

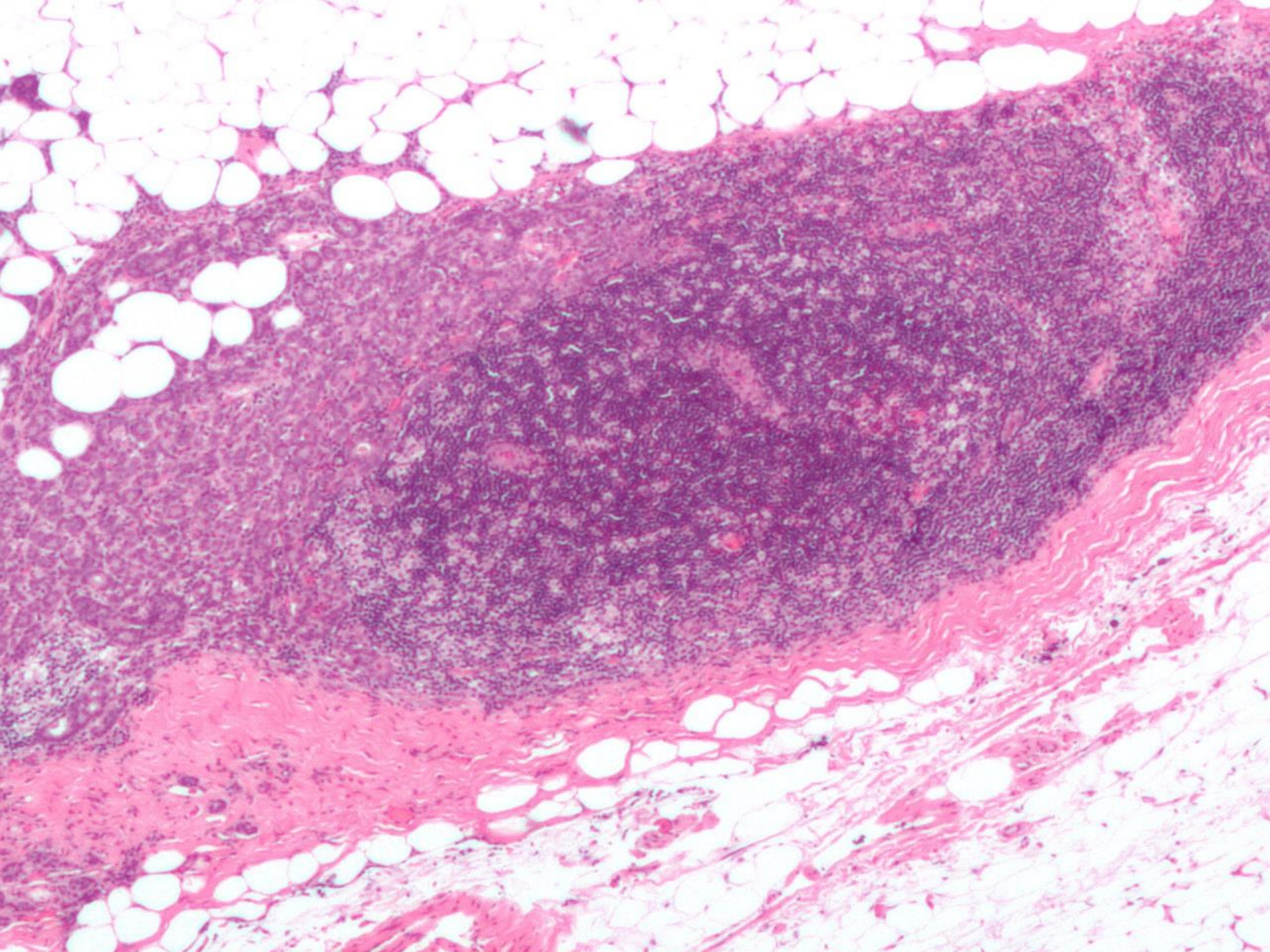
COULD FAT HIDE HIV??

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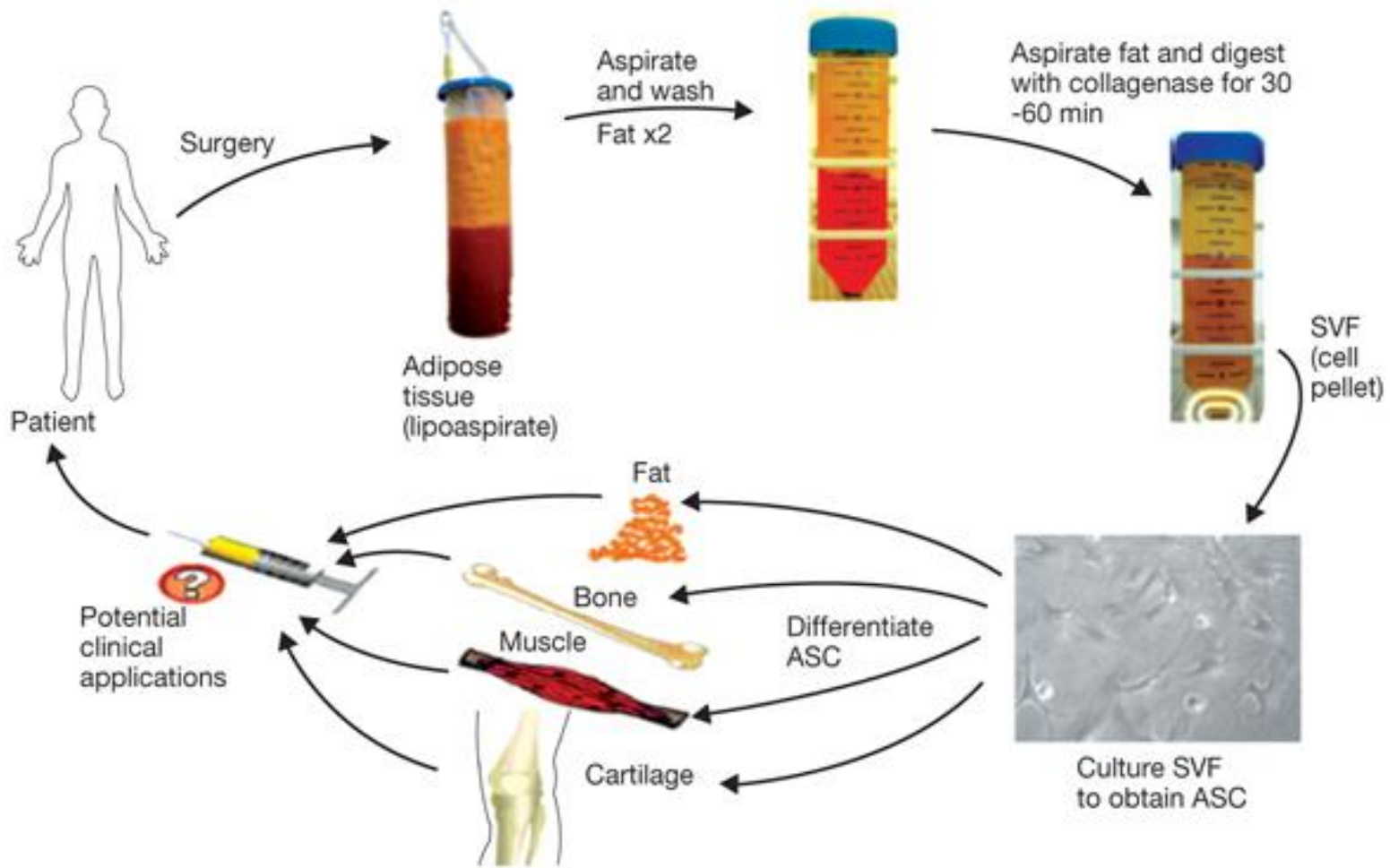
Why We Did this Study

- Immune cells are in fat including those infected by HIV
- Fat is ALL over the body, including where HIV is made
- Fat activates immune cells to make more HIV
- Could Fat be a place for HIV to hang out?
- Do the current drugs get into fat tissue?



What We Did

- Obtained fat and blood from 3 HIV infected patients that did not have detectable HIV in the blood
- Minced up the fat into 2 compartments (fat floats!) and studied the compartment that contains immune cells
- Studied HIV from those cells



What We Found

- ALL 3 donors had HIV in the immune cell compartment of fat from several places in the body.
- Immune cells are different in the fat than in the blood
- HIV in fat is different genetically than that in plasma
- Therefore, Fat is a SEPARATE reservoir for HIV

What Our Results Mean and Why this Matters

- Adipose tissue may be a reservoir for HIV
- An obese person may have 30-50 kilograms of fat—about 30,000-50,000 immune cells per gram of fat
- If 1-2% were HIV infected—then 15-25 million infected CD4 T cells total, which is a HUGE reservoir of HIV
- Not certain if the anti HIV drugs can get at these infected cells.

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