SHORT COMMUNICATION

Alexithymia in Uraemic Pruritus

Monika Heisig, Adam Reich and Jacek C. Szepietowski*

Department of Dermatology, Venereology and Allergology, Wroclaw Medical University, Chalubińskiego 1, PL-50-368 Wroclaw, Poland. *E-mail: jacek. szepietowski@umed.wroc.pl

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Uraemic pruritus (UP) occurs frequently in patients with chronic renal disease, and is one of the most bothersome symptoms (1). According to a representative cross-sectional study the point prevalence of UP is 25%, but it may be notably higher in countries such as Poland (1, 2). Although the prevalence of pruritus has decreased significantly in recent decades as a result of better dialysis techniques, it remains an important symptom in many patients on dialysis (3).

Alexithymia is a personality construct (trait) characterized by inability to identify and verbalize emotions (4). It literally means "no words for emotions". Some scientists (5) suggest that, in alexithymia, there may not only be difficulty in expressing emotions verbally, but also a deficit in cognitive processing. This would cause emotions to remain undifferentiated and poorly regulated and thus predispose alexithymic individuals to both psychological and somatic disorders (5). Some scientists distinguish primary alexithymia, which is an enduring psychological trait and does not alter over time, from secondary alexithymia, which is state-dependent and disappears after the evoking stressful factor is gone (6). People with alexithymia have an inability to regulate emotions and affect, which predispose them to both psychological and somatic symptoms. Alexithymia is broadly associated with health problems (7).

To the best of our knowledge, there are no studies of the association between alexithymia and pruritus. A wide variety of mediators and neural mechanisms are involved in the pathomechanism of itch (8). It has already been proved that pruritus can have a psychiatric comorbidity (7, 9). Several studies have also confirmed the association between alexithymia and pain of unknown origin (10). We already know that some pathways of itch and pain conduction can overlap (11).

The aim of the current study was to assess the relationship between alexithymia and pruritus in hemodialysis (HD) patients.

MATERIALS AND METHODS

The study was conducted in 142 patients on maintenance HD. From this group 90 patients agreed to participate and returned the completed form (response rate 63.4%). The final study group comprised 48 patients (28 males, 20 females) without UP and 42 patients (23 males, 19 females) with pruritus (p=0.9). Participants were between 27 and 88 years old. Patients without pruritus were slightly older (mean 60.5 ± 13.6 years) compared with those with pruritus (mean 56.6 ± 11.6 years, p=0.15).

Participants were recruited from cohorts of patients admitted to 3 different HD centres in Poland.

An itch score was obtained using the horizontal visual analogue scale (VAS) (12). Patients were asked to rate the mean level of pruritus they had experienced within the previous 3 days. The severity of pruritus was graded according to recent recommendations (13). Alexithymia was evaluated using the Bermond-Vorst Alexithymia Questionnaire (BVALQ-40), a self-administrated 40-item measure consisting of 5 domains, such as analysing (ANL), verbalizing (VER), identifying (ID), emotionalizing (EMO) and fantasizing (FANT). In the questionnaire each of the 5 dimensions is measured using 8 items. Each item in the BVALQ-40 was scored on a 5-point Likert-type scale (5), with higher scores representing more alexithymic features.

RESULTS

For itch in patients with UP the mean VAS was 4.1 ± 2.0 points; 17 (35.4%) patients had mild, 27 (56.3%) moderate and 4 (8.3%) severe pruritus. No significant differences were found between patients with and without UP regarding the total score of BVALQ (103.5 ± 13.9 vs. 108.5 ± 16.3 points, p=0.12) (Table I). However, there was a statistically significant difference considering the subscale of fantasizing (FANT). Patients with UP had a significantly lower mean score in this domain compared with those without itching $(21.7 \pm 8.9 \text{ vs. } 25.9 \pm 11.1 \text{ s})$ points, p < 0.05) (Table I) and the scoring inversely correlated with the intensity of pruritus (r=-0.33, p=0.03) (Fig. 1). Moreover, the total alexithymia score for both groups correlated with age and sex. Men were more alexithymic than women and the total BVALQ score increased with age (data not shown). However, neither age nor sex correlated with any of the BVALQ subscales.

DISCUSSION

Alexithymia has a prevalence rate of approximately 10% among the general population, and the mean score asses-

Table I. Mean score of Bermond-Vorst Alexithymia Questionnaire (BVALQ-40), in patients with and without uraemic pruritus

BVALQ	Without pruritus $(n=48)$	With pruritus $(n=42)$	<i>p</i> -value
Verbalizing (VER)	18.8	21.0	0.22
Fantasizing (FANT)	25.9	21.7	< 0.05
Identifying (ID)	14.1	15.0	0.57
Emotionalizing (EMO)	17.7	19.0	0.45
Analysing (ANL)	15.7	16.9	0.42
Total	108.5	103.5	0.12



Fig. 1. Correlation between the fantasy life subscale (fantasizing domain) and the itch severity assessed according to visual analogue scale (VAS).

sed with BVALO is 100.5 ± 20.0 points (14). It has been reported that the prevalence rate increases with age and male sex (14), and this was also observed in our study. In the present study no significant correlation was found between the total score of BVALQ and UP. Moreover, the total score of BVALO in the studied population is only slightly higher than the scoring found previously in the general population (14). Interestingly, compared with patients without UP, those with UP had a significantly lower mean score in the subscale of fantasizing. However, the mean FANT score in patients with UP was higher when compared with the suggested reference value of 15.9 points in the general population (14). Moreover, this scoring correlated inversely with the intensity of pruritus in patients with UP. The negative correlation between this subscale of BVALO was also found in another study evaluating its relationship with depression and neuroticism, albeit other subscales of BVALQ showed a positive correlation with these 2 psychiatric disorders (15). It is worth noting that most studies on alexithymia used the Toronto Alexithymia Scale (TAS-20) in which the fantasizing trait is not included (14). Although this scale does not cover the whole concept of alexithymia, it is still commonly used, probably because of the short time required to complete the questionnaire. However, in the current study we noticed that some patients, especially those with a poor general health condition, refused to complete the BVALQ, which is a more detailed and more time-consuming instrument. The question arises as to whether the fantasy life aspect of alexithymia is more frequently negatively correlated with diseases in which only the TAS-20 was used.

In conclusion, the ability to fantasize and daydream is higher in patients with UP compared with those without pruritus, and is inversely correlated with intensity of pruritus. This phenomenon might be interpreted as a mechanism of coping with pruritus, aiming to divert patient's attention away from itch. It is possible that, in patients with much more severe pruritus, the mean score of FANT may be significantly lower compared with the general population, indicating a greater richness of fantasy life. It is worth investigating whether pruritus, as an isolated symptom, significantly affects alexithymia in other patient groups, especially in those with pruritus of unknown origin. Due to the limited number of patients evaluated in our study, confinement to a single geographical location, culture and nationality and a relative low mean VAS score, further studies are needed to confirm these observations. We advise the use of the BVALQ in further clinical studies of alexithymia, as it is a detailed scale covering all aspects of alexithymia.

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