

Ten Things Physicians and Patients Should Question

1

Don't prescribe oral antifungal therapy for suspected nail fungus without confirmation of fungal infection.

Approximately half of nails with suspected fungus do not have a fungal infection. As other nail conditions, such as nail dystrophies, may look similar in appearance, it is important to ensure accurate diagnosis of nail disease before beginning treatment. By confirming a fungal infection, patients are not inappropriately at risk for the side effects of antifungal therapy, and nail disease is correctly treated.

2

Don't perform sentinel lymph node biopsy or other diagnostic tests for the evaluation of early, thin melanoma because they do not improve survival.

Patients with early, thin melanoma, such as melanoma in situ, T1a melanoma or T1b melanoma $\leq 0.5\text{mm}$, have a very low risk of the cancer spreading to the lymph nodes or other parts in the body. Further, patients with early, thin melanoma have a 97 percent five-year survival rate which also indicates a low risk of the cancer spreading to other parts of the body. As such, the performance of sentinel lymph node biopsy is unnecessary.

Additionally, baseline blood tests and radiographic studies (e.g., chest radiographs, CT scans and PET scans) are not the most accurate tests for the detection of cancer that is spreading as they have high false-positive rates. These tests have only shown benefit when performed as indicated for suspicious signs and symptoms based on the patient's history and physical exam.

3

Don't treat uncomplicated, nonmelanoma skin cancer less than 1 centimeter in size on the trunk and extremities with Mohs micrographic surgery.

In healthy individuals, the use of Mohs micrographic surgery for low-risk small ($< 1\text{cm}$), superficial or non-aggressive (based on appearance under a microscope) squamous cell carcinomas and basal cell carcinomas is inappropriate for skin cancers on the trunk and extremities. In these areas of the body, the clinical benefits of this specialized surgical procedure do not exceed the potential risks. It is important to note that Mohs micrographic surgery may be considered for skin cancers appearing on the hands, feet, ankles, shins, nipples or genitals, as they have been shown to have a higher risk for recurrence or require additional surgical considerations.

4

Don't use oral antibiotics for treatment of atopic dermatitis unless there is clinical evidence of infection.

The presence of high numbers of the *Staphylococcus aureus* (Staph) bacteria on the skin of children and adults with atopic dermatitis (AD) is quite common. While it is widely believed that Staph bacteria may play a role in causing skin inflammation, the routine use of oral antibiotic therapy to decrease the amount of bacteria on the skin has not been definitively shown to reduce the signs, symptoms (e.g., redness, itch) or severity of atopic dermatitis. In addition, if oral antibiotics are used when there is not an infection, it may lead to the development of antibiotic resistance. The use of oral antibiotics also can cause side effects, including hypersensitivity reactions (exaggerated immune responses, such as allergic reactions). Although it can be difficult to determine the presence of a skin infection in atopic dermatitis patients, oral antibiotics should only be used to treat patients with evidence of bacterial infection in conjunction with other standard and appropriate treatments for atopic dermatitis.

5

Don't routinely use topical antibiotics on a surgical wound.

The use of topical antibiotics on clean surgical wounds has not been shown to reduce the rate of infection compared to the use of nonantibiotic ointment or no ointment. Topical antibiotics can aggravate open wounds, hindering the normal wound healing process. When topical antibiotics are used in this setting, there is a significant risk of developing contact dermatitis, a condition in which the skin becomes red, sore or inflamed after direct contact with a substance, along with the potential for developing antibiotic resistance. Only wounds that show symptoms of infection should receive appropriate antibiotic treatment.

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6

Don't use systemic (oral or injected) corticosteroids as a long-term treatment for dermatitis.

The potential complications of long-term treatment with oral or injected corticosteroids outweigh the potential benefits. Although the short-term use of systemic corticosteroids is sometimes appropriate to provide relief of severe symptoms, long-term treatment could cause serious short- and long-term adverse effects in both children and adults. In extreme cases that have failed to respond to other appropriate treatments, the benefits of systemic corticosteroids must be weighed against these potentially serious risks.

7

Don't use skin prick tests or blood tests such as the radioallergosorbent test (RAST) for the routine evaluation of eczema.

Skin prick tests or blood tests may help identify the causes of allergic reactions, including hives or sneezing after exposure to dust or pollen. However, these tests are not useful for diagnosing dermatitis or eczema. When testing for suspected allergies is deemed necessary in patients with these rashes, it is better to conduct patch testing with ingredients of products that come in contact with the patient's skin.

8

Don't routinely use microbiologic testing in the evaluation and management of acne.

Bacteria are only one of several factors that contribute to acne. Microbiologic testing, used to determine the type of bacteria present in an acne lesion, is generally unnecessary because it does not affect the management of typical acne patients. Microbiologic testing should be considered only when acne has failed to respond to conventional treatments, particularly in patients who have already been treated with oral antibiotics.

9

Don't routinely use antibiotics to treat bilateral swelling and redness of the lower leg unless there is clear evidence of infection.

Research has suggested that bilateral lower leg cellulitis is very rare. Patients with swelling and redness of both legs most likely have another condition, such as dermatitis resulting from leg swelling, varicose veins or contact allergies. To ensure appropriate treatment, doctors must consider the likelihood of diagnoses other than cellulitis when evaluating swelling and redness of the lower legs. Misdiagnosis of bilateral cellulitis can lead to overuse of antibiotics and subject patients to potentially unnecessary hospital stays.

10

Don't routinely prescribe antibiotics for inflamed epidermal cysts.

The overwhelming majority of red and swollen epidermal cysts (ECs) are inflamed but not infected. It is important to confirm infection before treating these cysts with antibiotics. Appropriate treatments for inflamed ECs include incision and drainage or an injection of corticosteroid directly into the cyst.

How This List Was Created

The American Academy of Dermatology (AAD) is strongly committed to dermatologists serving as effective stewards of limited health care resources by assisting patients in making informed health care decisions. As such, the AAD leadership created a workgroup to develop this list with specific skills and expertise in evidence based research, public health quality and payer policy. Members of this workgroup include dermatologists who are current members of the Academy's Board of Directors, Council on Science and Research, Council on Government Affairs, Health Policy and Practice, Research Agenda Committee, Clinical Guidelines Committee, Access to Dermatology Care Committee, Patient Safety and Quality Committee, Resource-Based Relative Value Scale Committee and the Workgroup on Innovative Payment Delivery. The workgroup identified areas to be included on this list based on the greatest potential for overuse/misuse, quality improvement and availability of strong evidence based research as defined by the recommended criteria listed below. The recommended list was reviewed and approved by the AAD Council on Science and Research and the AAD Board of Directors.

- Supported by available scientific evidence (e.g., existing AAD appropriate use criteria and/or existing AAD clinical guidelines)
- Strongest consensus inappropriate score from the AAD Appropriate Use Criteria (AUC)
- Strong (wording/level of evidence) recommendations from the guidelines about discouraged practice
- Greatest potential for improvement in outcomes for patients
- Greatest potential for overuse/misuse by physicians

For AAD's disclosure and conflict of interest policy, visit. www.aad.org.

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