

Public Enemy #1 for Male Fertility: Anabolic Steroids

By: Stanton C. Honig, M.D.

Did you notice those guys with big muscles at the gym or on the beach? The muscles may be from "just plain old fashioned hard work in the gym" or they could be from using anabolic steroids or performing enhancing drugs (PED). Those that use anabolic steroids or PEDs to build and repair muscle are doing damage to their testicles. These testosterone-based hormones are very bad for men who eventually want to have children. They actually work almost like a contraceptive. When a man is taking anabolic steroids, it is virtually impossible for him to get his partner pregnant.

The use of anabolic steroids historically has been used by athletes in major sports, such as weight lifting, baseball and football. Because these so called "role models" use these drugs, anabolic steroid use or misuse has filtered down and is being used by recreational weight lifters, college and high school athletes, etc.

How do anabolic steroids affect male fertility? Sperm are formed in the body when brain hormones such as luteinizing hormone (LH) and follicle stimulating hormone (FSH) work directly on the testicles. In the testicle, cells called Leydig cells are turned on to produce the male hormone, testosterone. When this occurs, there are very high levels of testosterone that are present in the testicle, although there is a normal amount of testosterone in the blood stream. When men use anabolic steroids, they trick the body into thinking that the testicles DO NOT have to produce testosterone. When this happens, the amount of testosterone in the testicles is extremely low, despite normal or very high levels in the bloodstream. When this situation occurs, follicle stimulating hormone also is not released. This combination causes the testicles to shrink and to produce little if any sperm.

Although use of anabolic steroids can stop sperm production, the good news is that in many cases this problem is reversible. It appears that the longer one uses the steroids and the higher the dosage used, the more likely this becomes an irreversible problem. Once performance enhancing drugs are stopped, sperm production may start again but it will return in the ejaculate at the earliest three months after stopping the drug. In fact, in patients who have used steroids for years, this sometimes may take one to two years before one may see a return in sperm production. After a period of time after stopping the PEDs, sometimes medical therapy can enhance the ability of the body to restart sperm production. This is usually done with human chorionic gonadotropin, or hCG. In certain cases, if hCG alone does not stimulate sperm production, a form of FSH called human menopausal gonadotropin can be added to improve the chances of return of sperm.

Anabolic steroids can cause other health problems that sometimes can be irreversible. These include aggressive behavior, acne, baldness, prominent breasts, liver disease, high blood pressure, heart attack and stroke. In

adolescents, it may result in stunted growth and accelerated puberty changes.

PEDs can also cause sexual dysfunction. When the anabolic steroids are stopped, the "sexual rush" is gone and this will cause testosterone levels to crash to virtually zero. This may cause symptoms such as tiredness, loss of energy and loss of sex drive. Testosterone production may return in a few months, however, in certain situations, it may be a permanent problem. Fortunately, there is medical treatment for this problem to raise testosterone levels back to the normal range.

So, there are lessons to be learned from the misuse of anabolic steroids. The most important point here is if you want to have children at some point in your life, DON'T USE ANABOLIC STEROIDS!!! In addition, stopping anabolic steroids can result in the "crashing of testosterone levels" with associated bad problems related to general health and sexuality.

About the Author

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