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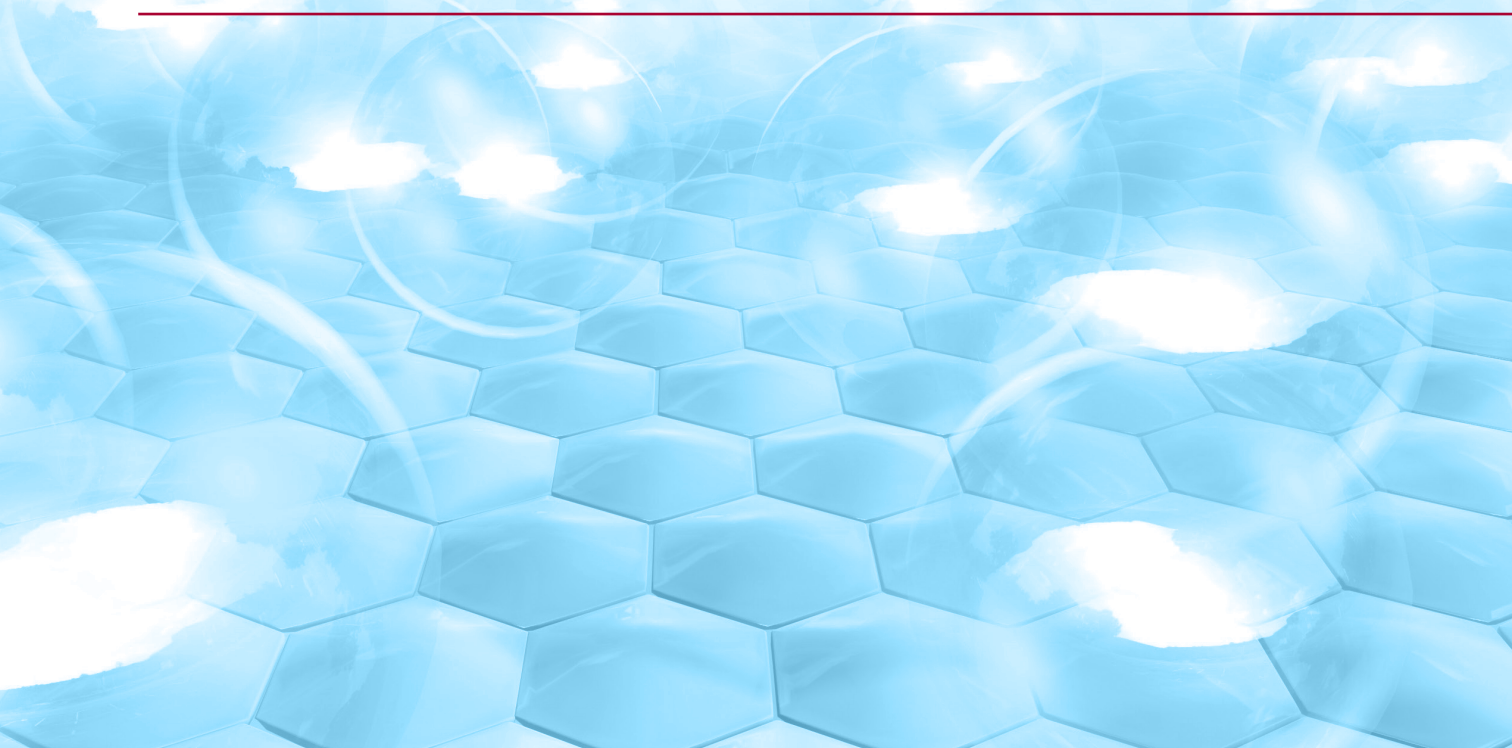
CUTANEOUS MEDICINE FOR THE PRACTITIONER

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PEARLS IN DERMATOLOGY

2017

TIPS FOR DIAGNOSIS, PATIENT CARE,
AND SURGICAL TECHNIQUE



INTRODUCTION

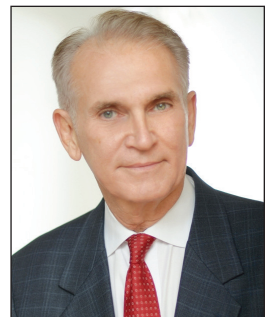
In this age of modern medicine, short concise clinical pearls can make a big impact on patient care in dermatology. Throughout the year we publish Practical Pearls From the *Cutis*® Board, which features advice from experts on our Editorial Board about various disease states, as well as Clinical Pearls, which are short pieces that are submitted to the journal and peer reviewed. Both types of content serve our readers well in providing tips for diagnosis, patient care, and surgical technique, topic areas that impact all practicing dermatologists.

This collection consists of our popular pearls from the year in one convenient file. I have provided an Editor's Commentary for each pearl (pages 3 and 4), highlighting how we can apply these pearls to our everyday practice of medicine.

Save this collection, print it, and/or share it with your colleagues. Any suggestions for topics in the coming year can be sent to our Editorial Office (cutis@frontlinemedcom.com).

We hope these pearls will make a positive impact on how you manage and treat your patients.

Vincent A. DeLeo, MD
Editor-in-Chief, Cutis



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Shari R. Lipner, MD, PhD; Matilde Iorizzo, MD, PhD

EDITOR'S COMMENTARY

As clinicians, it is essential that we learn to diagnose arthritis in our psoriasis patients because early recognition and systemic treatment is necessary to prevent crippling joint outcomes, even in patients with limited skin disease in whom such therapy would not otherwise be warranted.

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Psoriasis on the Hands and Feet: How Patients Should Care for These Areas

Jeffrey M. Weinberg, MD

EDITOR'S COMMENTARY

Dr. Weinberg has done a great service by giving clinicians quick guidelines for dealing with patients with psoriatic involvement of the hands and/or feet. Even in those with limited disease involvement in other body sites, management of psoriasis in these areas is of utmost importance to the quality of life in affected patients.

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Carrie Kovarik, MD

EDITOR'S COMMENTARY

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Stephen P. Stone, MD

EDITOR'S COMMENTARY

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Cosmeceuticals and Alternative Therapies for Rosacea

Maritza I. Perez, MD

EDITOR'S COMMENTARY

Anyone who has worked with Dr. Perez knows she is a no-nonsense, goal-oriented, evidence-based clinician. Who better to approach a controversial area such as alternative therapy for our patients with rosacea? This advice can be applied to all of our rosacea patients but is particularly useful for those who prefer a "natural" approach.

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Clinical Pearl: Mastering the Flexible Scalpel Blade With the Banana Practice Model

Wesley Wu, MD; Leonard Goldberg, MD; Marc Rubenzik, MD; Blake Zelickson, MD

EDITOR'S COMMENTARY

Banana? Don't laugh. This pearl is nothing short of inspired, and the authors do a great service to those in training as well as many of us older clinicians who can always improve our technical skills, especially with a procedure we do so frequently. I suggest our readers get a banana and give it a try. Our patients can only benefit!

Clinical Pearl: Early Diagnosis of Nail Psoriasis and Psoriatic Arthritis

Psoriatic arthritis (PsA) is more common in patients with nail psoriasis. Radiograph imaging is a quick, inexpensive, and valuable diagnostic technique for PsA in patients with nail psoriasis.

Shari R. Lipner, MD, PhD; Matilde Iorizzo, MD, PhD

Practice Gap

Early diagnosis of nail psoriasis is challenging because nail changes, including pitting, subungual hyperkeratosis, crumbling, oil spots, salmon patches, onycholysis, and splinter hemorrhages, may be subtle and nonspecific. Furthermore, 5% to 10% of psoriasis patients do not have skin findings, making the diagnosis of nail psoriasis even more difficult. Psoriatic arthritis (PsA) is more common in patients with nail psoriasis than in those with cutaneous psoriasis, and early joint damage may be asymptomatic.¹ Both nail psoriasis and PsA may progress rapidly, leading to functional impairment with poor quality of life.²

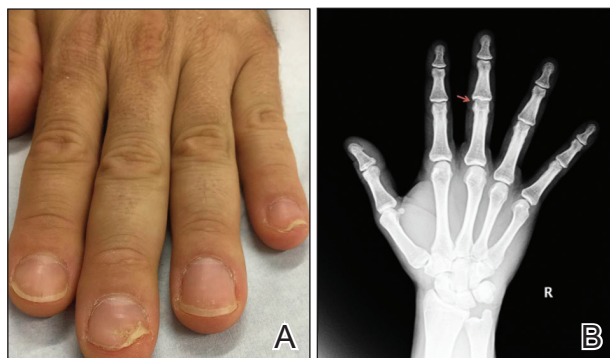
Diagnostic Tool

A 36-year-old man presented with a 4-year history of abnormal fingernails. He denied nail pain but stated that the nails felt sensitive at times and it was difficult to pick up small objects. His medical history was notable for type 2 diabetes mellitus, hypertension, and attention deficit disorder. He denied joint pain or skin rash.

Physical examination revealed pitting and onycholysis of the fingernails (Figure, A) without involvement of the toenails. A nail clipping was negative for fungus but revealed an incompletely keratinized nail plate with subungual parakeratotic scale, consistent with nail psoriasis. A radiograph showed erosive changes of the third finger of the right hand that were compatible with PsA (Figure, B).

Practice Implications

A nail clipping may be performed to diagnose nail psoriasis. Imaging and/or referral to a rheumatologist



Onycholysis and subungual hyperkeratosis of the second and fifth fingernails of the left hand as well as pitting of the third and fourth fingernail (A). A radiograph of the third finger of the right hand showed erosive changes (B).

should be performed in all patients with isolated nail psoriasis to evaluate for early arthritic changes. If present, appropriate therapy is initiated to prevent further joint damage. In patients with nail psoriasis with or without associated joint pain, dermatologists should consider using radiograph imaging to screen patients for PsA.

REFERENCES

1. Balestri R, Rech G, Rossi E, et al. Natural history of isolated nail psoriasis and its role as a risk factor for the development of psoriatic arthritis: a single center cross sectional study [published online September 2, 2016]. *Br J Dermatol*. doi:10.1111/bjd.15026.
2. Klaassen KM, van de Kerkhof PC, Pasch MC. Nail psoriasis, the unknown burden of disease [published online January 15, 2014]. *J Eur Acad Dermatol Venereol*. 2014;28:1690-1695.

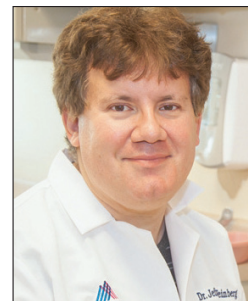
Editor's Note: To submit a clinical pearl, contact our Editorial Office at cutis@frontlinemedcom.com.

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Psoriasis on the Hands and Feet: How Patients Should Care for These Areas



Jeffrey M. Weinberg, MD

Patients need to be educated about the nature and causes of hand and foot psoriasis, as the condition can adversely affect quality of life and occupational performance. Herein, tips for patients on proper care of the hands and feet are provided as well as treatment options.

What does your patient need to know at the first visit?

Patients with this condition need to avoid friction and excessive moisture. They should be counseled to use gloves for excessive wet work. I recommend they use cotton gloves on the hands, and then cover those with rubber gloves. Patients should use a hand emollient regularly, including after each time they wash their hands or have exposure to water. If the patient lifts weights, I recommend he/she use weight-lifting gloves to reduce friction.

What are your go to treatments? What are the side effects?

The first line of therapy for hand and foot psoriasis is a topical agent. I most often use a combination of topical steroids and a topical vitamin D analogue. If insurance is amenable, I may use a fixed combination of topical steroid and vitamin D analogue.

If topical therapies are not successful, I often consider using excimer laser therapy, which requires the patient to come to the office twice weekly, so it is important to determine if this therapy is compatible with the patient's schedule. Other options include oral and biological therapies. Apremilast is a reasonable first-line systemic therapy given that it is an oral therapy, requires no laboratory monitoring, and has a favorable safety profile. Alternatively, biologic agents can be utilized. There are several analyses available looking at the efficacy of different biologics in hand and foot psoriasis, but at this point there is

no consensus first choice for a biologic in this condition. Many available biologics may have a notable impact though.

The side effects of therapies for psoriasis are well established. Topical therapies and excimer laser are relatively safe choices. Apremilast has been associated with early gastrointestinal tract side effects that tend to resolve over time. Each biologic has a unique safety profile, with a rare incidence of side effects that should be reviewed carefully with any prospective patients before starting therapy.

How do you keep patients compliant with treatment?

It is important to reinforce gentle hand care and foot care. Patients need to understand that lack of compliance with treatment will lead to recurrence of disease.

What do you do if patients refuse treatment?

I try to educate them as best as possible, and ask them to return and reconsider therapy if they find that this condition affects their quality of life.

RELATED PRACTICAL PEARLS ONLINE

Addressing Patient Concerns on Biologics for Psoriasis
>> <http://bit.ly/2nwcNHa>

Treating Psoriasis in Pregnant Women
>> <http://bit.ly/2nwjvmJ>

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Genital Wart Treatment

Carrie Kovarik, MD

A thorough patient history is essential to risk stratify a patient with genital warts and determine the best method for treatment and disease surveillance. Herein, discussion points for patient visits and treatment approaches are provided.



What does your patient need to know?

When a patient presents with a history of genital warts (GWs), find out when and where the lesions started; where the lesions are currently located; what new lesions have developed; what treatments have been administered (eg, physician applied, prescription) and which one(s) worked; what side effects to treatments have been experienced and at what dose; does a partner(s) have similar lesions; is there a history of other sexually transmitted diseases or genital cancer; is he/she immunocompromised (eg, human immunodeficiency virus, transplant, medications); and what is his/her sexual orientation.

Once all of the information has been gathered and the entire anogenital region has been examined, a treatment plan can be formulated. If the patient is immunocompromised or is a man who has sex with men, the risk for anogenital malignancy due to human papillomavirus (HPV) is higher, and GWs, which can be coinfecting with oncogenic HPV types, should be treated more aggressively. If the patient is still getting new lesions, use of only a destructive method such as cryotherapy will likely lead to suboptimal results.

Any patients with GWs in the anal region but particularly those in high-risk groups such as men who have sex with men and human immunodeficiency virus-infected patients should have an anoscopy to evaluate for lesions on the anal mucosa and in the rectum.

What are your go-to treatments?

Prior treatments need to be taken into account; make sure to understand any side effects and how he/she applied the prior treatment before eliminating it as a viable option. Treatment usually depends on the number of lesions, surface area, anatomic locations involved, and size of the lesions. I start with a 2-pronged

approach—a debulking therapy and a patient-applied topical therapy—which allows me to physically remove some of the lesions, typically the larger ones, and then have the patient apply a topical medication at home that will treat the smaller lesions as well as help to clear or decrease the burden of HPV virus on the skin. I use cryotherapy as a debulking agent, but curettage or podophyllin 25% also can be used in the office. I use imiquimod cream 5% as a first-line topical agent at the recommended dose of 3 times weekly; however, if after the first 2 weeks the patient has little response or too much irritation, I titrate the dose so that the patient has mild inflammation on the skin. The dose ultimately can range from daily to once weekly. Some patients who can only tolerate imiquimod once or twice weekly may require zinc oxide paste for the inguinal folds and scrotum to protect from irritation. Alternate topical medications for GWs include sinecatechins ointment 15% or cidofovir ointment 2%.

How do you keep patients compliant?

Start the visit with open communication about the disease, where it came from, what the risks are if it is not treated, and how we can best treat it to make sure we minimize those risks. I explain all of the treatment options as well as our role in treating these lesions and minimizing the risk for disease progression.

What do you do if they refuse treatment?

Most patients with GWs are motivated to be treated. If pain is a concern, such as with cryotherapy, I recommend topical treatments.

What patient resources do you recommend?

The American Academy of Dermatology (<https://www.aad.org/public/diseases/contagious-skin-diseases/genital-warts>), Harvard Medical School patient education center (Boston, Massachusetts) (<http://www.patienteducationcenter.org/articles/genital-warts/>), and *American Family Physician* (<http://www.aafp.org/afp/2004/1215/p2345.html>) provide patient materials that I recommend.

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Isotretinoin for Acne: Tips for Prescribing and Managing Patient Concerns



Stephen P. Stone, MD

Isotretinoin may be a useful treatment for patients with severe acne. The physician, the pharmacy, and the patient must be registered with the iPLEDGE program (<https://www.ipledgeprogram.com>). These pearls provide guidance on managing acne with isotretinoin, discussing side effects and false information with patients and/or parents/guardians, and providing reliable resources to them.

What does your patient need to know at the first visit?

Most important is what *you* need to know before the first visit. As the prescribing physician, you must be familiar with the iPLEDGE program. Because of the complexity of the program, consider identifying a physician in your area to refer patients if you are not going to be a regular prescriber of the medication.

If you are enrolled in iPLEDGE, let your patients (and/or their parents/guardians) know that there is a great deal of misinformation on the Internet. Reiterate that you and your staff are available to discuss their concerns. Also, give them reliable sources of information, such as the American Academy of Dermatology's patient information sheet (<https://www.aad.org/public/diseases/acne-and-rosacea/isotretinoin-treatment-for-severe-acne>) as well as the Mayo Clinic's acne information (<http://www.mayoclinic.org/diseases-conditions/acne/basics/treatment/con-20020580>). Drugs.com is another resource (<https://www.drugs.com/cdi/isotretinoin.html>).

All patients—males, females who cannot become pregnant, and females of childbearing potential (FCBPs)—must be aware that this medication can cause birth defects if taken during pregnancy. They must be informed that the medication is not to be

shared with anyone and that they should not give blood while taking this medication.

What treatment course do you recommend?

My evidence-based approach is a course of isotretinoin totaling a minimum of 150 mg per kilogram body weight. Do not give a more abbreviated course unless the patient has cleared early; even then I tend to complete 150 mg when possible. There is published evidence that pushing the course to a total of 220 mg per kilogram body weight results in a longer remission.

Generally, I do few laboratory tests other than pretreatment lipid panels as well as 1 or 2 follow-up lipid panels at monthly intervals. To comply with the iPLEDGE program, FCBP patients must have a monthly pregnancy test, which is reported on the iPLEDGE website before the patient can be prescribed the drug and receive the drug from a pharmacist who is participating in the iPLEDGE program.

One of the defects of the iPLEDGE system is that although only a 30-day supply of pills can be prescribed, it is difficult to always bring a patient back in exactly 30 days; for example, we work on a 4-week cycle and 30 days brings us into the next week or uncommonly the weekend when we do not see patients. Our male patients or females not of childbearing potential are not affected, but for our FCBP patients, it means usually scheduling visits at 35-day intervals because the pregnancy tests must be performed at minimum 28-day intervals and the prescription cannot be written and the pregnancy test recorded until after at least 30 days.

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What are the side effects?

The common side effects are what you would expect from a medicine that is supposed to dry up the oil on your skin: dryness of the lips, mouth, and skin, as well as rashes due to the dryness. There also can be minor swelling of the eyelids or lips, nosebleeds, upset stomach, and thinning of the hair; dryness of the scalp may occur. I recommend using a little petroleum jelly inside the nostrils at night to counteract the dryness that leads to nosebleeds, and saline drops or gel for the eyes, especially for contact lens wearers.

Joint aches and pains have been reported, though I rarely see those effects in patients who are physically active such as those participating in competitive sports. Mood changes have been reported, including suicidal ideation.

What do you do if patients refuse treatment?

There is so much false information on the Internet about the dangers of isotretinoin, leaving some patients (and parents/guardians) too afraid to use it. I sympathize with this anxiety, but I do endeavor

to point out that the birth defects occur *only* in women taking the drug while pregnant and have not been reported to occur after the drug is out of the patient's system.

Similarly, I point out that almost all of the evidence-based studies failed to confirm any association between the use of isotretinoin and depression, teenage suicide, and subsequent inflammatory bowel disease. Nonetheless, I mention these issues and recommend that the parents/guardians observe the teenager; in the case of adult patients, they themselves must be sensitive to symptoms.

SUGGESTED READINGS

American Academy of Dermatology Association. Position statement on isotretinoin. <https://www.aad.org/Forms/Policies/Uploads/PS/PS-Isotretinoin.pdf>. Published December 9, 2000. Updated November 13, 2010. Accessed May 18, 2017.

Blasiak RC, Stamey CR, Burkhart CN, et al. High-dose isotretinoin treatment and the rate of retreatment, relapse, and adverse effects in patients with acne vulgaris. *JAMA Dermatol*. 2013;149:1392-1398.

Cosmeceuticals and Alternative Therapies for Rosacea

Maritza I. Perez, MD

Rosacea is a skin condition mediated by a proinflammatory predisposition on the skin. A cosmeceutical approach supports the stable microbiome of the skin to maintain the health of the skin barrier. Herein, a regimen including cleansers, barrier repair creams, supplements, and antioxidants is provided, as well as alternative therapies.

What do your patients need to know?

Vascular instability associated with rosacea is exacerbated by triggers such as sunlight, hot drinks, spicy foods, stress, and rapid changing weather, which make patients flush and blush, increase the appearance of telangiectasia, and disrupt the normal skin barrier. Because the patients feel on fire, an anti-inflammatory approach is indicated. The regimen I recommend includes mild cleansers, barrier repair creams and supplements, antioxidants (topical and oral), and sun protection, all without parabens and harsh chemicals. I always recommend a product that I dispense at the office and another one of similar effectiveness that can be found over-the-counter.

What are your go-to treatments?

Cleansing is indispensable to maintain the normal flow in and out of the skin. I recommend mild cleansers without potentially sensitizing agents such as propylene glycol or parabens. It also should have calming agents (eg, fruit extracts) that remove the contaminants from the skin surface without stripping the important layers of lipids that constitute the barrier of the skin as well as ingredients (eg, prebiotics) that promote the healthy skin biome. Selenium in thermal spring water has free radical scavenging and anti-inflammatory properties as well as protection against heavy metals.

After cleansing, I recommend a product to repair, maintain, and improve the barrier of the skin. A healthy skin barrier has an equal ratio of cholesterol, ceramides, and free fatty acids, the building blocks of the skin. In a barrier repair cream I look for ingredients that stop and prevent damaging inflammation, improve the skin's natural ability to repair and heal (eg, niacinamide), and protect against environmental insults. It should contain petrolatum and/or dimethicone to form a protective barrier on the skin to seal in moisture.

Oral niacinamide should be taken as a photoprotective agent. Oral supplementation (500 mg twice daily) is effective in reducing skin cancer. Because UV light is a trigger factor, oral photoprotection is recommended.

Topical antioxidants also are important. Free radical formation has been documented even in photoprotected skin. These free radicals have been implicated in skin cancer development and metalloproteinase production and are triggers of rosacea. As a result, I advise my patients to apply topical encapsulated vitamin C every night. The encapsulated form prevents oxidation of the product before application. In addition, I recommend oral vitamin C (1 g daily) and vitamin E (400 U daily).

For sun protection I recommend sunblocks with titanium dioxide and zinc oxide for total UVA and UVB protection. If the patient has a darker skin type, sun protection should contain iron oxide. Chemical agents can cause irritation, photocontact dermatitis, and exacerbation of rosacea symptoms. Daily application of sun protection with reapplication every 2 hours is reinforced.

What holistic therapies do you recommend?

Stress reduction activities, including yoga, relaxation, massages, and meditation, can help. Oral consumption of trigger factors is discouraged. Antioxidant green tea is recommended instead of caffeinated beverages.

SUGGESTED READINGS

- Baldwin HE, Bathia ND, Friedman A, et al. The role of cutaneous microbiota harmony in maintaining functional skin barrier. *J Drugs Dermatol.* 2017;16:12-18.
- Celerier P, Richard A, Litoux P, et al. Modulatory effects of selenium and strontium salts on keratinocyte-derived inflammatory cytokines. *Arch Dermatol Res.* 1995;287:680-682.
- Chen AC, Martin AJ, Choy B, et al. A phase 3 randomized trial of nicotinamide for skin cancer chemoprevention. *N Engl J Med.* 2015;373:1618-1626.
- Jones D. Reactive oxygen species and rosacea. *Cutis.* 2004;74(suppl 3):17-20.

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Clinical Pearl: Mastering the Flexible Scalpel Blade With the Banana Practice Model

Wesley Wu, MD; Leonard Goldberg, MD; Marc Rubenzik, MD; Blake Zelickson, MD

This article describes the various applications of the flexible scalpel blade (FSB), the utility of the banana as a convenient and exceptional training instrument, and the intricacies of mastering the technique for students of different training levels.

Cutis. 2017;100:169-170.

The flexible scalpel blade (FSB) is a 2-sided hand-held razor blade that serves as a pivotal instrument in certain dermatologic procedures. Its unrivaled sharpness¹ permits pinpoint precision for shave biopsies, excisions of superficial lesions,² scar contouring, and harvesting of split-thickness skin grafts.³ Given its flexibility and long edge, considerable manual dexterity and skill are required to maximize its full potential.

Practice Gap

Prior to practicing on live patients, students on clinical rotation would benefit from *in vitro* skin simulators to practice correct hand position, FSB control for concave and convex surface cutting, and safety. Prior practice models have included mannequins, tomatoes, and eggplants^{4,5} Here, the authors recommend the use of a banana (genus *Musa*). In addition to its year-round availability, economic feasibility, simplicity, and portability, the banana has colored skin that well represents the epidermis, dermis, and subcutaneous tissue, allowing for visual feedback. Furthermore, its contour irregularities simulate convexities and concavities for various anatomic locations. Although the firmness of a yellow-green banana provides immediate tissue feedback, the softness and pliability of a ripe banana simulates the consistency of older skin and the use of appropriate traction.

Tools

To begin, one simply requires a marking pen, banana, and razor blade. Various shapes, including a circle, ellipse, rectangle, trapezoid, triangle, and multilobed lesion are demarcated by students or attendings (Figure 1). Careful removal of the pieces helps students improve dexterity, develop feel for the entire edge of the razor blade, and acquire muscle memory for these skilled movements (Figure 2). Three-dimensional spatial reasoning is honed with practice using the FSB to control appropriate thickness and defect depth while creating a smooth bevel around the entire perimeter, which is important for optimal cosmesis in second intention healing or grafting. The shallower the defect created, the faster the healing and the greater the reduction in contracture. Although downward pressure is important to prevent buttonholing or



FIGURE 1. Banana with marked lesions. From left to right: circle, ellipse, rectangle, trapezoid, triangle, and multilobed lesion.

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FIGURE 2. Defects with smooth bevel and floor after shave removal using the banana practice model.

tearing of the tissue being removed, the angle of the blade relative to the tissue must be assessed at all points, and the alteration in color and fiber orientation signify change in depth of the banana peel.

The Technique

To handle the FSB, one can hold the lateral edges of the blade between the thumb and index finger or between the thumb and middle finger. The thumb and index finger position allows for additional flexible working space and visualization, increased traction by the remaining 3 fingers, and greater ease of removal of lesions with considerable height. The thumb and middle finger hold allows for versatile use of the index finger of the same hand for stabilizing the center of the blade, fixing the tissue on the FSB while it is removed, and sliding the specimen off the FSB. It is important to maintain a fixed distance from the blade to the metacarpals at all times to ensure smooth advancement of the blade and visualization. Beginners can lift the pinky finger of the hand holding the FSB and move the finger up and down to control the angle of the blade.

Practice Implications

Generally, we utilize various techniques of shaving using the FSB. We approach the target lesion 2 to 3 mm from

the marked location and slide parallel to the skin surface and perpendicular to the lesion until the epidermis is penetrated. Second, we advance the blade toward the lesion with careful attention paid to the perimeter of the lesion and the points of contact of the FSB. For lesions with harder consistencies, a sawing motion of the blade is employed, which also requires controlled tilting of the wrist to maintain an even depth and smooth bevel. To cut deeper, flexing the FSB with lateral pressure is helpful. More shallow lesions require the instrument to be flatter and less bowed. When finishing the shave, it is important to start angling the blade upward early, either at the center of the targeted lesion or 2 to 3 mm before the demarcated edge of the skin graft, while applying traction away from the lesion and slight downward pressure with the nondominant hand.

For larger lesions, the perimeter may be more difficult to remove precisely and can be achieved by rotating the blade around the lesion with focus on one point of contact of the FSB to cut and glide through the tissue's perimeter. To achieve a more exact wound edge and to preclude jagged borders, a No. 15 blade can be used to score the perimeter very superficially to the papillary dermis prior to shave removal. The main disadvantage, however, is that the beveled edge is removed.

In summary, the FSB is an exceptional tool for biopsies, tumor removal, scar contouring, and split-thickness skin grafts. Through the banana practice model, one can attain fine control and reap the benefits of the FSB after meticulous and dedicated training.

REFERENCES

1. Awadalla B, Hexsel C, Goldberg LH. The sharpness of blades used in dermatologic surgery. *Dermatol Surg.* 2016;42:105-107.
2. Vergilis-Kalner JJ, Goldberg LH, Firoz B, et al. Horizontal excision of in situ epidermal tumors using a flexible blade. *Dermatol Surg.* 2011;37:234-236.
3. Hexsel CL, Loosemore M, Goldberg LH, et al. Postauricular skin: an excellent donor site for split-thickness skin grafts for the head, neck, and upper chest. *Dermatol Surg.* 2015;41:48-52.
4. Chen TM, Mellette JR. Surgical pearl: tomato—an alternative model for shave biopsy training. *J Am Acad Dermatol.* 2006;54:517-518.
5. Wang X, Albahrani Y, Pan M, et al. Skin simulators for dermatological procedures. *Dermatol Online J.* 2015;21. pii:13030/qt33j6x4nx.