

METABOLIC AND BODY SHAPE CHANGES

Gain and Loss of Fat

Since the late nineties, people living with HIV/AIDS have experienced body shape changes. These changes may include fat accumulation in areas of the waist/abdominal area, breasts and back of the neck and/or fat loss in the arms, legs, buttocks and facial area. The abdominal fat accumulates deep inside the abdominal cavity, around the vital organs, and makes the stomach protrude/stick out and feel hard to the touch. This is different from normal fat found just under the skin (subcutaneous fat), which feels soft.

At first it was thought the protease inhibitor (PI) or the nucleoside reverse transcriptase inhibitor (NRTI) drugs might be responsible for these body shape changes. As time went on, however, the fatty deposits were found to accompany other invisible changes in the body called "metabolic changes." These include increased LDL cholesterol and triglycerides which are blood fats; increased glucose in the blood and increased insulin levels in the blood ("insulin resistance"). The combination of body shape and metabolic changes in HIV disease has been referred to as the lipodystrophy syndrome.

Current thinking is that abdominal fat accumulation and metabolic changes may be the same "metabolic syndrome" that is prevalent in the general, non-HIV-infected population. "Metabolic syndrome" is often seen along with obesity and puts a person at risk for chronic diseases such as diabetes and heart disease.

In the general population "metabolic syndrome" is treated primarily with diet and exercise. The condition is helped by decreasing refined carbohydrates (foods or beverages high in sugar content and baked goods containing white flour) while increasing fiber rich foods and using unsaturated fats in place of saturated ones. Consultation with a registered dietitian is recommended.

Physicians treating persons living with HIV/AIDS have prescribed liposuction for the back of the neck. This is not recommended for fat accumulation in the abdominal area. Lipid-lowering drugs may also be prescribed for fat accumulation in the body or the blood. Anabolic drugs such as human growth hormone or testosterone have been tried for fat loss. Consultation with a physician is required to learn the risks and benefits of these treatments.

References:

1. *Body Changes: The Guide to Lipodystrophy in HIV*, published by Visionary Health Concepts, <<http://www.freehivinfo.com/>>, 2002.
2. *Lipo What? A Patient's Guide to Body-Shape Changes and Lipid Problems Associated with HIV*, published by National Minority AIDS Council, Washington, DC, 2002.
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