

The Problems in Sexual Functions of Vitiligo and Chronic Urticaria Patients

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Skin has an erogenic function, and skin lesions can have negative impact on sexual life and relationships with others. We compared fifty vitiligo patients and fifty chronic urticaria patients with fifty healthy controls to assess sexual functions; we used Arizona Sexual Experience Scale (ASEX; McGahuey, Gelenberg, Laukes, Moreno; & Delgado, 2000). Among females, sexual drive scores of the vitiligo and chronic urticaria groups were significantly lower than those of controls. Vitiligo and chronic urticaria groups experienced significantly more difficulties in sexual arousal and higher failure in attaining and maintaining the lubrication-swelling response of sexual excitement until the completion of sexual act than did controls. Females in the vitiligo and chronic urticaria patient groups had more difficulties in reaching orgasm than did healthy controls. Furthermore, satisfaction from orgasm of the patient groups was significantly less than controls. The total scores of the ASEX in female patient groups were significantly higher than those among controls. Satisfaction from orgasm in male patient group was less than controls. In males, other subitems of ASEX between the patient groups and controls were not significant. This study demonstrated that chronic skin diseases such as vitiligo and chronic urticaria have negative impacts on sexual life.

Skin has an erogenic function, and skin lesions can have a negative impact on sexual life and relationships with others (Devrimci-Özgüven, Kundakçı, Kumbasar, & Boyvat, 2000; Fritzsche, Ott, & Zschocke, 2001; Koo

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& Lebwohl, 2001; Mattoo, Handa, Kaur, Gupta, & Malhotra, 2002; Niemeier, Winckelsesser, & Gieler, 1997; Silvan, 2004).

Vitiligo is a common acquired and depigmentating disorder, with a prevalence 1–4% in the general population (Boisseau-Garsaud et al., 2000; Handa & Kaur, 1999; Moschella & Hurley, 1992). It is also called white spot disease (Braun, Plewig, Wolff, & Winkelmann, 1991), leucoderma, and white leprosis (Fitzpatrick, 1993).

Chronic urticaria is a poliethiological dermatological disease related to emotional factors and characterized by wheals and itching (Barankin & DeKoven, 2002; Champion, Roberts, Carpenter, & Roger, 1969; Consoli, 2003; Hein et al., 1996; Sheehan-Dare, Henderson, & Cotterill, 1990). It is possible to propose that more than 30% of cases have autoimmune origins, and 7–17% are linked to physical agents (Arnold, Odom, & James, 1990).

Studies show that more than half of vitiligo patients had reported relationship problems with the opposite sex (Koshevenko, 1989; Porter, Beuf, Lerner, & Nordlund, 1987; Porter, Beuf, Nordlund, & Lerner, 1979), most felt trouble and shame when meeting a stranger or beginning a sexual or emotional relation with a new partner, felt victimized when faced with rude remarks and offensive behaviours, or reported that their sexual lives had been directly affected (15%; Porter & Beuf, 1988, 1991; Porter, et al., 1987). A recent study found that 16% of vitiligo patients had experienced sexual problems and 25–35% had classical vegetatif symptoms of depression, such as loss of sexual drive, prior to developing vitiligo (Papadopoulos, Bor, Legg, & Hawk, 1998).

In this study, we aimed to compare the problems in sexual function among vitiligo and chronic urticaria patients with healthy controls.

METHOD

Subjects

We recruited the study population from February 2003 to December 2004 from dermatology outpatient clinics at four major hospitals in Istanbul: Leprosis Teaching and Research Hospital of Dermatology, Haseki Teaching and Research Hospital, Istanbul University Cerrahpasa School of Medicine, and Sisli Etfal Teaching and Research Hospital. We screened archives of all dermatological clinics with the permission of authorized positions at hospitals. The Ethics Committees of the hospitals gave permission to realize the study. We called 175 vitiligo and 175 chronic urticaria patients for an initial interview by phone. During the initial interview, we explained the purpose of the study in detail to the patients. We chose subjects for the phone interview who were suitable and who volunteered for the study. Sixty one (35%) of the 175 vitiligo patients could not be reached by phone. Eighteen (15%) of the rest ($n = 114$) were excluded because they were younger than

16 years. One (0.9%) of was in the military, and 10 (8.7%) were outside the city or abroad. Thirty-two subjects refused to participate in the study, 30% of whom of declined because they felt that their skin disorder was untreatable.

Sixty-two (35%) of the 175 chronic urticaria subjects could not been reached by phone. Seven (6%) of the rest ($n = 113$) were excluded because they were younger than 16 years. One (0.9%) worked the night shift, one (0.9%) was in the military, and 10 (9%) were outside the city or abroad. Two (4.5%) of the 44 subjects refused to participate in the study. Because their husbands did not give permission, 2 (4.4%) female patients refused the interview. The rest of the subjects (81%) refused to participate in the study for minor reasons.

We applied the Turkish version of the Structured Clinical Interview for DSM-IV Mental Disorders (SCID-I; Ozkurkcugil et al., 1999) and conducted a general clinical assessment among the control group. The subjects who had no mental illness or skin and other physical diseases were included to the control group.

As the study sample, we compared 50 vitiligo and 50 chronic urticaria patients, aged 16–60 years, with 50 age- and sex-matched healthy controls.

The duration of treatment in vitiligo patients was significantly more than among chronic urticaria patients. The number of patients currently receiving dermatologic treatment, admitted to psychiatric clinics, and prescribed psychotropic medicine by nonpsychiatric branches were significantly higher among chronic urticaria than among the vitiligo group. Fourteen (28%) vitiligo patients and 31 (62%) chronic urticaria patients were receiving dermatological treatment; whereas two (4%) of vitiligo patients and 7 (14%) of chronic urticaria patients received current psychiatric treatment.

Measures

After the procedure was explained to them, all subjects gave their written informed consent. The sample completed the sociodemographical data form, the (ASEX, McGahuey et al., 2000) male or female version, and the Turkish version of the SCID-I (Ozkurkcugil et al., 1999).

The ASEX (McGahuey et al., 2000) developed to assess the quantification of sexual function, is a five-item rating scale that quantifies sex drive, arousal, vaginal lubrication-penile erection, ability to reach orgasm, and satisfaction from orgasm. Possible total scores range from 5 to 30, with higher scores indicating more sexual function.

The SCID-I for DSM-IV, Clinical Version, was developed by First, Spitzer, Gibbon, and Willams (1997) to diagnose Axis-I psychiatric disorders. It is a structured clinical interview, applied by a trained clinicians. The scale can be administered to subjects with sufficient cognition and without agitation

or severe psychotic symptoms. The reliability and validity of Turkish version was performed by Ozkurkcugil et al. (1999).

Statistical Procedures

We used SPSS for Windows, version 10.0, for data processing and analysis. We used analysis of variance (ANOVA) to compare three or more than three groups; Kruskal-Wallis is a nonparametric test to compare three or more than three groups. We compared qualitative features among the groups using χ^2 test and by Fisher-Exact test.

RESULTS

The sociodemographical characteristics of all three groups are summarized in Tables 1 and 2.

The prevalence of sexual dysfunction in the vitiligo group were 62.5% ($n = 15$) in females and 11.5% ($n = 3$) in males; in the chronic urticaria group, it was 70.5% ($n = 24$) in females and 31.2% ($n = 5$) in males; the rates in the control group were 16% ($n = 4$) in both females and males. The differences between male and female patients and control group were statistically significant ($p = 0.000$). The sexual experiences of the groups are listed in Tables 3–6.

The sexual drive scores of female vitiligo and chronic urticaria groups were significantly lower than those for controls ($p < 0.001$). Vitiligo and chronic urticaria groups experienced significantly more difficulties in sexual arousal ($p < 0.001$) and more difficulty attaining or maintaining vaginal lubrication-swelling response of sexual excitement until the completion of sexual act ($p < 0.001$) than did controls. The females in both patient groups had more difficulty reaching orgasm during coitus than did controls ($p < 0.001$). Furthermore, orgasm satisfaction of patient groups was less than that of controls ($p < 0.001$). The total ASEX scores in female patient groups were significantly higher than those of controls ($p < 0.001$).

Males in the patient groups experienced less satisfaction from orgasm than did controls ($p < 0.001$). Among males, other subitems of ASEX between the patient groups and controls were not significant.

The Axis-I diagnoses of the patient groups according to SCID-I are listed in Table 3. The rates of dysthymic disorder and generalized anxiety disorder were higher in the chronic urticaria group (46% and 30% respectively) than vitiligo group (26% and 6% respectively) ($p < 0.05$). Other diagnoses in SCID-I were not statistically different among participant groups ($p > 0.05$).

The rates of dermatological treatment and psychiatric and nonpsychiatric admission of the patients and shown in Table 7. The duration of

TABLE 1. Mean Age of the Sample

	Vitiligo		Chronic urticaria		Control		<i>p</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	
Age	35.82	12.56	38.66	10.61	35.98	12.49	0.411

TABLE 2. Gender, Marital Status, and Education of the Sample

	Vitiligo		Chronic urticaria		Control		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Gender								
Female	24	48.0	34	68.0	25	50.0	4.90	0.066
Male	26	52.0	16	32.0	25	50.0		
Marital								
Married	29	58.0	35	70.0	34	68.0	1.82	0.402
Single-divorced	21	42.0	15	30.0	16	32.0		
Education								
Elementary	30	60.0	35	70.0	30	60.0	2.00	0.735
High school	11	22.0	7	14.0	12	24.0		
University	9	18.0	8	16.0	8	16.0		

TABLE 3. Arizona Sexual Experience Scale (ASEX)—Female Version

Female	Vitiligo		Chronic urticaria		Control		<i>p</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	
ASEX1	3.42	1.41	3.97	1.34	2.32	.95	.000**
ASEX2	4.04	1.37	3.97	1.38	2.64	.91	.000**
ASEX3	3.71	1.60	3.74	1.36	2.72	.84	.008*
ASEX4	3.92	1.56	4.00	1.35	2.80	.76	.001**
ASEX5	3.33	1.86	3.50	1.52	1.80	.96	.000**
ASEX total	18.42	6.69	19.18	5.97	12.28	4.03	.000**

* $p < 0.01$: statistically significant; ** $p < 0.001$: statistically highly significant.

TABLE 4. Arizona Sexual Experience Scale (ASEX)—Male Version

MALE	Vitiligo		Chronic urticaria		Control		<i>p</i>
	Mean	<i>SD</i>	Mean	<i>SD</i>	Mean	<i>SD</i>	
ASEX1	2.08	1.20	1.81	.75	1.52	.71	.115
ASEX2	2.12	1.03	1.75	.86	1.84	1.11	.467
ASEX3	2.27	1.46	2.06	1.00	1.92	.86	.560
ASEX4	2.19	1.06	2.13	.96	2.52	.87	.350
ASEX5	2.00	1.02	2.19	1.17	1.24	.44	.002**
ASEX total	10.65	4.45	9.94	3.42	9.04	3.36	3.29

** $p < 0.001$: statistically highly significant.

TABLE 5. Number and Percentages of the Groups Having Sexual Dysfunction

	Vitiligo		Chronic urticaria		Control		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%		
Female	15	62.5	24	70.5	4	16	18.74	0.000
Male	3	11.5	5	31.2	4	16	2.72	0.257
Total	18	36.0	29	58.0	8	16	19.0	0.000

TABLE 6. Comparison of Significant Diagnosis in SCID-I

SCID-I	Vitiligo		Chronic urticaria		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Dysthymia						
Absent	37	74.0	27	54.0	4.34	0.037*
Present	13	26.0	23	46.0		
GAD						
Absent	47	94.0	35	70.0		0.003**
Present	3	6.0	15	30.0		

* $p < 0.01$: statistically significant; ** $p < 0.001$: statistically highly significant.

SCID-I (The Turkish Version of the Structured Clinical Interview for DSM-IV Mental Disorders).

GAD (Generalized Anxiety Disorder).

TABLE 7. Dermatological Treatment-Psychiatric Admission, and Nonpsychiatric Admission

	Vitiligo		Urticaria		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Current dermatological treatment						
Absent	36	72.0	19	38.0	11.67	0.001**
Present	14	28.0	31	62.0		
Psychiatric Admission						
Absent	38	76.0	25	50.0	7.25	0.007*
Present	12	24.0	25	50.0		
Prescription of psychotropics by nonpsychiatric physicians						
Absent	40	80.0	27	54.0	7.64	0.006*
Present	10	20.0	23	46.0		

TABLE 8. Previous and Current Psychiatric Treatment

	Vitiligo		Urticaria		χ^2	<i>p</i>
	<i>n</i>	%	<i>n</i>	%		
Previous regular psychiatric treatment						
Absent	47	94.0	47	94.0		—
Present	3	6.0	3	6.0		
Current regular psychiatric treatment						
Absent	48	96.0	43	86.0		0.160
Present	2	4.0	7	14.0		

treatment for vitiligo patients (5.32 ± 6.39 years) was significantly higher than for chronic urticaria patients (2.91 ± 4.42 years). The number of patients currently receiving dermatologic treatment, admitted psychiatric clinics, and prescribed psychotropic medicine by nonpsychiatric branches were significantly higher among the chronic urticaria group than the vitiligo group. Fourteen (28%) vitiligo patients and 31 (62%) chronic urticaria patients were receiving dermatological treatment; whereas 2 (4%) vitiligo patients and 7 (14%) of chronic urticaria patients were currently receiving psychiatric treatment. The difference between the rates of previous and current psychiatric treatment of the vitiligo and chronic urticaria patients were statistically insignificant ($p = 0.16$) (Table 8).

DISCUSSION

Vitiligo and chronic urticaria are skin disorders that may be associated with a variety of negative psychological effects, shame, and self-consciousness. Vitiligo especially, a disfiguring disorder, has a negative impact on many relationships, including sexual ones.

In this study, we compared the sexual problems of patients with two skin diseases, vitiligo and chronic urticaria, with healthy controls and found ASEX (McGahuey et al., 2000) total scores in female group to be significantly higher than in the male patient or control groups. Furthermore, it was interesting that five major global aspects of sexual function (drive, arousal, vaginal lubrication, ability to reach orgasm, and satisfaction from orgasm) were significantly affected negatively in female patient group, compared with controls. However, in male patient groups, dysfunction was found only in one level of sexual activity, satisfaction from orgasm. This gender difference may be due to psychosocial factors. Females may be affected negatively more than males by this disfiguring disorder, and appearance is important in initiating sexual relationships. Porter and Beuf (1988) and Porter et al., (1987) also reported that women had more overall adjustment problems than men to skin disorders. Females experienced troubles in every level of the sexual activity, whereas males had difficulties only in the last level of sexual activity, satisfaction from orgasm.

Among females, the prevalence of sexual dysfunction were 62.5% ($n = 15$) in the vitiligo group and 70.5% ($n = 24$) in the chronic urticaria group. Among males, the rates were 11.5% ($n = 3$) and 31.2% ($n = 5$), respectively. One fourth of vitiligo patients believed that their skin disease had interfered with their sexual relationships (Porter, Beuf, Lerner, & Nordlund, 1990). In the other studies it was revealed that 15 to 16% of the vitiligo patients had sexual dysfunction (Porter et al., 1987; Papadopoulos et al., 1998). We could not find any research about sexual problems among individuals with chronic urticaria, but there is a case report in which recall of a sexual trauma caused urticaria in

a woman with marital problems (Brosig, Niemeier, & Kupfer, 2000). In these studies, the difference between genders had not been discussed. The higher rates of sexual dysfunction among females may be because of the negative impact of skin lesions in sexual life. It may also be interpreted in the context of transcultural aspects. In Turkey, women may feel more pressured about their appearance. We also found that the rates of sexual dysfunction was higher among chronic urticaria patients than vitiligo patients. This could be explained by the different pathogenesis, clinical manifestations, and courses of these skin disorders.

We found the rates of dysthymic disorder and generalized anxiety disorder to be higher in the chronic urticaria group (46% and 30%, respectively) than the vitiligo group (26% and 6%, respectively). Depressed and anxious people had more sexual problems in general (Wittchen & Hoyer, 2001). Mood and anxiety disorders could be associated with sexual dysfunction (Clayton, 2002). In our study, although we found rates of dysthymia and generalized anxiety disorder in the vitiligo and chronic urticaria patients to be higher than in the healthy control group, the number of patients currently receiving psychotropic medication that may negatively impact sexual life was significantly low.

The limitations of our study were the relatively small sample, the selection of the sample from outpatient settings at four different hospitals (not based on general population), and the inclusion of steroid-treated patients in the sample. However, our study is the first to evaluate the sexual problems of individuals with two different kinds of dermatological disorders with different etiopathogenesis and clinical manifestations and to make comparisons between these individuals and healthy controls.

CONCLUSION

This study had shown that chronic skin diseases such as vitiligo and chronic urticaria had negative impact on sexual life, especially among females. The sexual lives of these patients should also be evaluated, and if necessary, patients should receive treatment by a psychiatrist.

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