Epidemiology of Pruritus in France

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Pruritus, or itch, is an unpleasant feeling that leads to the need to scratch (1). A study of pruritus at the community level could offer significant information on its association with demographic and psychosocial factors, and other possible diseases in the community (2).

A major study on 40,888 adults with pruritus was performed in Oslo between 2000 and 2001 (3, 4). The prevalence of acute itching (during one week) reached 8.4% in the general population by using a categorization no, a little/very much, quite a lot, or 27% by using a dichotomy. In a cross-sectional observational study conducted among 11,730 employees from 144 German companies (53.2% male, age range 16-70, mean 43.7 years), the prevalence of pruritus with duration of at least 6 weeks prior to data collection was 16.8% (5). In a survey including a representative sample of the French population, the estimated prevalence of perceived chronic itching during the 24 months prior to the survey was 12.4%, and the estimated current prevalence was 5.4% (6). Among people with chronic itching, 42% reported it as a burden in their daily life activities.

The objective of this study was to obtain more data on the epidemiological characteristics of pruritus in France, and especially its distribution according to gender, age, severity, localization and time of day.

MATERIALS AND METHODS

A questionnaire was designed and conducted by the poll institute Council Survey Analysis (CSA) Health Institute. A sample of 1,703 people was drawn from a representative national sample of the French population aged ≥ 15 years. The subjects were interviewed by phone and selected according to the quota method (gender, age, occupation of family head, geographical density and region). The study was conducted in winter. Systematic monitoring of interviews was conducted, with a confirmation call to 20% of those interviewed. No error was detected. Participants responded to questions on pruritus, its severity, localization and chronology. Medical history and socioeconomic data were also recorded.

Quantitative variables were compared between groups using a Student's *t*-test (if there were two groups) or an analysis of variance (ANOVA) (if there were more than 2 groups). If the conditions required for these tests were not met, non-parametric Wilcoxon and Kruskal-Wallis tests were performed. Qualitative variables were compared using χ^2 tests or the Fisher's exact test if conditions for the application were not met. Statistical analyses were performed using the SAS software version 8.2 (SAS Institute).

RESULTS

To the question, "Do you suffer from itching?", 70.2% answered "no" and 29.8% answered "yes" (13.3% "ra-

rely", 13% "sometimes" and 3.5% "often"). There was no significant variation according to gender or age. To the question, "Did you have any itching in the last seven days?", the answer was "yes" in 32.1% of patients, with no significant variation according to gender or age.

The following results concern the 7 days before the survey: Itching was localized mainly on the scalp region and, to a lesser extent, the back, legs and arms (Table I). The itching intensity was reported as weak (61.4%), moderate (29.8%) or severe (8.9%), and there was no significant difference according to age or gender. A total of 40.7% of the subjects experienced itching while at rest, 25.3% while lying down and 14.2% during physical activity. When asked about the time of day, 55.8% reported experiencing itching in the evening, 31.9% in the morning, 20.3% at night and 20.3% in the afternoon.

DISCUSSION

In our study, approximately one-third of the patients reported pruritus. These results appear to be different from those of Dalgard et al. (3), Ständer et al. (5) and Wolkenstein et al. (6). However, differences from the Norwegian studies (3, 4, 7) are related to the repartition of the answers. In the German study (5), the assessment concerned the previous 6 weeks, and it is thus probable that most people who at some point during those 6 weeks had experienced an occasional pruritus answered "no pruritus" rather than "pruritus." The low prevalence observed in Wolkenstein's study (6) supports this hypothesis, as it targeted the previous 24 months.

There is no direct association between pruritus prevalence and age or gender. The German study (5) showed a weak increase in itching prevalence with age (from 11% to 20%). Moreover, a Turkish study (8) showed that pruritus was more frequent among elderly people (>85 years).

Table I. Localization of pruritus during the last 7 days (several answers were possible)

Localization	Men %	Women %	Total %
Legs	35.9	23.5	28.4
Back	31.3	32.7	32.1
Chest	12.5	6.1	8.6
Abdomen	10.9	4.1	6.8
Buttocks	9.4	5.1	6.8
Face	10.9	14.3	13
Scalp	43.8	50	47.5

The most common localizations of itch were the scalp, back, legs and arms. It is difficult to compare these results with those of the German study (5) because they reported information on the back and chest on the one hand, and the face and scalp on the other hand, as well as the anogenital region. The distribution of pruritus is not exactly proportional to the body surface, as the trunk seems to be relatively spared in comparison with other areas.

In all studies, itching is more frequent at rest, in the evening and during the night, suggesting that the diagnostic criteria defining this predominance in circumstances such as scabies (9) or psychogenic itch (10) should be examined cautiously. It appears that when the brain is occupied by other tasks, the psychological component of pruritus is decreased and pruritus is globally decreased (11), but there are many other factors that aggravate or inhibit itch.

In conclusion, our study shows a high prevalence of pruritus in France, as in other European countries.

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