

Psychiatric Characteristics and Quality of Life in Patients with Pathologic Skin Picking

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Objective: This study aimed to detail the phenomenology and psychiatric co morbidities in patients with pathologic skin picking (PSP).

Method: Forty five subjects (30% males) with PSP (mean± S.D. =33.2±10.9) were assessed. Subjects were assessed for psychiatric co morbidity using General Health Questionnaire (GHQ). The Yale-Brown Obsessive Compulsive Scale (Y-BOCS) was used to assess obsessive compulsive symptoms; the Dermatology quality of life index (DLQI) was utilized to evaluate the quality of life in patients; and clinical severity using Visual Analogue Scale (VAS) was employed for evaluating skin picking behavior.

Results: The mean time after (±S.D.) the onset of PSP was 6.6±2.4 years. Twenty eight (62.2%) individuals had a bimodal GHQ score higher than five which implied probable mental disorder, and twenty two (48.9%) of the individuals with PSP had significant obsessive compulsive disorder. The severity of impairment of quality of life status was increased with increment of mental disorder severity.

Conclusion: PSP appears to be time consuming and frequently associated with psychiatric co morbidities. Considerations should be made on the relationship between psychiatric co morbidity and quality of life in PSP diagnosis and treatment of mental disorders.

Key Words:

Comorbidity, Neurodermatitis; Psychiatry, Quality of life, Skin disease

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Pathologic skin picking (PSP) also referred to as neurotic excoriation or psychogenic excoriation is a condition characterized by repetitive or compulsive picking of skin to the point of causing tissue damage. Individuals suffering from PSP, report significant distress and psychosocial impairment including occupational and marital difficulties (1-3).

Prevalence rates of PSP in the general population is unknown, however, studies have found that the behavior occurs in 4% of college students (4), 2% of dermatology patients (5, 6), 11.8% of adolescent psychiatric inpatients (7) and 44.9% of individuals with body dysmorphic disorder (BDD) (8).

Psychiatric co morbidities were found in 38.3% of the patients with PSP (9); and recent studies have also detailed the relationship between PSP and obsessive-compulsive disorder (OCD) finding elevated rates of PSP in patients with OCD and in their first degree relatives (10, 11). The majority of the individuals seeking treatment for PSP are female (12). Although PSP generally has its onset in adolescence, it may occur at any age (4, 13, 14). In fact, the onset of PSP often begins with a dermatological condition such as acne, eczema or psoriasis (15). The picking behavior

may result in significant tissue damage and scarring and sometimes it may even warrant surgery (13), and in rare cases, can also be life threatening (16). Individuals with PSP rarely seek dermatological or psychiatric treatment due to embarrassment (15) or the mistaken belief that their condition is untreatable (17).

An understanding of the characteristics and quality of life of individuals suffering from this behavior may have clinical importance. Clinicians need to recognize the emotional and psychosocial impact of picking to provide appropriate mental health care and interventions.

Researches on PSP were limited by small sample sizes and little attention given to the psychiatric comorbidities on quality of life. The aim of present study was to construct a detailed demographic and psychiatric characteristics of individuals meeting the proposed criteria for PSP.

Materials and Method

Subject

Forty five male and female outpatients aged 17-54 years were recruited from a completed pharmacological treatment study for PSP in Razi

Hospital of Tehran from January to December 2007. No individuals refused to participate in this study. Subjects were included in this database if they met the general inclusion criteria, including: (a) primary diagnosis of current (past 12 months) PSP, (b) age of 17 years or older and (c) could be interviewed in person. The only exclusion criterion was the presence of an organic mental disorder or inability to understand and consent to the study.

All subjects had a current primary diagnosis of PSP defined by the following criteria: (a) recurrent skin picking resulting in noticeable tissue damage; (b) preoccupation with impulses or urges to pick skin, which is experienced as intrusive; (c) the picking not accounted for by another medical or mental disorder (e.g., amphetamine use disorders, scabies); and (d) suffering significant distress or social or occupational impairment. (1)

All research procedures were approved by the Institutional Review Board of the Tehran University of Medical sciences, and all research subjects provided informed consent prior to the treatment.

Assessments

To assess clinical characteristics of the behavior, all the subjects underwent a complete clinical examination. Clinical questions assessed complete medical and psychiatric history of the subjects.

To determine eligibility, after recruitment all the potential study subjects received a comprehensive psychiatric evaluation. The evaluation included the General health questionnaire (GHQ) for screening psychiatric co morbidity, Yale-Brown Obsessive Compulsive Scale (Y-BOCS) to assess obsessive compulsive symptoms, Dermatology quality of life index (DLQI) to evaluate the quality of life in patients. All of these three instruments were standardized in the Persian language (18, 19).

Visual Analogue Scale (VAS) was used to assess the severity of skin-picking behaviors which were rated on a 0–10 scale.

To analyze data, independent samples *t*-test and one-way ANOVA were used to compare quantitative data between groups with normal distribution. Chi-square was used for analyzing qualitative data.

Results

Demographics

Forty five consecutive subjects [n=13 (30%) males] with current PSP were studied. At the time of the presentation, the age of the 45 subjects ranged from 17 to 54 years (mean± S.D. =33.2±10.9). Of the 60 subjects with PSP, ten (22.2%) were single and 35 (77.8%) were married.

Clinical characteristics

The clinical characteristics are presented in Table 1. The reported mean time after the onset of PSP was 6.6±2.4 years. Twenty eight (62.2%) individuals had a

Table 1. Clinical characteristics, psychiatric comorbidity and quality of life status of 45 individuals with PSP

Characteristics	Value
PSP severity(mean±SD)	6.6±2.4
GHQ Score(mean±SD)	31±14.4
Y-BOCS score(mean±SD)	11.2±8.1
DLQI score(mean±SD)	13.3±7.3
Psychiatric problem(GHQ>5)	28(62.2%)
Obsession compulsion disorder	22(48.9%)
Mild	8(17.8%)
Moderate	10(22.2%)
Severe	4(8.9%)

bimodal GHQ score higher than five which implied probable mental disorder, and twenty two (48.9%) of the individuals with PSP had significant obsessive compulsive disorder. The mean score of quality of life status was 13.3±7.6. The severity of PSP was more in male subjects ($P<0.001$) and there were not any significant relationships between the PSP severity and age or marital status.

Psychiatric comorbidity

Twenty eight individuals (62.2%) had GHQ bimodal score higher than 5 which suggests a psychiatric disorder; the mean score of GHQ likert score was 31±14.4 and 57.8% of the subjects had a score higher than the mean. There was a significant correlation between PSP severity and GHQ likert score ($r=0.39$, $P=0.008$).

In GHQ subscales, anxiety score showed significant relationship with PSP severity ($r=0.32$, $P=0.03$) and other subscales of GHQ didn't show significant correlation with PSP severity. Psychiatric co morbidity did not differ significantly in both sexes and in the single or married subjects.

Obsessive compulsive disorder

The mean total score of Y-BOCS was 11.2±8.1 and twenty two (48.9%) of individuals with PSP had Obsessive compulsive disorder. There was not any significant relationship between the total score of Y-BOCS and the severity of PSP but compulsion subscale of Y-BOCS showed a significant correlation with the score of VAS ($r=0.39$, $P=0.007$). There was not any significant relationship between age and obsessive compulsive disorder. The prevalence and severity of obsessive compulsive disorder were similar between males and females.

Quality of life

The mean score of the measurement to assess the quality of life (DLQI) was 13.3±7.6; and half of the subjects had a score higher than the mean. There was a significant relationship between the DLQI score and the severity of PSP ($r=0.35$, $P=0.01$). The severity of impairment of quality of life status was increased with decrement of mental health status in GHQ likert score ($r=0.43$, $P=0.003$) and GHQ bimodal score ($r=0.35$, $P=0.01$). There was not any significant

correlation between obsession-compulsion severity and the impairment of quality of life status.

Discussion

To our knowledge, this study is one of the first studies to examine the psychiatric characteristics and the quality of life status of a large sample of individuals suffering from PSP. This is also a fairly broad sample of individuals with this disorder (our study had very broad inclusion/exclusion criteria), which may increase the generalizability of the results.

The results demonstrate that PSP is a pathologic behavior that is accompanied with high prevalence of psychiatric problems and causes significant impairment of quality of life status. The prevalence of psychiatric co morbidity is two to three times more compared to other dermatologic patients (20). Many reasons may account for the frequent observation of psychiatric disorders in PSP(21). First, psychiatric disorders may often come up as a complication or a consequence of primary skin problems of PSP in reaction to disfigurement, perceived social stigma or undesirable changes in life-style resulting from skin disease. Further, skin picking and psychiatric symptoms may both be present in some systemic diseases, such as systemic lupus erythematosus or porphyria. Finally, some drugs used in dermatology in treating PSP such as corticosteroids may precipitate psychiatric symptoms. Future studies should investigate in more detail the relative importance of these relationships between skin diseases and psychiatric morbidity.

A well-known methodological problem in studying psychiatric morbidity in the context of physical illness is the symptoms of somatic complications in PSP. For instance, lack of energy or insomnia may overlap with symptoms of psychiatric illness thus creating diagnostic difficulties.(20)

PSP is currently classified in DSM-IV-TR as an "impulse control disorder not otherwise specified" (22). Although some controversy exists regarding the most precise categorization of this behavior, this study's data showed a significant relationship between the severity of compulsion in obsessive compulsive disorder and the severity of PSP which can show a possible link between PSP and impulse control disorders like trichotillomania and compulsive nail biting.(9)

High prevalence of OCD in our findings is consistent with studies of OCD which have found elevated rates of comorbid PSP among subjects with OCD (23-27); and there has been evidence of a possible genetic link between PSP and subgroups of OCD (28).

There are some questions of whether picking behavior may be a symptom of multiple disorders and whether different neurobiological and genetic underpinning may all give rise to the symptom of repetitive picking.

This study found that the quality of life impairment in patients with PSP increased more with greater severity of PSP. There are some reasons for more impairment of quality of life status: Firstly, when the severity of

PSP increased the rate of psychiatric co morbidity enhanced which can negatively influence the status of quality of life in other medical or dermatologic problems (20); secondly, severe PSP usually are accompanied with more time consuming scratching behavior and disfigurement (9) that can deteriorate health and quality of life status.

Since the seminal work of Shepherd and colleagues, (29)attention has been drawn to the common presence of psychiatric disorders in general medical and general practice settings. Not only do they often go undetected, (30)but they are also disabling and may influence the outcome.(31)Their identification and appropriate management reduces psychological distress(32)and may also improve quality of life and influence treatment compliance and patient satisfaction. PSP appears to be time consuming and frequently associated with psychiatric co morbidities. Consideration should be made on the relationship between psychiatric co morbidity and quality of life in PSP diagnosis and treatment of mental disorders.

This study had some limitations. The sample was composed only of individuals seeking treatment (either therapy or medication). The extent to which these results generalize to the larger population of people with PSP warrants future study. Future studies using a control group of patients with a range of psychiatric disorders would be of use in determining whether co morbid psychiatric illness is more prevalent in the PSP population.

Large phenomenological studies are needed to elucidate the clinical characteristics and course and medical complications of PSP. As promising advances have been made in the treatment of PSP (33, 34), early detection and intervention are imperative. Just as research has provided greater information on the neurobiology and treatment of other psychiatric disorders, neuroimaging, genetics and clinical trials will be needed to identify the pathophysiology of, and treatment for, this behavior.

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