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Chilblains from the patient's perspective

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Introduction

Chronic chilblains is generally considered by doctors to be a slightly inconvenient and harmless condition. We observed that a large number of our patients showed unexpectedly severe complaints, with a distinct impact on daily life. Adequate information about the clinical picture is available (1–6), but we did not find any publications about how patients feel about their symptoms, nor about the measures they take to cope with them. Therefore, the aim of our study was to gain better insight by interviewing patients on two issues: 1) how do patients experience chronic chilblains, and what are their views on the condition? 2) How do patients cope with the disease, and what are their needs?

Methods

We opted for a qualitative design, obtaining information by a semi-structured interview. The setting of the study was general practice.

The study population consisted of all the participants in a study on the effect of vitamin D₃ (8). The participants had a confirmed diagnosis, with complaints lasting at least 3 weeks. Patients were, for reasons concerning the original study, excluded in

case of a history of inflammatory diseases, urolithiasis, hypercalcaemia, hyperparathyroidism, pregnancy, breast-feeding, or when using a calcium entry blocker.

In the winter of 2004–2005, these participants were asked to participate in an interview. The interview was structured by using a guidebook, and included the nature of the complaints and discomfort; causes of chilblains and contributing factors as experienced and recognized by the patient; and measures for relief and help-seeking behaviour. All interviews were performed by one well-trained MD (L.R.), using standard techniques such as asking, summarizing, and pursuing the questions. The complete interviews were recorded and transcribed afterwards by the interviewer. Two researchers (L.R., I.S.) analysed the transcriptions. We used an open approach regarding the basic rules of qualitative research, coding key words and key phrases to work towards our conclusions (9).

Results

We asked all 33 patients of the original study to participate. Seven refrained. The age and gender distribution of the remaining 26 patients met the

Table I. Experienced complaints ($n = 26$).

Complaints	Number of patients
Discolouration, red to purple	26
Pain	24
Swelling	16
Increased sensitivity	12
Itching	9
Stiffness	6
Diminished sensitivity	6
Formation of fissures and wounds	5
Burning and glowing sensation	4
Tingling	3

distributions reported by others for the disease (1,2,4,7). The ages at the onset of chronic chilblains varied between 8 and 60 years. The mean age of onset was 29 years (SD 16.5).

Most of the patients were troubled by red to purple discolouration, pain, and oedema. Increased sensitivity, itching, stiffness, numbness, fissures and wounds, a burning and glowing sensation, and tingling were mentioned as well (Table I).

Chronic chilblains were experienced by patients as an annoying and disturbing condition that led to restrictions in everyday life. The seriousness of these restrictions and handicaps varied considerably, ranging from a necessity to use peeled and cut-up vegetables and fruits or not being able to write down the answers during an exam, to feeling ashamed and not being able to wear normal shoes. It is mainly this impact on everyday life that determines quality of life (10,11).

The majority of patients visited a general practitioner. Patients complained of a shortage of information. We found a large number of measures that had been tried, unfortunately without positive effect. The patients were willing to try almost anything to get rid of their complaints, but they found the availability of effective measures to be lacking.

Patients look upon chilblains as a disorder that is still commonly unknown and offers few therapeutic possibilities. Most patients stated that they could cope with this, but they hoped that a cure would soon be found.

Patients were not able to give a clear reason for the development of their complaints. However, all patients reported that chronic chilblains occurred at temperatures below 10–15°C. The presence of chilblains in the first-degree relatives of 10 patients suggested a hereditary component in the aetiology of chronic chilblains.

Discussion

We performed a qualitative study, with a large variety of ages. The number of participants was sufficient when considering saturation (12). Our study has, however, some restrictions. The study population was selected from participants of a trial to assess the effect of vitamin D on chronic chilblains. This may have influenced the severity of their conditions and thus the results of our study. Furthermore, all participants live in the same region in the northwest of the Netherlands. Local conditions may influence our findings, but we think that this kind of bias does not significantly affect our results.

Taken together, our findings support the observation that chilblains prove to be an annoying and disturbing disorder, causing major restrictions in daily life. Patients lack proper information about the disease and the availability of an effective therapy, and the hypothesis that cold in combination with a hereditary factor plays a role in chronic chilblains needs further research. Patients usually see their general practitioner for advice. We therefore strongly urge further research into the disease and its therapy.

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