

## Is Pruritus in Depression a Rare Phenomenon?

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Sir,

We read with great interest the report by Mazeh et al. (1) published recently in *Acta Dermato-Venereologica* on itching in psychiatric patients. Studying a group of psychiatric inpatients with different diseases these authors found that approximately one-third of the analysed population suffered from pruritus at the time of examination or within the past 6 months (1). They also observed that itching was distributed equally among all psychiatric diagnoses, suggesting that this symptom is a frequent co-morbidity in psychiatry. We consider these findings very important. In our opinion the problem of pruritus in psychiatric subjects has been underestimated for a long time and we would like to share our own experience on pruritus in individuals with depression in order to present further evidence that many psychiatric patients suffer from itching.

We recently conducted a pilot study among 40 subjects (31 (77.5%) women and 9 (22.5%) men) with depression. We consecutively recruited patients with depression who were hospitalized in the Department of Psychiatry of Wrocław Medical University. The patients' ages ranged between 24 and 78 years (mean  $58.0 \pm 12.7$  years). The study was based on a specially designed questionnaire containing demographic and clinical data. Patients with skin or systemic diseases that could induce pruritus were excluded from the study. Based on the psychiatric examination, according to diagnostic criteria of ICD-10 classification a recurrent depressive disorder was diagnosed in 30 (75%), a depressive episode in 5 (12.5%), and a depressive episode during the course of the bipolar affective disorder in 5 (12.5%) patients. Symptoms of depression were rated as of mild severity in one patient (2.5%), moderate severity in 22 (55%), severe in 4 (10%)

and severe with psychotic symptoms in 13 (32.5%) individuals. The mean duration of the current episode of depression was  $11.3 \pm 11.9$  weeks (range 2–52 weeks).

Pruritus was experienced by 7 (17.5%) patients during the depressive episode. This symptom led to scratching in all patients. Marked excoriations and erosions were found in 3 of 7 (42.9%) subjects. Five (71.4%) patients scratched their skin occasionally during the day (total duration of scratching less than 1 h/day) and remaining 2 (28.6%) had scratching episodes lasting in total at least 3 h every day. There was no predilection site for pruritus: it was localized within the scalp (one patient), scalp and face (one patient), palms (one patient), face and lower and upper limbs (one patient), hands and chest (one patient), back (one patient) or was generalized (one patient) (Table I). The severity of pruritus according to a visual analogue scale (VAS) ranged between 1 and 10 points (mean  $5.1 \pm 3.1$  points). In all patients the pruritus disappeared when the depressive symptoms significantly decreased. Patients with recurrent depression episodes (6 subjects) claimed that itching had occurred during every depressive episode, always in the same location, and had resolved while symptoms of depression had disappeared. None of these patients suffered from pruritus in the time between episodes of depression.

Based on our results we conclude that pruritus seems to be a rather common phenomenon in patients with depression. However, as the studied population was rather small, future prospective studies are necessary to elucidate whether our current results are generally valid. Remarkably, the problem of pruritus in depression has been very poorly investigated to date, although it was clearly documented that depression may modulate itching perception in pruritic skin diseases such as

Table I. Characteristics of patients with depression with co-occurring pruritus

Patient	Age (years)	Gender	Diagnosis	Severity of depression	VAS (points)	Localization of pruritus	Depression treatment
1	37	Female	Recurrent depressive disorder	Severe, with psychotic symptoms	5	Back	Sertraline 200 mg/day + olanzapine 10 mg/day
2	52	Male	Recurrent depressive disorder	Severe, with psychotic symptoms	2	Face, scalp	Mianserin 120 mg/day + pernazine 300 mg/day
3	56	Female	Recurrent depressive disorder	Moderate	4	Palms	Mianserin 90 mg/day
4	59	Female	Recurrent depressive disorder	Severe	7	Hands, chest	Mianserin 80 mg/day + clonazepam 1 mg/day
5	62	Male	Recurrent depressive disorder	Severe	10	Generalized pruritus	Fluvoxamine 300 mg/day
6	64	Male	Bipolar affective disorder (depressive episode)	Moderate	7	Face, upper limbs, lower limbs	Olanzapine 10 mg/day + venlafaxine 150 mg/day
7	78	Female	Recurrent depressive disorder	Moderate	1	Scalp	Mianserin 90 mg/day

VAS: visual analogue scale 1–10.

psoriasis, atopic dermatitis or urticaria (2) and that a substantial percentage of patients with idiopathic generalized pruritus (about one third) demonstrate significant depression (3). The exact frequency of depression-associated pruritus is unknown; however, based on our experience and results presented by Mazeh et al. (1) it could be expected that about 20–30% of patients with depression may experience significant itching during the depression episodes. However, we agree with Mazeh et al. that patients with mental disorders usually do not report pruritus spontaneously during psychiatric examination; only one person in our study complained of pruritus without directed investigation. Furthermore, pruritus in depression shows no specific features, making the proper diagnosis difficult for psychiatrists who are usually not familiar with the problem of pruritus. Similarly to Mazeh et al., we did not find any specific localization of pruritus among depressive patients.

Although Mazeh et al. tried to assess the influence of itching on sleep and mood, these observations, in our opinion, should be considered with caution. Many psychiatric patients, especially those with depression, demonstrate problems in falling asleep or frequent awakenings due to their psychiatric condition. If pruritus is considered as a part of the manifestation of psychiatric disorder (i.e. psychogenic pruritus), it is rather impossible to distinguish whether sleep problems are due to the psychiatric disorder or the pruritus itself. The same refers to mood, as low mood is a key depressive feature. Whether depression-associated pruritus could further lower the mood in depression is unclear and this problem needs further investigation.

The treatment for depression-associated pruritus is the same as for depression. In all our depressive patients with co-occurring pruritus, pruritus disappeared during the treatment with antidepressants, while the depression significantly improved. Interestingly, antidepressants have also been documented to relieve itch in other conditions (4, 5). The mechanism of anti-pruritic effect of antidepressants in other diseases remains unclear. Whether it could be connected with the improvement in depressive symptoms or with the direct anti-pruritic activity of these drugs requires further study. In our opinion, at least in depression-associated pruritus this anti-pruritic effect should only be related to the anti-depression properties of these drugs.

## REFERENCES

1. Mazeh D, Melamed Y, Cholostoy A, Aharonovitch V, Weizman A, Yosipovitch G. Itching in the psychiatric ward. *Acta Derm Venereol* 2008; 88: 128–131.
2. Gupta MA, Gupta AK, Schork NJ, Ellis CN. Depression modulates pruritus perception: a study of pruritus in psoriasis, atopic dermatitis, and chronic idiopathic urticaria. *Psychosom Med* 1994; 56: 36–40.
3. Sheehan-Dare RA, Henderson MJ, Cotterill JA. Anxiety and depression in patients with chronic urticaria and generalized pruritus. *Br J Dermatol* 1990; 123: 769–774.
4. Hundley JL, Yosipovitch G. Mirtazapine for reducing nocturnal itch in patients with chronic pruritus: a pilot study. *J Am Acad Dermatol* 2004; 50: 889–891.
5. Zyliech Z, Krajnik M, Sorge AA, Constantini M. Paroxetine in the treatment of severe non-dermatological pruritus: a randomized, controlled trial. *J Pain Symptoms Manage* 2003; 26: 1105–1112.

*Note: The authors of the original article (Mazeh et al.) were given the opportunity to comment in response to this letter, but chosen not to do so.*