Transcript: HIV & Your Heart-Part II

February 21, 2008

At the 15th Conference on Retroviruses and Opportunistic Infections (CROI) in Boston, David Evans continues his discussion with Donald Kotler, MD, talking about diet, lifestyle and new treatments to combat belly fat. To see the video click here.

David Evans: There are a number of lifestyle factors that can obviously affect someone's risk of having a heart attack. Some of these factors we know are—we find them more commonly in people living with HIV than we do in the general population. There have been a number of studies where as many as fifty percent or sixty percent of a cohort of HIV positive people are active smokers. What can you tell us about what we're learning about lifestyle factors and their impact on people living with HIV?

Donald Kotler, MD: Well I can't tell you a tremendous amount because much of the work that's being done is related to what drugs people take. So the majority of the noise, the majority of the information is related to that. I can talk about one study though, a study that my laboratory did that looked at lifestyle modifications—diet, exercise. And it fact it was diet, exercise, and rosiglitazone (Avandia) the one that was found to be a big relative risk for having a heart attack, the one that was in the newspapers within the last year or so. Not great, as it occurred right in the middle of us doing a study. But we made a very interesting observation in our first look at that data. What we looked at was lipids, we looked at body composition; you know, when you lose weight, do you lose belly fat, do you lose subcutaneous fat. We compared not only the HIV positives who had lipodystrophy, but also the HIV negatives who had the metabolic syndrome. Then we looked more specifically at lipids: cholesterol, triglycerides, etc, and we looked at one other type of lipid called oxidized-LDL, which is a form of fat in the blood that seems to be very closely related to atherosclerosis. And we looked at, as I said, HIV positives, HIV negatives, men, women, diet and exercise, rosiglitazone, and both. So it's a pretty complicated study. What we found was that rosiglitazone alone was not good for you; it raised triglycerides 40 percent. It raised the oxidized-LDL. It really seemed to be not so good for your lipids. Diet and exercise on the other hand was actually quite good for the lipids; it really made them better, including dropping the oxidized-LDLs. So just like everyone else would say, diet and exercise is good for you. Well then we also looked at diet and exercise plus rosiglitazone, and what we found was that diet and exercise plus rosiglitazone looked like diet and exercise; it didn't look like rosiglitazone. The combination was okay, and the effect of diet and exercise was stronger than the effect of rosiglitazone. But here's the message: the way many studies are done, like the D:A:D study or the study that was quoted in the newspapers about the risks of Avandia or rosiglitazone come from

meta analyses, where they take data from many groups and studies and just lump them all together, and then ask a very simple question. “Does rosiglitazone versus no rosiglitazone cause heart attacks or survival?” or, as was in the newspapers just in the last month, “Does Zetia or Vytorin prolong survival or not prolong survival?” And they’re looking at it just as a single agent. That’s almost like asking, “Is this pill magic? Is this a magic pill and you don’t need to do anything?” Well, it’s not a magic pill. By itself, it’s not a magic pill. However, doctors shouldn’t be giving out magic pills; that’s like monotherapy (one drug alone), giving someone AZT (zidovudine, Retrovir) monotherapy. In fact, people found that HIV treatment was better when you gave a comprehensive regimen, and HIV treatment is better when you give comprehensive care. Not just, “here are some pills.” Well you know, maybe the treatment of lipodystrophy or the metabolic syndrome should be the same. And that if you’re going to give a drug like rosiglitazone, it shouldn’t be given as, “here, take a pill, you’ll do better,” but rather given as a comprehensive program so that if you’re actually going to treat somebody with that medicine, you should give diet, exercise, other lifestyle and other modifications, and see if all together they work. It might be hard under those circumstances, because in my study—it was a tiny study—but I couldn’t stay that rosiglitazone added anything to diet and exercise, and maybe it doesn’t; maybe you’d need a huge study to figure that out. But maybe you shouldn’t just make drugs as magic pills, because if you do, you’ll find something wrong.

DE: A product that released some data here at the conference… again, not a magic pill or a magic substance…but we do have a number of our viewers and our site visitors who do exercise, watch their diet, and do everything they can to be healthy, and unfortunately, they stubbornly can’t seem to get rid of their belly fat. And there was a product here called tesamorelin (TH9507), which seems to be able to help at least a bit with that. Can you tell us what we’ve learned at the conference about tesamorelin?

DK: Tesamorelin is a compound that also can be referred to as growth hormone releasing factor. Growth hormone has been around the HIV field for the last ten or fifteen years. It was first known to be an anabolic agent, and was also shown at the same time that along with building up lean mass, it burned fat. It wasn’t long after the recognition of lipodystrophy that several people noticed that growth hormone would decrease belly fat or buffalo hump fat, or breast fat in a woman, in patients with lipodystrophy. Growth hormone has been looked at in several clinical trials, and shown that, sure enough, it will decrease the belly fat. The more you give, the more you get; the more you give, the more toxic it is. The FDA has not approved growth hormone for that treatment, for a number of reasons, though that struggle’s not over yet. Growth hormone releasing factor has some potential benefits, in terms of, perhaps, less abuse potential, a more physiologic, a more natural way of giving it, with feedback mechanisms. But it acts a lot like low dose growth hormone. What was done in this study, what was presented was some data looking at a year’s worth of therapy, in which there was s six month trial and then a follow up trial, in which the drug, having been given, was either stopped or continued. There was also the placebo [and people on the placebo were later] given drug, which is an important thing. But looking at stopping the drug or continuing the drug, the drug seems to work as long as you give it; you don’t sort of get used to the drug and then have it stop working. But at the same time, if you take the drug and then stop it, as soon as you stop it you go right back to where you were, or go right back towards where you were, which is what people found with growth hormone. So it acts like a hormone, it

acts like insulin in a diabetic; if you take it, your blood sugar goes down, if you stop taking it, your blood sugar will go back up. So it seems like that drug is going to needed over the long term. It does have, it seems, a pretty good safety profile. It's not likely to make someone a diabetic. It actually sort of benefits the lipids, the circulating fats, the cholesterol and triglycerides, rather than making them worse. I will say that there's another abstract to be presented, orally, by Steven Grinspoon of Massachusetts General, that's looking at very low dose growth hormone. The studies in growth hormone, as well as the studies of the growth hormone releasing factor, tesamoralin, have shown that the worse you are—the bigger the belly—the better the effect. Well in fact in this study, Steven Grinspoon and his group gave very low dose growth hormone to people who seemed to have the biggest abnormality. They defined it as the most suppressed natural output of growth hormone from the brain, but that really goes along with having the biggest belly. And the biggest belly should have the biggest response. Over eighteen months of therapy, they were able to get the same kind of result as higher doses of growth hormone when given to anybody with lipo. And did so with a great deal of safety. So not only is tesamoralin a drug that has some benefit, but maybe very low dose growth hormone also could have some benefit. It's up to the regulators to decide, is the benefit worth the risk? Is the benefit worth the cost? Is this really something that can be given over the long term? Will it really be a benefit? Certainly the idea that very big bellies with fat are associated with this dyslipidemia, high cholesterols, low HDL cholesterol, high triglycerides, insulin resistance or diabetes. The fact that dropping that belly fat down might be beneficial sounds good. Somebody ultimately will have to prove that it's better than just sounding good.

DE: Well thanks again for taking the time to speak with us and to share with our viewers your expertise, and I hope you have a really great conference.

© 2026 Smart + Strong All Rights Reserved.

http://beta.docker.poz.com/article/hiv-aids-heart-14086-2436