Fibrates (Part 1)

Fibrates have an important role in treating hypertriglyceridemia, in raising HDL (good cholesterol levels), and in treating patients with diabetes and metabolic syndrome. The two most widely used fibrates are Fenofibrate (Triglide, Tricor, Lofibra, Antara) and Gemfibrozil (Lopid), and Clofibrate (Atromid-S). The mechanism of action is somewhat complicated. In summary, the main physiologic effect is to reduce VLDL (very low density lipoproteins) which are the main transport vehicle for triglycerides. Triglycerides typically fall 20-70%. They do also lower LDL cholesterol a modest 10% or less but this is not a primary use for the fibrates. Surprisingly, in patients with very high triglyceride levels, this class of drugs can actually cause LDL cholesterol to rise. HDL cholesterol levels do typically rise. Fenofibrate may be useful for the purpose of LDL reduction with low triglyceride levels when statins, Niaspan, and bile sequestrants cannot be tolerated.

The major side effects of the fibric acid drugs are gallstone disease and abdominal discomfort. In rare cases, myopathy, which I discussed at great length in my posting about statins and the effect on muscles, can occur but usually when it is taken with a statin. While some medical professionals, have reported "renal (kidney) dysfunction while on fibrates, this has never been shown to be true. Although there does exist a case report of fenofibrate associated reversible acute kidney dysfunction in 3 kidney transplant patients, one must remember that transplant patients are on a multitude of drugs which affect kidney function. Fibrates are, however, infrequently associated with an increase in serum creatinine. Serum creatinine is measured in the blood and is used to measure renal function. Some investigators have found that the source of the creatinine probably reflects and induced elevation of the metabolic production rate of creatinine. In my next posting, we will talk about the use of fibrates in patients with actual kidney dysfunction or on dialysis prior to their use and also the major studies which have proven their effectiveness and safety as a mainstay of lipid management.