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Survey of Skin Disease in Schizophrenia patients visiting psychiatry clinics in Razi and Sina hospital in 2007 to2008, Tabriz in Iran

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ABSTRACT

During a descriptive study from October 2007 to March 2008, 100 known Schizophrenia patients visiting psychiatry clinics in Razi and Sina hospital as well as patients hospitalized in Razi hospital were studied. These patients according to existence of dermatologic problems were divided into groups with and without problems. The incidence of dermatologic problems and prescribed drugs were compared between two groups. Then case group was studied about onset of the disease, other co-morbidities and other proposed diagnosis.Significant differences were found in Olanzapine, Halopridole, Perfenazine, Respridone and lithium among case and control groups. Most (68.31%) of dermatologic diseases had stable progress. itching (40.9%) and akin wounds (2.7%) were the most argument of patients. Distribution of dermatologic problems were mostly (52.3%) in limbs. Epilepsy was the prevalent co-morbidity in these patients.In this study, many different types of dermatologic disease were seen in Schizophrenia patients. According to wide use of antipsychotic drugs in Schizophrenia patients and our findings, purposing the incidence of complications during using these drugs is important and should take into regard some actions in preventing or treating their complications by following the patients.

Key words: Skin diseases; Schizophrenia; Antipsychotic drugs, Tabriz.

INTRODUCTION

The Psychocutaneus disorders span a vast range of entities from primary skin conditions known to have psychological sequelae (e.g., Psoriasis, Pemphigus, alopecia, Acne vulgaris) to psychological or psychiatric conditions resulting in severe skin morbidity[1].Long time known that the close relationship between the development of skin disease with psychological factors. In fact an estimated over 75 percent of patients with skin diseases are also affected to some psychological problems. Certain psychosomatic disorders are associated with severe itching and

other skin diseases and in common mental disorders found frequently [2]. Moreover, the onset and course of dermatologic disorders may be significantly influenced by stress [3]. Schizophrenia is affected that almost one percent of human populations usually start before the age of 25 years and remains stable end of life. Any of the social classes are not immune to the infection. Several studies is known as the total of 80% schizophrenia patients have an important internal disease and perhaps are not diagnosed to 50% percent of these illnesses [4]. Psychological factors is believed that the emergence of contribute to all disease. Whether is associated the starting role, development or exacerbation disease is concerned with self-field response to the disease which is still discussed. Evidence is not strong in Psychological causes. The skin diseases are common in patients with proven mental disorders [2, 4]. The drug used to treat schizophrenia can have effects on the skin. Phenothiazines caused rash, sensitivity to light and skin pigmentation. Phenilbotason can cause the rash, dermatitis and drug induced lupus [5]. New generation of antipsychotic drugs gradually replace the old drugs, but side effects medication is not exactly known on the skin. Cases with exacerbation of skin diseases have been reported in some of these drugs. Frequent psychiatric patients visitors for consultation or diagnosis of skin diseases in the Department of Dermatology caused formation aim of this study. It is important to known diseases and are treated quickly because the incidence of skin disease to impose double problems.

MATERIALS AND METHODS

Study location, Sample collection and Preparation of data for analysis

In the descriptive study within 16 months from October 86 to March 87, all patients referred to Razi hospital psychiatric clinic and hospitalized patients in the Sina or Razi hospitals Tabriz Medical University known that schizophrenia patients were placed under the skin exam. All their skin disease was recorded. Between these patients, 100 patients randomly were selected for study. Total patients with schizophrenia were divided based on skin lesions of cutaneous problems in both groups included patients with skin disease and control group included patients without skin lesions. The two groups were compared of drug consumption and incidence of waste. For all patients or person under guardianship described benefits and damage of research. They was completely optional participate in this study. They could cancel study in every step. Also ensure that the name of patients and information was confidential and will not mention in any place. In the study satisfaction letters were obtained of patients.

Statistical analysis

Data taken from study was analyzed using descriptive statistical methods (mean ± standard deviation, frequency and percent). To compare between groups used chi-square (χ^2) and fisher's exact test. Test Statistical analyses were performed by using SPSS version 16.0 software. P value less than 0.05 was considered statistically significant.

RESULTS

In this study 100 patients with schizophrenia were studied (mean age 37.87 ± 13.56 years). Control group consist of men 34 (60.7 %) and females 22 (39 2 %) and case group composed of men 22 (50%) and women 22 (50%). Average age in case group was 37.16 ± 19.11 years and in the control was 38.43 ±18.14 years .there was not significant difference between case and control group according to sex and age According table 1 was observed significant difference between drugs consumption and skin disease in case and control group. Drugs including Olanzapine, Risperidone, Halopridol, Perphenazine, Lithium, had important role in the incidence of skin lesions. The review that was done only on the group, previous history of skin disease was in only

5 cases (11.4%). Rash onset in 39 cases (88.6%) was created after Psychological disease and its treatment. Skin disease in schizophrenia patients improved detectors in 4 (9.1%), in 10 cases (22.7%) had intensified in 30 (68.3 %) cases was fixed of the course. Primary complaint of patients in case group were 18 (40.9%) itching, 4 (9.1%) hair loss, lesions and nodules, lesions and pigmentation spots, each 6 (13.6%) and 10 patients (22.7%) of skin wounds (including cellulites, wound round the fingers and nails). Type of skin lesion was studied. Plaque was in 10 patients (22.7%), plaque with nodular and Vesicular was in 10 (22.7%) patients, Papuler Vesicular lesions were in 7 (15.9%), alopecia and erythematos lesions were observed 1(2.3%) person. The pigmentation Patch and erythematos patch each lesion were positive in 7 (15.9%) and 8 (18.3%) patients. The main type of skin lesion distribution of patients in cases23 (52.3%) were in the limbs. Head and face in 17 (38.6%) patients and trunk in 3 (6.8%) patients had lesions pretend place. Total body was involved in one case (2.3%) with skin lesions. Epilepsy was most common disease (18%) addition to these patients. Drugs induced skin lesion and type of skin disease manifestation were in table 2.you can observe frequency of skin lesion on psychiatric patients in figure2,Dermatitis, skin infection and eczema the most common skin lesion founded in this patients.

Figure1: drugs consumption between two groups of schizophrenia patients with and without skin lesions

Drug type	Case (n=44)	Control (n=56)	P value
Lithium	16(36.4%)	3(5.4%)	< 0.001
Chlorpromazine	25(56.8%)	35(62.5%)	0.3
Risperidon	26(59.1%)	7(12.5%)	<0.001
Perphenazine	5(11.4%)	2(3.8%)	0.01
fluoxetine	5(11.4%)	6(10.7%)	0.5
Haloperidol	18(40.9%)	35(62.5%)	0.02
Biperidine	7(15.9%)	4(7.1%)	0.1
Clozapine	3(6.8%)	8(14.3%)	0.1
Sodium valprovate	8(18.2%)	4(7.1%)	0.08
Olanzapine	18(40.9%)	8(14.3%)	0.003

Figure1: Type of skin lesions with drugs related using

Type of skin lesion	Frequency (percent)	Drugs using
Contact dermatitis	7(15.9%)	Lithium, Sodium valprovate, Halopridole, Risperidon, Biperidine, Chloropromazine
Drug eruption	1(2.3%)	Halopridole, olanzapine. Chloropromazine
Cyst epidermal	1(2.3%)	Olanzapine
photosensivity	1(2.3%)	Halopridole, Olanzapine, Risperidon
Pitriasis versicolor	1(2.3%)	Lithium, Olanzapine, Risperidon, Biperidine, Chloropromazine
Erythemanodusom	1(2.3%)	Risperidon
Trichotillomania	1(2.3%)	Halopridole
Wart	1(2.3%)	Lithium, Olanzapine, Chloropromazine
Erythema multiforme	1(2.3%)	Halopridole, Olanzapine, Risperidon
cellulites	7(15.9%)	Risperidon, Chloropromazine, Perphenazine
Acne and seborrheic dermatitis	8(18.2%)	Halopridole, olanzapine, Risperidon, Chloropromazine, Perphenazine
melasma	6(13.2%)	Fluoxetine, Halopridole, olanzapine, chloropromazine
Discoid eczema	7(15.9%)	olanzapine, Risperidon, chloropromazine, Perphenazine
psoriasis	1(2.3%)	Halopridole, olanzapine

DISCUSSION

Skin diseases are considered the most important problems in patients with schizophrenia. Skin disease and possible causes of bacterial and viral infections can occur due to their lack of precision and lack of care hygiene. Also in these patients numerous and various complications of skin made because of various antipsychotic drugs consumed for long time. In this study of skin disease was observed in patients with schizophrenia. During the study of Kuruvida and *et al* Pitryasis Versicolor, eczema of were common skin disease among patients with mental disorders [6]. The prevalence of Dermatophyte infections was higher than normal population [6]. But in the present study Pitryasis versicolor was observed only in one patient, also contact dermatitis, eczema and skin infections had a higher prevalence. According to the study Latini and *et al*, Olanzapine can be effective as the beginning and progress psoriasis without previous experience [7]. While the study only one case of psoriasis that were simultaneously treated with drugs Haloperidol, Olanzapine and Chloropromazine that the drug cannot be certainly impact the incidence of psoriasis. Jafferany was reported the incidence of psoriasis was more in the lithium user [8]. But in our study influence lithium user was not observed in patients with psoriasis. In the study of Wohl et al incidence of skin reaction caused by contact with light in patients with schizophrenia was higher than other people (9). This case only one person was seen simultaneously treated with 3 drugs Haloperidol, Chloropromazine and Risperidon that this Photosensivity cannot be due to consumption of drugs. One of the main complaints of skin disease includes itching. During the study of Mazeh et al. indicated to have been emphasized this topic in psychiatric patients [10]. They are believed itchy dermatitis eczema, psoriasis and systemic diseases can be are related with schizophrenia [10]. Our results also findings are compatible with their findings but schizophrenia is related with contact dermatitis, psoriasis and eczema. Similar to our study dermatitis and eczema are the most common psychopathologic factors appearing to be an underlying immature personality [11]. In Akkaya *et al*, as hives skin reaction, papules have reported in Ziprasidone consumption [12]. In the present study the effect of eczema induced by drugs including Olanzapine, Perphenasine and Risperidone. To this is among Risperidone was that the most important factor. In our study olanzapine consumers were facing with a wide range of skin lesions and diseases. Fernandez-Torres et al study the lichen plan had more in patient's consumers of all this medication [13].Nasierowski in their study the dermatitis outbreak started after mental disorders occurred in patients while no description of the previous history of skin disease before there is a mental disorder [14]. In the present study there is only 11.4% of patients had history of previous skin disease. The more skin lesions occurred first few days had given drugs. Alopecia areata is non scarring hair loss in patches of typically well-demarcated smooth skin with breakage of the hair shaft that results in characteristic “exclamation mark hairs.” Hair loss often involves the scalp, but may also affect the brows, lashes, beard, and body hair, and varies from a single patch to multiple patches or total hair loss [15]. Unlike the study of Ghanizadeh and *et al,* that incidence of alopecia is noted in most mental disorders [16]. Our prevalence of alopecia was fewer in psychiatric patients. In summarized schizophrenia and antipsychotic medication have important role in skin disease and skin treatment regimen will provide faster resolution of lesions which will, in turn, improve the patient’s self-image, decrease the risk of further skin manipulation, and render behavior modification more effective.

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