Chronic Pruritus Management: A Plea for Improvement – Can Itch Clinics Be an Option?

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Introduction

People with chronic pain may be able to attend a specialist pain clinic for assessment and possible pain management, together with advice on living a fuller life in spite of pain. People with chronic itch are less liable to be referred to a specialized service since, with few exceptions, itch clinics are simply not available [1]. Is chronic itching less relevant than pain?

In this issue of the journal, Ständer et al. [2] present data on the prevalence of chronic pruritus in the German working population. The results point to a remarkably high prevalence of the symptom in the population, suggesting that effective interventions are not available or not applied. Chronic pruritus was reported by about 17% of the German sample with about 4% of all persons reporting the symptom being continuously present. About 89% of the people with chronic pruritus reported being bothered, and nearly 11% being greatly bothered, by the symptom. Interestingly, people complaining of frequent or constant pruritus had a higher intensity than those with occasional occurrence of the symptom, pointing to chronicity as affecting severity (a phenomenon similar to what has been observed in people with chronic pain) [3, 4]. About half of the people suffering from pruritus had never sought medical advice for their symptom. There is an obvious need for patient education and for improvement in treatment options. The establishment of itch clinics may help.

Improving Clinical Assessment

An area in need of improvement is clinical classification and assessment. A first attempt to standardize clinical assessment has been made by the International Forum for the Study of Itch [5]. An agreement was reached on identifying 3 groups of conditions: pruritus on diseased (inflamed) skin (group I), pruritus on nondiseased (non-inflamed) skin (group II) and pruritus presenting with severe chronic secondary scratch lesions, such as prurigo nodularis (group III). In addition, according to the underlying disease, different categories were considered: dermatological diseases, systemic diseases including diseases of pregnancy and drug-induced pruritus, neurological and psychiatric diseases. ‘Mixed’ cases, i.e. patients with >1 cause, and cases without any identifiable cause,
were also considered. This is the first version of a clinical
classification. Further improvements can be made based
on physiopathological considerations. The way the classifi-
cation could improve management should be assessed in
field surveys.

Improving Management

The management of chronic pruritus is a multidisci-
plinary task involving, among others, dermatologists,
neurologists and specialized nurses. Thus far, no specific
antipruritic drugs exist that equal aspirin’s association
with pain relief. Patient education and elimination of
provocative factors is an important component of itch
management. The teaching of adequate methods of inter-
rupting the itch-scratch cycle, and stress control tech-
niques are important components as well [6]. If properly
organized, itch clinics may be best suited to harmonize
these different components of itch management.

As indicated by the diversity of options for controlling
pruritus in a condition such as cholestasis (table 1) [7]
clinical research and outcome evaluation are in an urgent
need of improvement. An example of the way manage-
ment can take advantages of improvements in the under-
standing of pathophysiology and multidisciplinary col-
laboration is offered by polycythemia vera. Disabling
itching is seen in approximately 40% of the patients suf-
ferring from polycythemia vera and the symptom is char-
acteristically triggered by contact with water (aquagenic)

Table 1. Some of the proposed treatment options for controlling
cholestatic pruritus

<table>
<thead>
<tr>
<th>Treatment Options</th>
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<tbody>
<tr>
<td>Cholestyramine</td>
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<tr>
<td>Ursodeoxycholic acid</td>
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<tr>
<td>Rifampin</td>
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<tr>
<td>μ-Opioid receptor antagonists (naltrexone, naloxone, nalmefene)</td>
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<tr>
<td>Phenobarbital</td>
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<tr>
<td>Propofol</td>
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<tr>
<td>Thalidomide</td>
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<tr>
<td>Ondansetron</td>
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<tr>
<td>Dronabinol</td>
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<tr>
<td>Sertraline</td>
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<tr>
<td>Stanozolol</td>
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<tr>
<td>Butorphanol spray</td>
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<tr>
<td>Plasma resin perfusion (ion resin BR-350)</td>
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<tr>
<td>Albumin dialysis</td>
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<tr>
<td>Ultraviolet light phototherapy</td>
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<td>Exposure to bright light from a light therapy box</td>
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at any temperature. Many different treatment options
have been tried over the past several decades, e.g. anti-
histamines, antidepressants, interferon-α, phlebotomy,
phototherapy, iron supplements and myelosuppressive
medications, all demonstrating mixed results [8]. Toget-
her with essential thrombocytosis and primary myelofi-
brosis, polycythemia vera is a myeloproliferative clonal
disorder arising in a pluripotent hematopoietic stem cell.
The discovery of an activating mutation (V617F) in the
gene for Janus kinase 2, a tyrosine kinase utilized by he-
atopoietic cell receptors for growth factors, provided an
explanation for the shared clinical features of the 3 my-
eloproliferative disorders and offered a new potential tar-
get for treatment [9]. Preliminary results of clinical trials
with agents that inhibit the mutated kinase have shown
impressive clinical benefit on itching in polycytemia vera
[10].

Recent research on itching has revealed new neuronal
mechanisms in the skin and brain, suggesting novel ther-
apeutic targets [11]. Specific agonists such as cannabi-
noids or calcineurin inhibitors can influence neurore-
cep tors on sensory nerve fibers of the skin, itch-selective
neurons in the dorsal horn of the spinal cord can be tar-
geted to inhibit the transmission of pruritus to the so-
mato sensory cortex, and anticonvulsants, antidepress-
sants and microopioid receptor antagonists may interfere
with the sensation of pruritus in the central nervous sys-
tem. Placebo responses in pruritus are quite marked and
many systemic drugs with antipruritic effects may work
primarily by a placebo mechanism, demonstrating the
powerful central nervous modulation of pruritus [12].
Pruritus may be precipitated, prolonged or enhanced by
a number of stress-related mediators such as histamine
and neuropeptides. There are also a number of secondary
psychosomatic mechanisms through which pruritus may be
generated or exacerbated, e.g. sweat response, altera-
tions in cutaneous blood flow and scratching. Limited
data point to group psychotherapy, behavioral therapy,
controlled physical exercise, support groups and biofeed-
back as effective means to stop scratching and improve
quality of life. Itch clinics may assess in a formal way the
impact of these interventions as part of a harmonized
multicomponent management strategy [13].

Organization Issues

As discussed above, itch clinics may offer a multidisci-
plinary setting for the optimal management of chronic
pruritus. In principle, they may also concentrate exper-
tise and knowledge in a single spot, which may help foster research on pathomechanisms and treatment. As for any change in the organization of medical care, there is a need for documenting the advantage of specialized itch clinics in terms of improved outcome and cost-effectiveness. This means that itch clinics should be implemented in an experimental way in limited areas to assess, in the framework of so-called ‘health service research’, their impact and sustainability [14]. All in all, it is worthy of consideration for improving patient care.

References


