

When Is Fat Not Just Fat?

Many people living with HIV may find they gain a strange type of weight

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When Larry Watson looks at himself in the mirror, his dark brown eyes reflect the helplessness he feels whenever he stares at the hardened fat around his midsection. This fat is different from the usual soft, doughy fat, called subcutaneous adipose tissue, or SAT, that usually develops under the surface of the skin when people pack on pounds. The fat that frustrates Watson is called visceral adipose tissue (VAT), the excessive abdominal fat that some people living with HIV develop after years on antiretroviral treatment.

For most of the more than two decades he's spent living with the virus, Watson has been on the same antiretroviral (ARV) meds. Each day in his cell at FCC Allenwood, the maximum security federal prison in Pennsylvania where he's incarcerated, Watson swallows a cocktail of several drugs—Viread (tenofovir), Epivir (lamivudine) and Kaletra (lopinavir/ritonavir)—that he began taking at age 31.

Today, Watson, age 50, still maintains the workout regimen that helped sculpt his 5-foot, 6-inch frame into that of a swimmer who was talented enough to receive a partial athletic scholarship that took him to the University of Southern California. Watson spent just a semester there, then pursued amateur boxing as a lightweight when he returned to his hometown of Philadelphia. Athletics is in his DNA, Watson says, and, in or out of prison, he's not about to stop exercising.

"I play ball, run at least three times each week and train my arms and upper body as much as possible," he says, smiling. "I'm trying to get my arms where they were in my twenties."

But about 15 years ago, Watson noticed his body had stopped responding to his intense exercise program. He began putting on fat in places where he'd never stored weight. Alarmed, he spoke with his nurse practitioner. "She informed me that fat was being distributed unevenly on my body," he says.

Watson believed there was more to the changes his body was undergoing. When he poked his finger into his abdomen, he felt the hardness of the excess fat. "I work out really hard and this has truly caused me to stress out," he says. "My wife is into exercise and appreciates a fit physique, so I've started wondering if she'll be turned off when she sees my body the way it looks now."

Christian Marsolais, PhD, senior vice president for medical affairs at Theratechnologies, doesn't have an answer for Watson's worry about his wife. But Theratechnologies makes the injectable drug Egrifta (tesamorelin), which doctors recommend as a treatment for VAT beyond the cosmetic concerns Watson has. "VAT is a potentially harmful type of fat that is found mostly deep within the abdominal cavity," Marsolais explains. "It can surround organs and be associated with fat build-up in organs. Excess VAT is associated with reduced physical health-related quality of life and adverse health consequences in patients living with HIV."

As Watson learned, excess VAT doesn't respond to diet and exercise in the same way regular fat does. To date, Egrifta is the only medication approved by the Food and Drug Administration that reduces this accumulation of hard belly fat, a condition called lipodystrophy—more specifically, lipohypertrophy. "In clinical studies, treatment with Egrifta was associated with a significant decrease in VAT," Marsolais says. "The effect is maintained with continued treatment."

During his time in prison, Watson launched Need-2-Know, a nonprofit organization that links incarcerated men into care prior to release, conducts case management and performs outreach work. But the primary purpose of his organization is to educate inmates living with HIV about all aspects of the virus, including the drug therapies available to treat the disease and related conditions such as VAT.

At Allenwood, Egrifta is not included on Watson's list of meds approved to treat HIV. He's aware of the drug and says he "would love to try anything that may help." But he can't change his regimen because he's still incarcerated. "At present, where I am these types of meds aren't offered because administrators feel VAT isn't a life-or-death issue," he says. "And never mind what this type of fat accumulation is doing to you psychologically."

Perhaps if prison administrators spoke to clinical research experts in pharmaceuticals, such as Marsolais, they'd learn that VAT isn't only harmful psychologically to those suffering from its effects. According to Marsolais, multiple studies show that excess VAT in patients with HIV may also be associated with metabolic abnormalities, including high blood pressure, abnormal cholesterol levels (a.k.a. dyslipidemia), insulin resistance, diabetes and cognitive function impairment.

In addition, excess VAT is life threatening because the condition can increase inflammation and deposit "fat in organs such as the liver, the skeletal muscle, the heart and the kidney," Marsolais says. What's more, this toxic fat can trigger hormonal imbalances and, in general, increase risk of disease and death.

In light of Marsolais's medical revelations, Watson is even keener to try Egrifta. "I'm very interested," he says. "As soon as possible, I'll get this med included in my regimen."

