Total Body Skin Exams: Don’t Abandon Them

Lesion-directed exams may save time, but is the limited temporal savings worth it?

BY JONATHAN WOLFE, MD

Total body skin exams (TBSEs) have become the standard of care for the detection of skin cancers, including melanoma, especially in its early stages. They are relatively quick, require no special equipment—although a dermatoscope is a definite plus—and are generally effective. They’re also becoming somewhat controversial.

Although TBSEs are ubiquitous in dermatology practices and endorsed by the American Academy of Dermatology, some experts seem to believe that lesion-directed exams should become the norm. Here’s a look at the history and benefit of TBSEs and an assessment of the alternatives.

DERMATOLOGISTS AND TBSEs

There seems to be no question regarding the utility of TBSEs conducted by dermatologists. They are the norm in the majority of practices; multiple practices and dermatology professional societies (AAD, Women’s Dermatologic Society, and others) host skin exams for the general public. Likely every dermatologist can report having identified and removed a skin cancer identified through TBSE that the patient did not otherwise indicate as a lesion of concern.

There have been some questions regarding the appropriateness of subjecting every patient to TBSEs, and it is always essential to ensure patients’ privacy and comfort during exams. Each dermatologist and dermatology practice has its own protocols. Some practices require or highly recommend that all new patients and those who have not been seen for some time to undergo TBSEs, regardless of their initial cause for visiting the office. Others offer exams or wait for patients to request one.

When it comes to sensitive body areas, it may be appropriate to rely on patient self-reporting, coupled with personal and family history and other risk factors for skin cancer, to determine whether the dermatologist must visualize these areas or can rely on patient reports of new or changing lesions. Generally, having a nurse or technician in the exam room is recommended and is reassuring to patients and providers.

In the end, dermatologists should have no qualms about conducting skin exams over the whole body and ought to keep the risk for genital skin cancers in mind. A full body skin exam by an experienced dermatologist takes relatively little time. In addition to potentially allowing the dermatologist to identify malignant or suspicious lesions, the TBSE offers an opportunity to educate the patient about UV safety and the conduct of skin self-exams, including a review of the ABCDE criteria.

NON-DERMATOLOGISTS AND TBSEs

The role of the non-dermatologist in the provision of TBSEs is not clear. Certainly, depending on factors like access to specialists, as well as the patient’s personal and family history, it may be beneficial for a non-dermatologist to provide full skin exams to select patients. Studies indicate a discordance between detection rates of dermatologists compared to general practitioners. However, collaboration between dermatologists and general practitioners is associated with improved diagnostic accuracy. As such, general practitioners can help identify suspicious lesions and play a critical role in referral for skin exams by a dermatologist.

The US Preventive Services Task Force (USPSTF), whose recommendations are not immune to criticism, determined in 2016 that it could not conclude whether or not TBSEs were beneficial and therefore could not be recommended. At the time of the USPSTF publication, the AAD responded with a statement emphasizing that the USPSTF was not recommending against screenings; rather the group had inconclusive evidence to make a recommendation.
Some information pertinent to the USPSTF report is worth reviewing. The USPSTF ultimately looked at the benefit from three different screening programs, aimed at “asymptomatic populations and included screening by primary care physicians only, primary care physicians and other nondermatology specialists, or volunteer dermatologists and plastic surgeons.”

Given the above noted discrepancy in diagnoses between dermatologists and general practitioners, it is reasonable to consider whether the inclusion of data from non-dermatologist screeners skewed study results. It would be interesting to see if the USPSTF would come to different conclusions for screening by dermatologists.

It’s also worth noting that the USPSTF looked at potential harms due to screening, and “did not identify any studies that directly reported on procedure-related adverse events or psychosocial harms, such as skin infections or scar revisions in screened populations. Further, we did not identify any studies that specifically identified overdiagnosis in screened populations.”

ANOTHER ANGLE

Lesion-directed skin (LDS) cancer screening has been proposed as an alternative to TBSEs, even in dermatology practices, under the supposition that it can save time without a significant impact on detection. One analysis used organized population-based cross-sectional screenings by a team of six dermatologists in two sociodemographically similar regions. The first group included subjects who were invited for a TBSE. The second group included subjects who were invited for an LDS if they had a lesion meeting one or more of the following criteria: ABCD rule, ugly duckling sign, new or changing lesion.

In total, 1,982 individuals were screened, and 47 skin cancers were histologically confirmed, including nine melanomas, 37 basal cell carcinomas, and one squamous cell carcinoma. The skin cancer detection rate per 100 participants was 2.3 percent in the TBSE group vs. 3.2 percent in the LDS group. The mean duration of the complete skin cancer examination was 232.0 seconds in the TBSE group, compared with 40.9 seconds in the LDS group.

IN CONTEXT

In the comparison study noted above, TBSE took almost four minutes on average, while the lesion-directed exam took less than one minute—so TBSE took more than five times as long. However, it’s difficult to conclude that the time savings justifies abandoning TBSEs. For one thing, it’s not clear that TBSEs performed in the clinical setting would necessarily add four minutes to a visit. In fact, the skin exam can often be completed at the same time as other clinical tasks. If a dermatologist is already evaluating the thigh to assess a rash, how much more time is needed to evaluate the legs for potential skin cancers? In practice, a TBSE need not add a substantial additional time to a given clinic visit.

But even assuming four minutes as the time needed to provide a TBSE: Is that really too much time to spend to potentially identify and treat a skin cancer, possibly a melanoma?

Patients are not particularly adept at spotting cancerous lesions. The ABCDE criteria are certainly helpful in directing patient self-examinations, and there is surely benefit associated with skin self-exams or partner-assisted skin exams. But experience and the literature tell us that they aren’t always effective. We have all had patients present in distress over a lesion that turned out to be benign. We’ve also told patients that the lesion that primarily concerned them is benign, but that one a few millimeters away is potentially malignant.

CALL FOR CLARITY

To be clear, the data and our experience show that there is value to surveillance for the early detection and treatment of skin cancers. It is important to find the “take home” of various studies without over-stating the implications for patients and providers. Surely patient self-exams are important and beneficial, but they have limitations. Skin exams by general practitioners are also potentially beneficial—when they lead to referral to specialists. And skin exams by dermatologists are critically important. The rationale for abandoning total body exams in favor of only lesion-directed exams or exams limited to “high-risk/high exposure” body areas seems misguided. At the expense of a few minutes time, it seems that the early detection of a cancerous lesion is invaluable.

Jonathan Wolfe, MD is an Associate Professor of Dermatology at the University of Pennsylvania.