

20. A 30-year-old man with schizophrenia is referred to the lipid clinic. He was first diagnosed with schizophrenia at age 25 and for the past two years, has been treated with olanzapine 15 mg/day and nefazodone 150 mg/day. He has responded well to therapy and according to his family, has improved social interactions with friends and has been able to work part-time as an office clerk. However, in the past two years, he has gained more than 40 lbs and has developed dyslipidemia. His labs are as follows:

|                     |           |
|---------------------|-----------|
| Total cholesterol   | 210 mg/dL |
| Triglycerides       | 500 mg/dL |
| HDL-C               | 25 mg/dL  |
| LDL-C               | N/A       |
| Glucose             | 120 mg/dL |
| HbA1C               | 6.5%      |
| Height              | 5'11"     |
| Weight              | 220 lbs   |
| Waist circumference | 41"       |

Which *one* of the following statements regarding schizophrenia and cardiovascular risk is INCORRECT?

- (A) Patients with schizophrenia have more than double the risk of cardiovascular disease than the general population.
- (B) Patients with schizophrenia receiving atypical antipsychotics as well as those receiving conventional antipsychotics are at increased risk of developing diabetes.
- (C) According to the *2004 Consensus Report on Antipsychotics*, screenings and follow-up measures should include weight, waist circumference, blood pressure, fasting plasma glucose, and fasting lipid profile.
- (D) The weight gain associated with atypical antipsychotics, such as olanzapine, appears to diminish after the first six months of therapy.
- (E) Weight gain is a significant cause of discontinuation of treatment for patients with schizophrenia.

## ■ Items 21–23

A 50-year-old man with dyslipidemia and mild renal impairment (creatinine 2.0 mg/dL) was placed on niacin therapy 1500 mg/day three months ago. He has tolerated the niacin fairly well complaining of occasional flushing initially, which has decreased over the past few weeks. He presents with the following physical finding:



His other medications include aspirin 325 mg/day and hydrochlorothiazide 25 mg qd.

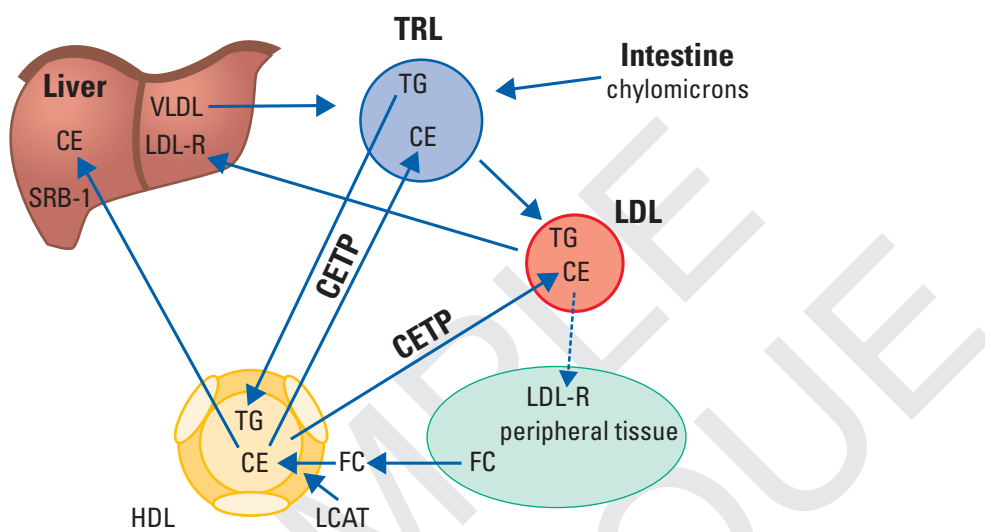
21. The MOST likely explanation for this physical finding is which *one* of the following?
- (A) Acute gout due to taking low dose aspirin to decrease the flushing associated with niacin.
  - (B) Acute gout due to the thiazide diuretic increase in uric acid level.
  - (C) Acute gout due to niacin increase in uric acid levels.
  - (D) Acute gout is associated commonly in patients with dyslipidemia.
  - (E) All of the above.
22. Which *one* of the following drugs does NOT lower uric acid levels?
- (A) Losartan.
  - (B) Fenofibrate.
  - (C) Indapamide.
  - (D) Allopurinol.
  - (E) Indomethacin.
23. The patient's medications were discontinued and he was placed on colchicine 1.2 mg/day and pravastatin 20 mg. Two weeks later, he returned to the office with improvement in his toe erythema and pain, but he now complains of severe muscle weakness and fatigue. His CK is 7000 U/L, creatinine 2.1 mg/dL.
- What is the MOST likely cause of his myopathy?
- (A) Colchicine, an inhibitor of cytochrome P450 3A4 metabolism increased pravastatin levels resulting in myopathy.
  - (B) Pravastatin 20 mg in patients with mild to moderate renal impairment is associated with a significant increase in myopathy.
  - (C) Colchicine has been associated with myopathy, especially in patients with renal impairment.
  - (D) The patient has developed a severe gouty tenosynovitis that has caused cellulitis of the muscles.

**Item XX**

**Answer X**

Those studies suggesting that atherosclerosis is increased in some individuals with a heterozygous CETP deficiency may reflect chance owing to small sample sizes, confounding by other risk factors, or biases inherent in the study design. Nonetheless, the initial report that genetic CETP deficiency in men with HDL levels of 40–60 mg/dL and the D442G mutation was associated with increased CHD risk was a cause for concern.

Figure 7 shows how CETP inhibition works to increase HDL-C and lower LDL-C. Although there has been concern that CETP inhibitors may be pro-atherogenic by blocking one of the pathways for removing HDL-C cholesteryl esters from plasma in the final step of reverse cholesterol transport, this hasn't been shown in studies in rabbits. (NS)



**Figure 7.** Effects of cholesteryl ester transfer protein (CETP) inhibition

Barter PJ, et al: Cholesteryl ester transfer protein: a novel target for raising HDL and inhibiting atherosclerosis. *Arterioscler Thromb Vasc Biol* 2003;23:160–7.

**Bibliography**

1. Zhong S, et al: Increased coronary heart disease in Japanese-American men with mutation in the cholesteryl ester transfer protein gene despite increased HDL levels. *J Clin Invest* 1996;97:2917–23.
2. Barter PJ, et al: Cholesteryl ester transfer protein: a novel target for raising HDL and inhibiting atherosclerosis. *Arterioscler Thromb Vasc Biol* 2003;23:160–7.
3. Kee P, et al: Effect of inhibiting cholesteryl ester transfer protein on the kinetics of high-density lipoprotein cholesteryl ester transport in plasma. *In Vivo Studies in Rabbits. Arterioscler Thromb Vasc Biol* 2006;26:884–90.