

Designer Steroids-Are They Harmful to My Heart?

In prior postings, I have talked about the fact that the supplement industry is not regulated. Androgenic Anabolic Steroids(AAS) have been associated with a wide range of adverse effects on the lipid levels. This group of nutraceuticals are marketed as “dietary supplements” and available on the internet yet most of the public is unaware of the hidden dangers. There are two products in particular that have caused problems in previously healthy individuals. The first is known as Superdrol(methasteron) and the second is Orastan-E (prostanazol) . While both of these products are on the prohibited list of the 2008 World Doping Agency, their legal status is not clear. According to the Anabolic Steroid Control Act of 2004, the sale of these “designer” steroids as nutritional supplements is prohibited in the US; however, these products are not on the list of banned steroids.

Many side effects have been reported with the use of AAS. The HDL cholesterol (the good cholesterol) has been shown to decrease by 40-70% while they increased the LDL cholesterol (the bad cholesterol) by an average of 36%. In one study of male weight lifters, oral administration of stanozolol led to a LDL cholesterol increase of 29% and a 35% increase in apolipoprotein B levels. In my posting titled Advanced Lipoprotein Testing, I discussed LDL particles being the most numerous type of atherogenic particle of all the ApoB particles. The higher the level of apoB particles, the greater the risk of cardiovascular morbidity and mortality. ApoB particles are the transport vehicles that drive the cholesterol into the artery wall leading to atherosclerosis. It has been suggested that the magnitude of AAS induced lipid changes are dose dependent. Recovery from the negative effects on the lipid profile is more dependent on duration rather than the dosage of AAS.

Chronic cholestatic liver disease is often associated with the use of these “designer” steroids. The best way to describe what cholestasis refers to is that it is a “slugging” of the bile. It then gets clogged in the liver resulting in an elevation in the liver enzymes and the bilirubin levels and causes liver damage. This type of liver disease is associated with an increased LDL cholesterol levels. Superdrol has been shown to cause cholestatic jaundice.

In about 60% of AAS users, a decrease in libido occurs which is typically reversible. The exact time for complete recovery is not known and is dependent on dose and duration of AAS use although full recovery has been shown to take up to a year once the drugs are stopped.

As these types of “designer” drugs become more readily available via the internet, their dangerous side effects need to be clearly stated. I have previously discussed the dangers of Red Yeast Rice and the fact that this type of nutraceutical is not regulated either. It is important for the public to know that sham studies and articles in non-peer review journals are widely available touting the benefits of all these unregulated drugs. It is also important to remember that one can get anything published in some magazine for the right amount of money. I would proceed with

caution and talk to a physician before proceeding with the use of these “designer” steroids.