Assessing and Treating the Patient with Chronic Itch

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Acute Pruritus (Itch) -
Physiological function: Self-elimination of insects, parasites, toxic plants from the skin’s surface

Chronic Pruritus -
Symptom of diseases:
Danger signal of the skin or inner organs
Definition: 6 weeks or longer
Clinical Classification in the Management of Chronic Pruritus Patients

Step 1 - Clinical picture only
The patient can be readily assigned to one group

Groups of patients

Group I: Pruritus on lesional skin
Group II: Pruritus on non-lesional skin
Group III: Chronic scratch lesions

Step 2
Histological, laboratory and radiological tests

Categories of diseases

Dermatological
Systemic
Neurological
Psychogenic
Mixed
Other

## Classification of Chronic Pruritus According to the IFSI*

<table>
<thead>
<tr>
<th>Category</th>
<th>Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Dermatological</td>
<td>Arises from “diseases of the skin” such as psoriasis, atopic dermatitis, dry skin, scabies and urticaria</td>
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<tr>
<td>II. Systemic</td>
<td>Arises from “diseases of organs” other than the skin, such as the liver (e.g. primary biliary cirrhosis), kidney (e.g. chronic renal failure), blood (e.g. Hodgkin’s disease) and certain multifactorial (e.g. metabolic) states or drugs</td>
</tr>
<tr>
<td>III. Neurological</td>
<td>Arises from “diseases or disorders of the central or peripheral nervous system”, e.g. nerve damage, nerve compression, nerve irritation (neuropathic, neurogenic)</td>
</tr>
<tr>
<td>IV. Psychogenic / Psychosomatic</td>
<td>Somatoform pruritus with comorbidity of “psychiatric and psychosomatic diseases”</td>
</tr>
<tr>
<td>V. Mixed</td>
<td>Overlapping and coexistence of several diseases</td>
</tr>
<tr>
<td>VI. Other</td>
<td>Of undetermined origin</td>
</tr>
</tbody>
</table>

**Pruritus on lesional skin**
- Dermatological disease
- Evaluation of skin diseases, e.g. skin biopsy, direct immunofluorescence, ANA, IgE

**Pruritus on non-lesional skin**
- Systemic, neurological, psychogenic disease, drug intake, diseases during pregnancy
- Laboratory and radiological diagnostics

**Pruritus and chronic scratch lesions**
- Dermatological, systemic, neurological, psychogenic disease, drug intake, diseases during pregnancy
- Skin biopsy, laboratory and radiological diagnostics
Core symptoms

(1) **Chronic pruritus** (≥ 6 weeks)
(2) History and/or signs of **repeated scratching** (e.g. excoriations, scars)
(3) Localized or generalized presence of **multiple pruriginous** lesions

*Excoriated, scaling and/or crusted papules and/or nodules and/or plaques, often with a whitish or pink center and hyperpigmented border.

Taking the Medical History:
7 Itchy Questions

1. Initial localization
2. Onset w/wo skin lesions (inside lesions only?)
3. Duration (≤ 12 months: lymphoma or liver tumor possible)
4. Contact with water (polycythemia vera)
5. Mechanically induced (urticaria factitia, cholestatic pruritus)
6. Pruritus intensity
7. Quality of life

Important for monitoring therapy

Assessment of Pruritus

How do you rate your itch intensity today? VAS

- No itch
- Worst imaginable itch

How do you rate your itch intensity today? VRS

- 0 = no itch
- 1 = low
- 2 = moderate
- 3 = severe itch

Please rate the intensity of your itch today on a scale from 0 to 10. NRS

- No itch
- Worst imaginable itch

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10

- Mild itch: 0.1 – 2.9
- Moderate itch: 3.0 – 6.9
- Severe itch: 7.0 – 8.9
- Very severe itch: 9.0 – 10.0

European Guideline on Chronic Pruritus

In cooperation with the European Dermatology Forum (EDF) and the European Academy of Dermatology and Venereology (EADV)

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German Dermatological Society (DDG)
Published: in German and English (no open access) in J Dtsch Dermatol Ges. 2017;15:860-872
Current Recommendations to Treat Pruritus (Guideline)

Anti-inflammatory
- UV phototherapy
- Glucocorticosteroids
- Cyclosporin A, MTX, Azathioprine
- Thalidomide

Anti-pruriceptive
- Gabapentinoids
- Mu-opioid R antagonists
- Antidepressants
- Topical: Capsaicin, calcineurin Inhibitors

Treatment Ladder for PN

- Treat the underlying disease if possible
- In cases of psychological factors add paroxetine, amitriptyline or mirtazapine
- In cases of severe inflammation add topical steroids
- In cases of remained single nodules inject corticosteroid- triamcinolone intralesional

Step 1

Step 2

Step 3

Step 4

Step 5

- μ-opioid receptor antagonists
- NK1R antagonists
- Immunosuppressants

- Gabapentinoids
  - Topical tacrolimus
  - Topical capsaicin
  - Non- sedative antihistamines

- Topical corticosteroids
- Topical Pimecrolimus
- UV phototherapy

Prurigo Nodularis League (PNL)
www.prurigo-nodularis.net

• Global network of international experts, physicians, patients and scientists
• Founders: S. Ständer, H.F. Ständer, M. Augustin
• Aim: Combine forces to raise awareness of PN
  – Initiate clinical and basic research
  – Inform member physicians on new therapies
  – Improve patient care

• Please join us! Feel free to contact us.
Gabapentin and Pregabalin

• Healthy adults:
  – Gabapentin: Increase to 900 mg/day within 3 days, max. 2,600 mg/day within 3 weeks
  – Pregabalin: 2x75 oder 3x50 mg/d, after 3-7 days 2x150 mg, 600 mg/day if necessary after 14 days

• For older patients and those with chronic renal failure
  – Slowly introduce dosage
  – Adjust at clearance

• Maintain for at least 8 weeks
• If discontinuing, taper off within a week
Selective Serotonin Reuptake Inhibitors (SSRI)

• Approved for treatment of depression in late 1980’s

• Highly accepted as modern therapy for depressive disorder, panic disorder, obsessive-compulsive disorder and anxiety disorders


• Itch: paraneoplastic, cholestatic, prurigo, PUO

Zylicz Z et al. J Pain Symptom Manage 2003;26:1105-12
Future Approaches to Treating Pruritus

**Anti-inflammatory**
- Nemolizumab
- Dupilumab
- Crisaborol, Apremilast
- H4R antagonist

**Anti-pruriceptive**
- Kappa agonist / comb. w Mu antagonist
- NK1R antagonist
- Topical: TRPM8 agonist, TrkA antagonist
Assessing and Treating the Patient with Chronic Itch

• Pruritus as symptom and disease after chronification

• Own therapies necessary
  – Anti-pruriceptive and anti-inflammatory action
  – Treat early, effective and long enough