NIH Is Moving Toward Itch Referral Centers

BY SHERRY BOSCHERT

EXPERT ANALYSIS FROM A DERMATOLOGY SEMINAR SPONSORED BY SKIN DISEASE EDUCATION FOUNDATION

LAS VEGAS – Improved understanding of itching and best practices in management of the condition may lead to U.S. medical centers specializing in treating pruritus.

A recent gathering of experts convened by the National Institutes of Health (NIH) may be the first step in this direction, Dr. Timothy G. Berger said at the meeting.

The National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) pulled together 50 physicians to discuss the topic of pruritus. One of a series of roundtable discussions held by NIAMS, this was the first to focus on itching. A summary of the meeting and a list of attendees has been posted on the NIAMS Web site, NIAMS media liaison Trish Reynolds said in an interview.

"These things are usually followed by calls for proposals," said Dr. Berger of the University of California, San Francisco (UCSF), who did not attend the roundtable discussion. "The NIH is moving to a model of having major itch referral centers at several sites."

Patients with itch would be referred to a center where their tissue samples and data could be stored and analyzed while they get expert treatment. "There will be direct translational benefits" from this approach, he predicted.

These centers would be patterned after two models – referral centers for pain, and European itch centers. The U.S. itch centers might first appear at UCSF; Washington University, St. Louis; and Harvard University, Boston, he said.

"In Europe, every patient with itch goes to a medical center for itch, is seen in a standard way, and has a defined database established about that patient. They now have tens of thousands of itch patients of various types logged into this database," and data it provides are helping to build greater understanding of the problem of itching, Dr. Berger said.

One of the key insights into itching in recent years has been the understanding that chronic itch is like chronic pain. Chronic itch is thought to begin peripherally but then trigger anatomic changes in the CNS that make treatment much more difficult. "This suggests that we will have agents that will act both peripherally and centrally" to ease itching, he said. "We're now at the verge of being able to do something about itching."

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DR. BERGER

Chronic itching should be treated aggressively because once central sensitization occurs, it is very, very hard to manage, he advised. Chronic itching has a huge impact on quality of life, earning the same scores by patients as the reduced quality of life reported by patients with chronic renal failure on dialysis.

Once itch is chronic, the threshold for sensation of itch is reduced. "Even if you make their rash better, they still itch," he said. Itch intensity increases with chronicity, producing more itch from the same rash. Even when the skin is clear, patients may have short bursts of spontaneous itch. In atopic dermatitis and perhaps some other forms of itchy lesions, patients may scratch themselves raw because inflammatory mediators of pain are perceived as itch.

"This whole system is miswired" in chronic itch, Dr. Berger said.

Perceived itch is a delicate interaction between the skin, nerves, and immune system, and treatments may target one or more of these pathways. The most common medication for chronic itch is second-generation antihistamines, in higher doses than used for the approved indication of allergic rhinitis. "These substances also block other inflammatory mediators that may be important for itch, so they may have benefit beyond what we know," Dr. Berger said.

Neuroleptic medications for itch include amitriptyline or other tricyclic antidepressants, gabapentin, pregabalin, duloxetine, or thalidomide for prurigo nodularis. "These act primarily on the neural axis," he said.

Central-acting agents include paroxetine, amitriptyline, doxepin, or mirtazapine. In a large European cohort, 6-9 months of treatment with paroxetine reduced chronic itch by 75% in 70% of patients. "It's now become one of our drugs to treat itch, and is the treatment of choice for itch in polycythemia vera," he said.

Research has shown that patients who have liver disease can develop itch caused by abnormalities in opiate metabolism, leading some clinicians to treat chronic itch with naltrexone, butorphanol, or other agents that act on the opiate pathway.

Phototherapy also has been used to treat chronic itch, including narrow-band UVB, psoralen plus UVA, or broadband UVB for itch associated with renal disease. "Phototherapy probably has an immunomodulatory effect that can benefit itch," Dr. Berger said.

Several European itch centers incorporate a biopsychosocial approach to managing itch. As with chronic pain, focusing on the itch through education and support from nurses helps reduce the itch and decrease feelings of helplessness or inability to cope. Patients miss less work and report more low-itch days and improved quality of life. "So, there's a biopsychosocial aspect that probably will need to be addressed," he said. Some U.S. centers have employed this approach in managing atopic dermatitis.

Dr. Berger has been a consultant for Prescription Solutions and received research funding from GlaxoSmithKline, Clinsys Clinical Research, Merz Pharmaceuticals, and Pharmanet, none of which is relevant to this topic, he said. All the medications for itching that he discussed are used off-label.

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Topical Coal Tar Could Make a Comeback for Psoriasis

BY SHERRY BOSCHERT

EXPERT ANALYSIS FROM A DERMATOLOGY SEMINAR SPONSORED BY SKIN DISEASE EDUCATION FOUNDATION

LAS VEGAS – Topical tar therapy for psoriasis may be making a comeback thanks to more user-friendly formulations.

That trend is happening in Europe and may be replicated in the United States, said Dr. Linda Stein Gold, director of dermatology research at Henry Ford Hospital, Detroit.

"Topical therapy is the bread and butter of psoriasis treatment," and coal tar has been used for centuries to control the symptoms of plaque psoriasis, she said. The Goeckerman regimen, a combination of topical tar and ultraviolet light therapy in use since the 1920s, proved "exceptionally" effective and durable, with an average time of 18 days to 90% clearing of psoriatic lesions and 90% of patients remaining clear for up to 8 months.

But tar therapy was time consuming, a logistical hassle, and aesthetically unpleasing, and its use declined in recent decades with the advent of systemic biologic medications. "People weren't using tar before because it's messy and it smelled. Now we have some better options," Dr. Stein Gold said.

One of the newer topical solutions is a transparent gel of 15% liquor carbonis distillate (LCD), the equivalent of 2.3% coal tar (Psorent, NeoStrata Co.). "It doesn't discolor bleached hair" when used for scalp psoriasis, it is quick-drying, and it comes in bottles with "dab-on" applicators so that patients don't have to come in contact with it, she said.

In a controlled comparison with calcipotriol cream in 12 weeks of treatment of 60 adults with moderate plaque psoriasis, the LCD solution was more effective and led to fewer relapses 6 weeks after treatment. Among 55 patients with complete data, mean Psoriasis Area Severity Index (PASI) scores improved by 58% in the LCD solution group and 37% in the calcipotriol group, a significant difference (J. Am. Acad. Dermatol. 2009;60 [issue 3, suppl. 1]:Ab174 [doi: 10.1016/j.jaad.2008.11.757]).

A 75% improvement in PASI scores was seen in 11 of 27 (41%) of the LCD solution group and none of the 28 patients on calcipotriol. A 50% improvement in PASI scores was seen in 18 of 27 (67%) in the LCD group and 10 of 28 (36%) in the calcipotriol group. These differences between groups were statistically significant.

Among 42 patients with Physician Global Assessment (PGA) scores 6 weeks after treatment, the PGA scores worsened to baseline in 5 of 22 patients (23%) in the LCD solution group and in 14 of 20 patients (70%) in the calcipotriol group, again a significant difference.

A separate study compared the LCD solution in combination with UVB therapy on one side of the body with UVB light therapy alone on the other side of the body in 12 patients in 4 weeks of therapy. "Very quickly, the combo therapy gets more rapid and complete efficacy compared with UVB alone," said Dr. Stein Gold (J. Drugs Dermatol. 2009;8:351-7).

Another relatively user-friendly product is an over-the-counter 2% coal tar formulation in a foam base (Scytera, Promius Pharma). The foam is "a much more cosmetically elegant" treatment compared with older tar therapies, she said. It spreads easily, dries quickly, and has an acceptable fragrance, Dr. Stein Gold added.

In a randomized, observer-blind study of 38 patients with chronic plaque-type psoriasis, two lesions on each patient were treated for 8 weeks with a 1% coal tar foam or calcipotriol cream. The treatments appeared to be comparably effective. More patients reported itching, unpleasant odor or staining with the tar foam than with calcipotriol cream, but the foam is considerably less expensive, the investigators noted (Br. J. Dermatol. 2003;149:350-3).

"Tar is something we probably should look at again," Dr. Stein Gold said.

Other useful topical therapies include corticosteroids, she said. While studies with objective measures of atrophy have proved that potent topical corticosteroids do lead to thinning of the skin over time, often this effect is not clinically noticeable, and it reverses over time once treatment is stopped.

Topical vitamin D is complementary to topical steroids for psoriasis therapy and helps counteract some of the side effects of topical steroids on skin.

Dr. Stein Gold said she has had financial associations with Leo Pharma, Medicis Pharmaceutical Corp., Stiefel Laboratories, Galderma, and Novartis. SDEF and this news organization are owned by Elsevier. ■