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Which patients with chronic pruritus are presented for psychological assessment by their dermatologists? Results from a consecutive sample

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Dear Editor, Chronic pruritus (CP) is a frequent symptom that poses special diagnostic and therapeutic challenges for dermatologists. To identify the causes underlying CP, a comprehensive multidisciplinary assessment is necessary.[1,2] CP can impair quality of life and can be associated with clinically relevant depression and anxiety levels; also, psychiatric comorbidity can be present independent of CP, but it may affect its dermatological management.[1,3,4] However, not all patients with CP undergo a psychological assessment. It remains unclear which individual variables should suggest a referral for a psychological assessment by a patient's dermatologist. We sought to investigate this relationship in a large sample of patients with CP attending the Center for Chronic Pruritus (KCP) at the University of Münster. Between 2007 and 2016, data from 6374 consecutive inpatients with CP were entered into the database.

At the KCP, patients undergo extensive diagnostics and complete a set of questionnaires on a mobile electronic device: a patient itch questionnaire (Münster NeuroDerm questionnaire), the Hospital Anxiety and Depression Scale (HADS)[5] and the Dermatology Life Quality Index (DLQI).[6] All patient data are transferred into the electronic patient records and, if the patient consents, into a research database.[7] The local ethics committee approved the study (2007-413-f-S), which was performed in accordance with the declaration of Helsinki and the guidelines for Good Clinical Practice.

We used this database to identify patients who were referred for a psychological assessment and compared their dermatological and patient-reported data to those of other patients with CP. The results of the consultations were extracted from the documentation of the Department of Psychosomatics and Psychotherapy, where patients with CP were examined by physicians with a specialization in psychosomatic medicine and psychotherapy. Based on a 1-h semistructured clinical interview, a diagnosis according to International Classification of Diseases (ICD)-10, chapter F is given if the respective diagnostic criteria are applicable.

A psychological assessment was performed in 560 (8·8%) of the patients with CP. We compared the available sociodemographic, clinical and psychological screening variables for the patients with CP who were presented for a psychological assessment with that of those who were not, first for all patients with CP (Table 1), then only for those with complete datasets (a further table for the 2764 patients with complete datasets is available on request from the authors).

Variables that showed significant differences between the two subgroups were entered into a binary logistic regression analysis using Backward Elimination (Wald): the complete set of variables (complete in n = 2764) explained 12·3% of the variance (Nagelkerke's R^2). Variables in the model with a highly significant contribution ($P < 0·001$): female sex (Exp (B) 1·74), higher DLQI score (Exp(B) 1·059), higher HADS depression score (Exp(B) 1·070) and higher number of comorbidities (Exp(B) 1·079) made referral more probable whereas patients with CP from International Forum for the Study of Itch (IFSI) group I had a lower probability (Exp(B) 0·352) of being referred for a psychological assessment. These variables explained 11·9% of the variance (Nagelkerke's R^2).

Of the patients referred for a psychological assessment, 427 (76.3) were diagnosed with at least one diagnosis according to ICD-10, chapter F. The most frequent diagnosis was 'psychological/psychosomatic co-factors in pruritus' (F54) in 318 patients (74·5%), followed by depression (F32-F33-F34) (131 patients, 30·7%), adjustment disorder (F43·2) (76 patients, 17·8%), dissociative or somatoform disorder or hypochondria (F44-F45) (48 patients, 11·2%), anxiety or compulsive disorder (F40-F41-F42) (28 patients, 6·6%), psychosis (F2) (9 patients, 2·1%) and other (73 patients, 17·1%). In total, 191 patients (44·7%) fulfilled criteria for more than one psychiatric/psychosomatic diagnosis.

The high percentage of psychiatric/psychosomatic diagnoses demonstrates that the dermatologist's assessment of a need for psychological referral was supported in three-quarters of the patients. There are, however, limitations to this approach. We lack information regarding the psychiatric morbidity of the patients with CP who had not been referred for a psychological assessment and of those who originally refused a referral. Another limitation is the large amount of missing data, this impairs validity and generalisability of our results. We cannot exclude that this was as a result of the use of electronic

Table 1 Comparison of patients with chronic pruritus (CP) with and without a psychosomatic consultation (N = 6374)

	Psychosomatic consultation (n = 560)	No psychosomatic consultation (n = 5814)	Missing data, n	χ^2 (d.f.)	t-test
Sociodemographic variables			0		
Age, mean ± SD	58·33 ± 15·6	60·32 ± 17·1			2·86**
Sex, n (%)				36·83 (1)***	
Men	181 (32·3)	2655 (45·7)			
Women	379 (67·7)	3159 (54·3)			
IFSI classification group, n (%)			249	64·99 (2)***	
I: CP on inflamed skin	70 (14·2)	1611 (28·6)			
II: CP on nonlesional skin	240 (48·9)	2682 (47·6)			
III: CP with chronic scratch lesions	181 (36·9)	1341 (23·8)			
Clinical characteristics					
Duration of CP, n (%)			84	50·04 (1)***	
Days to weeks	3 (0·5)	54 (0·9)			
Weeks to months	35 (6·3)	924 (16·1)			
A couple of months	85 (15·3)	626 (10·9)			
1–10 years	295 (53·2)	3053 (53·2)			
> 10 years	136 (24·5)	1079 (18·8)			
Somatic comorbidities, mean ± SD	5·29 ± 3·1	4·6 ± 3·2	0		4·51***
Psychometric scores, mean ± SD					
Intensity of CP (VASs)					
Average itch	6·76 ± 2·3	6·11 ± 2·4	1141		5·28***
Worst itch	8·39 ± 1·9	7·66 ± 2·2	1550		6·99***
Itch today	6·08 ± 2·8	5·18 ± 2·85	1689		6·11***
Dermatology Life Quality Index	13·05 ± 6·9	9·18 ± 6·5	1874		10·09***
Hospital Anxiety and Depression Scale					
Anxiety subscale	9·04 ± 4·6	7·11 ± 4·1	2645		6·65***
Depression subscale	8·13 ± 4·7	5·83 ± 4·2	2627		7·79***

IFSI, International Forum for the Study of Itch; VAS, visual analogue scale. **P ≤ 0·01; ***P ≤ 0·001.

devices, perhaps because of less acceptance by patients. On the other hand, only the use of these electronic screening devices made it possible to calculate and transfer the scores for psychological burden (DLQI and HADS) instantly to the dermatologists.

The main factors associated with a referral were female sex, number of comorbidities, chronic scratch lesions and psychological burden. It has previously been established that women with CP have more scratch lesions and a higher burden.[8] The high number of somatic comorbidities is likely because the patients with CP had a mean age of 60 years and multimorbidity is common in higher age groups. Whether the reasons for underrepresentation of male patients with CP for psychological referral might be because of their tendencies to underreport psychological burden and/or a reluctance to accept psychological referral or because dermatologists having a greater awareness of psychological problems in women cannot be deduced from our data.

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