



# Lipodystrophy

## What is it & why does it matter?

Many people taking drugs to fight HIV will develop a condition known as "HIV Lipodystrophy Syndrome." The syndrome may include any of the following:

- ♦ body fat redistribution,
- metabolic complications, such as increased levels of sugar and insulin in the blood, or
- → increased levels of fats (triglycerides and cholesterol) in the blood.

# QuickTip: Lipodystrophy also

Lipodystrophy also includes changes in the blood levels of sugars and fats. This may also cause blood pressure to go up. These can lead to long-term health problems, such as diabetes or heart disease.

## Changes that can occur in HIV Lipodystrophy Syndrome (may occur together or separately)

#### Increased

- Fat around the abdomen
- Fat around the back of the neck and upper shoulders ("buffalo hump")
- ▲ Fat in the breast area
- ▲ Sugar and insulin in the blood (increasing risk of diabetes)
- ▲ "Bad" cholesterol (LDL) in the blood
- ▲ Triglycerides (another kind of "bad" fat in the blood)

#### **Decreased**

- ▼ Fat under the skin of the face
- ▼ Fat on the legs and arms
- Fat on the buttocks

#### Why does it matter?

Some people are bothered by the change in appearance that is caused by fat redistribution. They may think that people can tell they have HIV, just by looking at them. Increases in fat around the neck can make it more difficult to move the head and shoulders. Fat loss from the buttocks can make it uncomfortable to sit on hard surfaces. Changes in levels of sugars and fats in the blood, as well as increases in blood pressure, could lead to long-term health problems.



### **Managing lipodystrophy**

#### **Healthy living**

Healthy living can help improve many of the effects of lipodystrophy. Healthy living has many benefits:

- ◆ It can minimize increases in body fat.
- ◆ It can improve blood sugar and blood fat levels.
- ◆ It can lower blood pressure.
- ◆ It can maintain lean muscle, for improved physical appearance.

#### **Nutrition**

In general, try not to eat too much fat, and try to choose healthy sources of unsaturated fat, such as fish and nuts.

#### **Avoid**

- × Saturated fats: fats from animals (e.g. meats, dairy, or lard)
- X Trans fats: fats found in processed baked goods like donuts, and muffins; as well as many fried and fast food snacks
- X Refined carbohydrates: white bread, rice or pasta, candies and chocolates
- X Alcohol

#### Try to Include

- Unsaturated fats: fats from nuts and seeds, olive oil, canola oil, sunflower oil
- ✓ Sources of omega-3 fatty acids: fish, such as salmon, as well as tofu, walnuts, milled flax seeds and flax seed oil
- Sources of fibre: whole grain breads and cereals, brown rice, whole wheat pasta, fruits and vegetables
- ✓ Moderate amounts of dietary cholesterol, as found in liver, shellfish, and eggs

#### Lifestyle

Try to get some moderate exercise most days of the week, to help combat the effects of lipodystrophy. Don't overdo it, though - too much exercise could make fat loss worse.

- Aerobic exercise (cardio): such as brisk walking, cycling, swimming, or rollerblading. Try to do at least 30 minutes 4 times a week. Remember: you don't need to do all 30 minutes at once.
- → Resistance exercise (weights, strength training): can include hand weights, machines at a gym, or exercises that use the weight of the body, such as push-ups. These can help build healthy muscle, as well as burn excess body fat.

Also, **smoking can worsen the effects lipodystrophy can have on your blood lipid levels.** If you smoke, ask for help on how to stop.

#### **Cosmetic procedures**

Some doctors have tried surgery to reduce the visible effects of lipodystrophy. These procedures attempt to remove fat from areas where it has accumulated and add it to areas where it has been lost. However, these treatments can be expensive and come with their own risks. They may need to be repeated regularly to retain their effect.

#### **Medications**

Some medications may interact with your antiretroviral drugs. This could prevent them from fighting HIV as well as they should. Always talk to your doctor or pharmacist before using any medications or supplements, including those you can get without a prescription.

Medications for health-related effects: There are medications available that can help to lower blood fats and sugar levels. Your doctor may prescribe one or more of these drugs, if needed.

Antiretroviral medications: If lipodystrophy becomes severe, your doctor may want to review the combination of antiretroviral drugs you are taking to fight HIV. The risk is that sometimes the symptoms of lipodystrophy may not improve.

Much progress has been made, however some symptoms of lipodystrophy may not be completely reversible. Research is ongoing to look at alternative ways to help treat the effects of lipodystrophy.

### When should I call my doctor?

The signs of lipodystrophy usually occur slowly, over time. If you notice changes in your body fat distribution, let your doctor know right away. You may also have increased blood fat and sugar levels. Return for blood tests as your doctor recommends, so these increases can be detected and treated quickly.

If you have lipodystrophy, talk to your healthcare team. They can help you improve your appearance and your health.

Supported by an educational grant from Boehringer Ingelheim (Canada) Ltd N75054 GLGZ