

### **DR. JERRY BREWER:**

I'm Dr. Jerry Brewer, one of the dermatologic surgeons at Mayo Clinic in the Department of Dermatology. This article coming out is about melanoma in immunosuppressed patients.

So this article is a review article, looking at all of the pertinent on patients with immunosuppression and melanoma. And we focused on melanoma-induced immunosuppression, and then, the two clinical settings that we focused on mainly were people with transplants and lymphoma. We did also touch on people with HIV/AIDS who get melanoma, but the two people that we talk about the most with immunosuppression are lymphoma patients and transplant patients.

So looking at all the recent data on melanoma in immunosuppressed patients, if we talk about the first group of patients, the people with transplants, their chances of getting melanoma is probably around 3.6 times higher than average. And there are studies that show a little bit less or more than that, but that's probably about where it is. And a lot of the previous studies have looked at outcomes. One in particular showed that overall survival was worse in thicker melanomas. The new finding was a recent study, a year or so ago, that not only found overall survival worse in all Breslow thicknesses of melanoma, but this study also showed that melanoma-cause specific survival was worse in patients with melanoma thicker than 1.5 millimeters Breslow thickness. And that's the first data that's ever been able to show that people with transplants have a higher chance of dying from metastatic melanoma.

The other group of patients that we looked at were people with lymphoma, and lymphoma is an interesting group of people that have an innate immunosuppression because of their disease. So these people have been shown to have a higher incidence of melanoma for a number of years, probably ranging between 1.8 and 2.2 times higher than average, some studies showing a little bit higher than that, as well. And the recent article that was published a while back was able, again, for the first time, to show that not only do these people get melanoma more often, but they die from melanoma more often, as well. And this study suggested that people with CLL, or chronic lymphocytic leukemia, had about a maybe 2.8 times higher chance of metastatic melanoma if their Breslow thickness was greater than one.

So how this study relates to patients is that people who have immunosuppression really, now, we know for sure, they have melanoma more often, and they also probably do worse with melanoma. And so what the take-home message is, is that patients that have any form of immunosuppression, especially if they're a transplant patient or if they develop lymphoma, should be very aware of their skin. What that means, from a physician's standpoint, is we should probably do a good job of educating patients to look their selves over once a month, being aware of the ABCDEs of melanoma and being seen by a dermatologist once a year and perhaps more often if they have a lot of other risk factors.

And I think one of the take-home messages is that if we are able to find melanomas earlier in these patients, then, potentially, we can affect outcomes. We know that people that are immunosuppressed die from melanoma more often, and if we can find melanomas in these patients earlier, then, they might do better. I think the only other thing is that, if we can do a better job of educating our patients that the risk of melanoma is higher so that their behavior can potentially change, such as avoiding tanning beds and avoiding sun during the peak hours of the day, wearing sunscreens more often, then that could, potentially, also affect outcomes and improve survival.

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