

Does aspirin's anti-inflammatory properties lower melanoma risk?

Jeffrey Weber, MD, PhD

Director

Donald A. Adam Comprehensive Melanoma Research Center

Moffitt Cancer Center

Tampa, Florida

This is Jeffrey Weber, I am a medical oncologist and the director of the Donald A. Adam Comprehensive Melanoma Research Center at the Moffitt Cancer Center in Tampa, Florida. I am a melanoma researcher, interested specifically in the immunotherapy and targeted therapy of melanoma. A question that I am asked, very recently, I should say, is whether aspirin's anti-inflammatory properties lower melanoma risk. And that is because there has been a recent article that was published in the journal *Cancer* by an investigator from Stanford whose name is Tang, and that was a very interesting article where it took advantage of the huge numbers of women in a longitudinal study of the health of women called the WHI or the Women's Health Initiative. This is an observational study of many thousands of women where it looks at different dietary influences on disease. It is not specifically a cancer observational trial, this of course is not a melanoma trial, but interestingly in this trial, it was noticed that among women who self-reported the use of chronic aspirin, that there was a 21% lower risk of melanoma relative to those who did not use aspirin, and that is a modest effect. But, if you look at the duration of the aspirin use, again self-reported by the women, as less than a year, 1-4 years, and more than 5 years, the longer you used the aspirin, the lower was the risk of developing melanoma. Interestingly in contrast, if you used the so-called nonsteroidals, things like Motrin or ibuprofen or Indocin, or Tylenol or acetaminophen, there was no association with the risk of getting melanoma, either pro or con, it didn't reduce it certainly. So again, very interesting study in a group of women predominantly who are almost all post-menopausal showed that the use of aspirin lowered your risk of developing new melanomas of the skin and the longer you used the aspirin, the better off you were. Is this conclusive? I would say no, I would say this is a very provocative study. The difference between these two groups is only a few dozens of women, it is not as if there were differences in hundreds and hundreds of women because the rate of melanoma was pretty low. Nonetheless, provocative data, would they lead everyone in the world to start using aspirin if you are a female and you are post-menopausal? Should you be using aspirin to prevent melanoma? Well, I think anyone over the age of 50 should be using aspirin because of its cardiac protective effect. I personally take one 81 mg aspirin a day, every day, and have done so since the age of 40. I am not convinced that taking an 81 mg of aspirin is going to prevent melanoma; however, the data are very provocative. They certainly justify further investigation, and if you look at the authors' own article, the conclusion of their article is that these data merit further investigation, and I would certainly agree with them. I do not think they feel that these are definitive data that will cause all women to start taking aspirin to prevent melanoma, but nonetheless, it really



gets you thinking and it makes you feel a whole lot better about taking that little aspirin pill every morning in terms of prevention of melanoma. That being said, taking aspirin is no excuse for going out for prolonged periods in the sun, exposing yourself to tanning booths, not wearing proper sun protection when you are out in the sun, especially during the spring, summer and fall months, and especially in a place like Tampa which is very, very sunny all the time. So once again, provocative data, it will certainly provoke a repeat study to try to find out whether this protective effect of aspirin is really true. I thank you very much for your attention.