Proper Preop Makes for Easier Toenail Surgery

BY JEFF EVANS
Senior Writer

WASHINGTON — Proper early management of ingrown toenails may help to decrease the risk of recurrence whether or not surgery is necessary, Dr. C. Ralph Daniel III said at the annual meeting of the American Academy of Dermatology.

"An ingrown nail is primarily acting as a foreign-body reaction. That rigid spicule penetrates soft surrounding tissue" and produces swelling, granulation tissue, and sometimes a secondary infection, said Dr. Daniel of the departments of dermatology at the University of Mississippi, Jackson, and the University of Alabama, Birmingham.

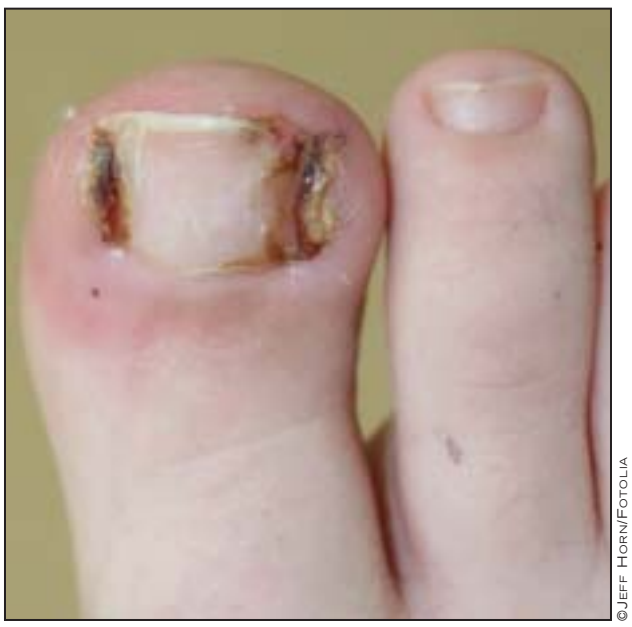
For the early management of stage I ingrown toenails in which some granulation tissue but no infection is present, Dr. Daniel said he has trained a nurse to push wisps of cotton gently under the ingrowing nail by using a 2-mm nail elevator or a 1- to 2-mm curette. This procedure can be repeated as often as is needed.

He also uses a technique for early-stage ingrown toenails in which dental floss is inserted under the ingrown nail corner without anesthesia and is kept there to separate the nail edge from adjacent soft tissue (J. Am. Acad. Dermatol. 2004;50:939-40).

Dr. Daniel advises patients to combat the inflammation present in early stages (without infection) by soaking the toe for 10 minutes in 1-2 teaspoons of salt or Epsom salt in a liter of cold water. After drying off the toe, patients apply a mid- to high-potency topical steroid to the nail fold. These steps are repeated three times a day for 7-10 days.

When the cotton, dental floss, and/or toe soak methods are used, he advises patients to apply 30%-40% urea twice daily to soften the nail plate and decrease rigidity and the "splinterlike" effect.

In one procedure, reported as being successful for avoiding surgery, a plastic gutter tube is set under the ingrown part of the nail and acrylic is sculpted and allowed to polymerize around the ingrown part of the nail and hold the gutter tube in place. The tubes are removed after the inflammation has subsided and the nail has grown (Int. J. Dermatol. 2004;43:759-65).



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Surgery should not be performed on a patient with an ingrown toenail until the inflammation as been curbed.

Dr. Daniel said surgery should not be performed on a patient with an ingrown toenail in a more advanced stage until the level of inflammation has been reduced with salt soaks in warm water (not cold, because of the possibility of infection) and topical application of steroids three times a day for about a week. He added that urea is not often used in these cases because it doesn't seem to work as well as it does for early-stage ingrown toenails. In cases of suspected secondary infection, he usually prescribes 500 mg cephalexin (Keflex) four times per day; this prescription may change if the bacterial culture and sensitivity report indicates a different antibiotic may be better.

Before surgery, one should allow for time for anesthesia using a digital block or a distal approach to take effect. Premedication with NSAIDs, codeine, or dextropropoxyphene also may be appropriate, he said.

To cut away the offending section of nail, an English anvil nail splitter is inserted under the nail plate and the cut is made all the way to the proximal nail fold. The hypertrophic, granulated tissue should be cut away as well. Many ingrown toenails are recurrent, so Dr. Daniel performs a chemical matricectomy in nearly all patients after making sure that the surgical field is dry and bloodless.

The proximal nail fold can be flared back to expose more of the proximal matrix if necessary. Dr. Daniel inserts a Calgiswab coated with 88% phenol or 10% sodium hydroxide and applies the chemical for 30 seconds to the portion of the nail matrix that needs to be destroyed. This procedure is repeated three times, each time with a new Calgiswab. The chemical then is rinsed out with saline or alcohol.

An Ellman electrode can be used to electrodesiccate the matrix, followed by curettage. The CO_2 laser also has been used to perform a partial matricectomy after removal of the nail spicule and staining of the nail matrix with methylene blue (Dermatol. Surg. 2005;31:302-5).

After surgery, Dr. Daniel applies bacitracin/polymyxin ointment, followed by a Telfa pad, 2-by-2-inch or 4-by-4-inch dressings, tube gauze, and then paper tape, making sure that the dressing is not too tight.

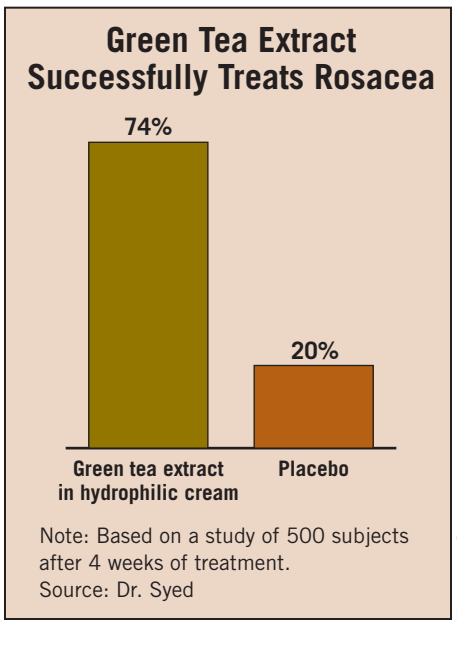
The foot should be elevated as much as possible during the first 24 hours and kept in an orthopedic shoe or old tennis shoe with the toe cut out. After 48 hours, the toe can be soaked in a warm salt bath for 20 minutes. Each soak should be followed with bacitracin/polymyxin ointment and a large adhesive bandage or bulky dressing. These steps are repeated three to four times a day for 1-2 weeks. Some physicians routinely add an oral antibiotic.

Dr. Daniel formerly was on the board of directors for Doak Dermatologics, a subsidiary of Bradley Pharmaceuticals Inc., which manufactures urea-based products for nail care. He holds stock options and has served as a speaker, consultant, and investigator for the company. ■

Rosacea Lesion Count Drops With Use of Green Tea Cream

BY DENISE NAPOLI
Assistant Editor

WASHINGTON — Twice-daily application of 2% polyphenone (–)-epigallocatechin-3-gallate (ECGC [green tea extract]) in a hydrophilic cream significantly reduced inflammatory lesion counts in patients with papulopustular rosacea, Dr. Tanweer Syed and colleagues wrote in a poster presented at the annual meeting of the American Academy of Dermatology.



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In this double-blind study, Dr. Syed—partial owner of Syed Skin Care Inc., San Francisco, which sells a version of this product—and coworkers randomized 500 subjects (315 women) with papulopustular rosacea into two groups. One group received 50 g of a hydrophilic cream containing 2% polyphenone ECGC; the other received 50 g of a placebo cream.

The patients (average age 30 years) applied the cream twice a day for 4 weeks, with a maximum of 56 applications. They were evaluated weekly using photographic and optical techniques. Tolerability and adverse effects were graded according to duration (in days) and severity (mild, moderate, or severe). Patients with connective tissue diseases or acne, on immunosuppressive regimens, and with use of topical steroids within the previous 12 weeks were excluded.

After 4 weeks, 74% of patients in the active treatment group showed success, meaning significant reduction in mean inflammatory lesion count, compared with 20% of those on placebo. Three-quarters of the funding for this study was provided by Syed Skin Care Inc., the authors said. ■

Infant Atopic Dermatitis May Signal Elevated Asthma Risk

BY DOUG BRUNK
San Diego Bureau

SAN DIEGO — Serum IgE levels are increased in children aged 3-18 months with atopic dermatitis, suggesting they are at risk of developing asthma and allergies, baseline results from the Study of the Atopic March demonstrated.

The purpose of the Study of the Atopic March (SAM) trial is to determine if treatment with pimecrolimus 1% cream in infancy improves control of atopic dermatitis and reduces the incidence of asthma and allergies at 6 years of age, said Dr. Mark Boguniewicz in an interview during a poster session at the annual meeting of the American Academy of Allergy, Asthma, and Immunology.

In a multicenter study funded by Novartis Pharmaceuticals Corp., which developed and markets the pimecrolimus 1% cream Elidel, Dr. Boguniewicz and his associates enrolled 1,091 infants aged 3-18 months who have a family history of atopy and who had clinical evidence of atopic dermatitis for up to 3 months. They conducted an allergy history and total and antigen-specific IgE assessments.

In the treatment component of the trial, children are enrolled in a double-blind phase for 3 years, followed by a 33-month open-label phase for eligible participants. The study presented at the meeting was limited to baseline results.

The mean age of patients at baseline was 8 months, and more than half (62%) were male, reported Dr. Boguniewicz, a pediatric allergist with the National Jewish Medical and Research Center in Denver. The researchers conducted baseline IgE tests on 926 of the children. The median total IgE level was 14 kU/L and was higher for children with moderate atopic dermatitis than for those with mild atopic dermatitis (a median of 18 kU/L vs. 11 kU/L, respectively).

The researchers also observed that children who had more severe atopic dermatitis or who were older at baseline had higher total IgE levels, compared with children who had mild atopic dermatitis or who were younger at baseline.

Baseline tests for antigen-specific IgE showed that almost one-third (29%) were sensitive to egg, whereas 25% were positive to peanut, 22% were positive to milk, and 16% were positive to animal dander.

Dr. Boguniewicz is a scientific advisor to Novartis Pharmaceuticals Corp. ■