Practice Gaps in Pruritus

Jonathan I. Silverberg, MD, PhD, MPH[a,b,c,d,*]

KEYWORDS

• Itch • Pruritus • Assessment • Treatment • Workup • Education

KEY POINTS

- The severity of and patient-burden from pruritus should be assessed in all patients with itch.
- Management of pruritus should be tailored to the underlying cause and use evidence-based treatments.
- Patients with generalized pruritus of nondermatologic cause should be screened for several underlying systemic disorders.

PRACTICE GAPS

Difficulty Measuring Pruritus

Pruritus or itch is a sensation that is characterized by an urge to scratch. Patients' report of pruritus is subjective and can be described as itching, burning, tingling, stinging, and so forth. Given the subjective nature of pruritus, it is often difficult to assess in clinical practice. There are currently no serologic or tissue markers clinically available to characterize the nature and/or intensity of itch (**Box 1**). In order to address this knowledge and skill gap, future studies are needed to identify biomarkers of itch that can be used in clinical practice. One approach to objectively assessing itch is to measure body movements that occur in scratching (ie, actigraphy). This approach has been used in research studies and clinical trials. However, the feasibility and validity of using actigraphy in clinical practice has not been established. Future studies are needed to determine whether actigraphy should have a role in clinical practice.

Clinical assessment of pruritus is currently limited to patient-reported outcomes, including the visual analog scale (VAS) and numeric rating scale (NRS). These tools have been previously validated.[1] Some experts have even suggested incorporating such measures of itch as a fifth vital sign in dermatology practice, similar to the routine use of similar scales for the assessment of pain. However, these scores are imperfect. Self-reported intensity of itch with VAS seems to not correlate well with objective measures of scratching using actigraphy.[2] Nevertheless, until optimal objective measures for itch are available for clinical practice, the VAS or NRS remain important tools for quantifying the intensity of itch. Alternatively, the patient-burden of itch on can be assessed using quality-of-life instruments (eg, Dermatology Life Quality Index, Skindex, or ItchyQOL). Unfortunately, standardized assessment of itch is rarely performed in dermatological practice outside of specialty centers. In order to address this practice gap, health care professionals in dermatology should consider routine screening of patients for

Financial Disclosures: None.
Conflicts of Interest: None.
Funding Support: This publication was made possible with support from the Agency for Healthcare Research and Quality (AHRQ), grant number K12HS023011, and the Dermatology Foundation.
[a] Department of Dermatology, Northwestern University Feinberg School of Medicine, 676 North St. Clair Street, Suite 1600, Chicago, IL 60611, USA; [b] Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, 676 North St. Clair Street, Suite 1600, Chicago, IL 60611, USA; [c] Department of Medical Social Sciences, Northwestern University Feinberg School of Medicine, 676 North St. Clair Street, Suite 1600, Chicago, IL 60611, USA; [d] Northwestern Medicine Multidisciplinary Eczema Center, 676 North St. Clair Street, Suite 1600, Chicago, IL 60611, USA
* Department of Dermatology, Northwestern University Feinberg School of Medicine, 676 North St. Clair Street, Suite 1600, Chicago, IL 60611, USA.
E-mail address: JonathanISilverberg@Gmail.com

Dermatol Clin 34 (2016) 257–261
http://dx.doi.org/10.1016/j.det.2016.02.008
0733-8635/16/$ – see front matter

Box 1
Practice gaps for the evaluation and management of itch

Practice gaps

Difficulty measuring itch

- Lack of biomarkers for itch
- Lack of objective measures of itch available for clinical use
- Infrequent use of validated patient-reported measures of itch by health care professionals

Lack of appreciation of the patient-burden of itch

Limited treatment options for itch

- There are no FDA-approved medications primarily indicated for the treatment of itch.
- Dermatologists often use non–evidence-based treatments for itch and may not be comfortable with prescribing some of the more effective treatments available.
- Antihistamines should not be a one-size-fits-all treatment of all pruritic disorders.
- Screening and referral for mental health comorbidity of itch are often not performed.

Lack of evidence for workup of generalized pruritus

- Generalized pruritus may be caused by several systemic disorders.
- There is no consensus for the optimal screening approach for systemic disease.

Educational gaps

Many dermatologic texts do not have sections devoted to the evaluation and management of pruritus.

Dermatology residency curricula should incorporate didactics devoted towards the evidence-based treatment of pruritus.

Abbreviation: FDA, Food and Drug Administration.

itch. At the very least, patients with chronic inflammatory skin disease or who present with a chief complaint of pruritus should be evaluated with VAS or NRS. Strategies to improve the clinical assessment of itch include incorporating the VAS or NRS into the electronic health record and incorporating itch assessments into the clinical workflow when patients are being roomed.

Lack of Appreciation of the Patient-Burden of Pruritus

Chronic pruritus is a very troubling symptom for patients and associated with poor health-related quality of life.[3,4] Previous studies found that itch causes just as much quality-of-life disturbance as does pain.[5] Chronic pruritus negatively effects all patients' activities of daily living and their emotional well-being.[3,4] Despite itch being a commonly reported symptom,[6] it is not routinely assessed by most clinicians. Patients often think that health professionals do not take their itch seriously,[7] which may result in inadequate treatment and poor patient satisfaction. To address these gaps, health care professionals should routinely ask patients about itch. Moreover, health care professionals should ask patients with pruritus about its impact on their quality of life. Finally, treatment decisions must factor in the patient-burden of itch. Health care professionals should consider adding and/or replacing itch treatments when the intensity of itch and quality-of-life disturbance are not improved by current therapy.

Limited Treatment Options for Pruritus

There are several gaps with respect to the treatment of itch. There are no Food and Drug Administration–approved medications primarily indicated for the treatment of itch. The mechanisms of itch are not fully understood, which has hindered development of novel therapeutic agents for pruritus. Moreover, itch seems to be mediated by complex signals from both peripheral and central nervous system pathways. It remains controversial whether future therapeutic development should target peripheral or central pathways. Future research is needed in order to better understand both the peripheral and central mechanisms for itch.

Moreover, far fewer randomized controlled trials have been performed to study the efficacy