imagery, self-statements and exposure/desensitization as outlined in Box 1. It was administered to 13 vitiligo patients who were more than 12 years of age with moderate to severe psychosocial problems, based on subjective assessment. Five weekly sessions were given by a dermatology trainee (AJ) who had undergone training in the practical aspects of cognitive behavior therapy with a clinical psychologist (MM), and the first few sessions were conducted under the latter's supervision. Study subjects continued to receive their ongoing medical treatment for vitiligo. During therapy, patients maintained daily mood charts. Behavioral assessment and quality of life evaluation using the Dermatology Life Quality Index and Skindex-16 were done at baseline, at the end of 5 sessions and 7 weeks after therapy. Behavioral assessment is a qualitative questionnaire used to guide the psychosocial therapy in individual patients. It was carried out by the researcher, with patients mentioning positive and negative qualities about themselves, distressing situations, coping strategies and thoughts about self and illness. Clinical photographs of the skin lesions were taken at baseline and at the end of therapy. All the patients received individual psychosocial therapy.

Nine men and 4 women of mean age 25.8 ± 6.3 years were studied. The frequency of, and time required for each behavioral intervention are outlined in Table 1. All our patients experienced a feeling of relief and reduced anxiety following the first session of psychoeducation. Two (15.3%) patients were lost to follow-up after the first visit and three (22.8%) patients withdrew from the study. Eight (61.5%) patients completed the 5 sessions of psychosocial intervention and the additional 7 weeks of follow-up. All of them had a reduction in the Dermatology Life Quality Index scores at the end of 5 sessions. The reduction was maintained in 7 of these patients at follow-up at 12 weeks'. This reduction was meaningfully different in four patients at the end of 5 sittings and at follow-up at 12 weeks. For one patient, the decrease was meaningfully different at follow-up but not at the end of 5 sessions. One patient had a worsening of the score at follow-up compared to the score at the end of 5 sessions. Five of the eight patients who completed the treatment had significant/meaningful reductions in their Skindex-16 scores at the end of 5 sessions which was maintained at follow-up. In one patient, the score remained the same at the end of 5 sittings but worsened at 12 weeks. One patient showed a non-significant reduction in the score at the end of 5 sittings, with worsening at follow-up [Table 2]. There was an overall improvement in the mood charts

Box 1: Brief summary of techniques used in our intervention module

Session 1: Psycho-education: All patients were given detailed information about vitiligo and its management. Psychosocial issues of the patient were also addressed by detailed counselling

Session 2: Breathing, relaxation and imagery: The patients were asked to sit up/lie down comfortably with eyes closed. They were then asked to breathe normally concentrating on their abdominal movements, chest movements and nose respectively for 15 times each. Following this, they were asked to imagine themselves in a natural place for around 3 minutes. The entire process was repeated 2-3 times

Session 3: Self statements: This session was targeted to improve the self esteem of the patient by reinforcing positive thoughts about themselves. The positive qualities cited by the patient about themselves were chosen and framed into optimistic sentences and the patients were asked to speak them out loud

Session 4 & 5: Exposure and desensitization: This session was aimed at reducing the anxiety/fear in situations which caused distress to the patient. After a session of breathing and imagery, subjects were asked to imagine themselves in the situation which caused them distress for 5-10 seconds, followed again by breathing/relaxation for 30 seconds to 1 minute. The entire process was repeated 5-6 times with 1-2 stressful situations at a time

Table 1: Frequency and approximate time required for each behavioral intervention during the psychosocial therapy sessions

Behavior therapy techniques	Frequency	Time required for each session (minutes)
Psycho-education	Once (on the first day of therapy)	20-25
Breathing/relaxation and imagery	3 times/day	12-15
Self-statements	6-10 times/day	2-5
Exposure and desensitization	2-3 times/day	10-15

Table 2: DLQI and Skindex-16 scores at baseline, after 5 sessions of cognitive behavior therapy and at follow-up 7 weeks later

Subject number	Baseline body surface area involvement (%)	DLQI (baseline)	DLQI (after 5 sittings)	DLQI (follow-up)	Skindex-16 (baseline)	Skindex-16 (after 5 sittings)	Skindex-16 (follow-up)
1	1	13	4	2	59.3	52.1	35.4
2	1-2	9	5	4	37.5	27.1	18.7
3	10-15	3	2	2	11.4	11.4	17.7
4	1-2	3	1	2	17.7	6.2	7.2
5	3-4	7	2	2	77.1	43.7	43.7
6	2-3	9	4	4	40.6	21	20
7	3-5	1	0	0	67.7	32.2	17.7
8	1-2	8	5	3	25	14.5	12.5

Most patients showed reductions in their QOL scores which were also maintained at follow-up. Patient 3 had a worsening of Skindex scores and patient 4 showed worsening of both Skindex and DLQI scores at follow-up. A meaningful change in DLQI score is indicated by a change of 3.2 points from baseline and with Skindex-16, 10 points from baseline). DLQI: Dermatology Life Quality Index, QOL: Quality of life

at the end of the fifth sitting in 7 patients. One patient had worsening of the mood scores at the fifth visit which she attributed to an increase in the number of skin lesions at this time [Table 3]. Five patients were given topical steroids, 3 received topical tacrolimus and 2 received topical PUVAsol with topical steroids. One patient received oral steroids and 1 received oral PUVA with a topical steroid initially and was later changed to oral PUVAsol due to compliance issues. At the end of therapy, one patient (subject 7) had 20–30% repigmentation and one (subject 3) had a 6–8% increase in the lesions. The remaining subjects did not show any change in their skin lesions.

Table 3: Mood charts during the psycho-social intervention

Subject number	First visit	Second visit	Third visit	Fourth visit	Fifth visit
1	1.6	1.6	1.8	1.5	1.8
2	0.9	1.3	1.4	1.5	1.8
3	0.9	0.8	1.4	1.6	0.7
4	1.4	1.7	1.7		
5	0.4	0.6	0.9	1.4	1.6
6	0.9	1.6	1.4	1.6	1.8
7	1.2	1.4	1.6	1.6	1.6
8	0.3	0.9	0.8	1.6	1.8

All patients showed improvements in their mood charts at most of their visits. Mood scoring was done as follows: 0 (not feeling good), 1 (feeling normal) and 2 (feeling good). Frequency of charting was 4 times every day and the average of all scores was computed at the end of every week. Whenever the grading was 0, subjects were also asked to mention the reason for feeling low

Cognitive behavior therapy is an intervention which focuses on changing the maladaptive ways of thinking, feeling and behaving. Previous studies have shown that patients with vitiligo could benefit from cognitive behavior therapy in terms of coping and living with vitiligo.[2] It also prevents recurrence of depression and helps in maintenance of self-esteem and mood elevation even after formal therapy has ended.[2-4] Previous studies on vitiligo used 8 sessions at weekly intervals, each session lasting 1 hour[2] and 1.5 hours.[5] Individual-centered counseling was reported to show better results than group cognitive behavior therapy in a study.[5] Previous studies have used a certified counseling psychologist,[2] a clinical psychologist and nursing staff[4,6] for providing the behavior therapy in various skin disorders including vitiligo.

Five of our patients did not complete the therapy stating time constraints, inability to come weekly and inappropriateness of therapy. We attribute this significant dropout to the use of an intervention which did not include medications. The unwillingness of patients to engage in a non-medication, multi disciplinary approach was also noted by Fortune *et al*.[4] However, patients who completed the treatment were self-motivated and had a better understanding about their disease.

Rendering a psychosocial intervention in routine dermatology practice requires training the dermatologist and cognitive behavior therapy requires multiple, long sessions. The feasibility of such therapy would depend upon the willingness and ability of both the dermatologist and the patient to set aside the time required. Interventions with less frequent sessions of shorter duration may ensure better patient compliance. Our study suffers from the limitations of a small sample size and lack of a control group. In addition, though a significant number of vitiligo patients had psychosocial issues, only some chose to undergo cognitive behavior therapy because they lacked understanding about its usefulness, pointing to the need for education about the role of psychosocial treatment in routine clinical practice. We recommend that all vitiligo patients be given information about the disease as it reduces stress. Those having greater degrees of stress should

be identified and may be provided cognitive behavior therapy, if they are motivated and willing to attend therapy sessions regularly.

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Conflicts of interest

There are no conflicts of interest.

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