

## STEROIDS

I would like to start and end this article with a story.

I was attending my son's baseball game many years ago, when a fan approached me with a question. It was one of those events where everyone knows everyone else, and all know I am a physician. The parent informed me she heard a player on the other team was 'on steroids.' She did not think this was fair, and complained this person may have an advantage over the other athletes, because he was on this drug. I informed her there are different types of steroids, and this was not the kind of drug people used to enhance their athletic performance. Quite the contrary, this athlete was on Corticosteroids, or Glucocorticoids to decrease the inflammation in his airway due to asthma. This is a different type of steroid used by doctors to treat pain and inflammatory conditions. They are prescribed in low doses and for short durations. This is a rather common misperception and one which needs to be addressed. I have heard this on many occasions since this initial discussion, so I thought it best to bring to the forefront.

What she was referring to, were anabolic steroids. Let us begin the discussion.

Everybody involved in sports talks about steroids. Many people hear the term, but they don't know what steroids are and what they do. Let's go over a few things and get to the truth about these drugs and what they do to your body. We will end the column with a case history I saw in the operating room involving a young man and his experience with anabolic steroids.

First of all, what are steroids? They are naturally appearing hormones in our bodies. Anabolic/Androgenic Steroids, (AAS), are a class of drugs that mimic male sex hormones such as testosterone and dihydrotestosterone. They promote masculine traits; in other words, make a man, a man. They cause deepening of the voice, growth of body hair, and are responsible for behavior to a certain extent.

Anabolic steroids are artificially produced hormones. Make no mistake, this alters your body and is classified as a drug, an illegal one, I might add. First, these drugs are taken by mouth, skin patch, or injected. They can improve endurance, strength, and increase muscle mass. They do this on a temporary basis with a huge price tag.

Research has shown the prevalence of use among high school students in the United States may be as high as 2.7 percent.

Let's review some of the dangers. This way, you at least have some idea of what can happen to your body as a result of steroid use.

When you share a needle with someone, you run the risk of contracting HIV, the virus that causes AIDS. You also run the risk of getting hepatitis, which is a disease of the liver. Both of these diseases can kill you.

With steroid use, you also see loss of hair, acne, mood swings, anger, depression, hallucinations, suicide, nausea, vomiting, hypertension, heart disease, stroke, shorter height than normal (irreversible), testicular atrophy (smaller testicles), cancer, and a GREATER chance of injuring muscle, ligaments, and tendons.

For basic information, ligaments connect bone to bone. Tendons connect muscle to bone.

I wanted to cover this just a little more. With steroids, muscle mass increases. The tendons, ligaments, and joints are thought to remain the same. However, more recent data suggests ligament and tendon strength may be reduced.

Achilles, biceps, and triceps tendons seem to be at greater risk for injury, which include tears. One muscle in particular seems to be the hamstring muscle which is located in the back of your leg. Please know this does not mean everyone with these types of injuries is using steroids. It is mentioned merely so you will know the most recent, updated medical reports. Of course, other injuries may result which are less common, so I will use this to introduce you to my patient, Michael.

Let's scrub up and go to the O.R. for Michael's case.

The patient was a high school baseball player who was very talented and had a promising future. He wanted to make himself better in the off season. Instead of doing it the correct way, he used anabolic steroids. He admitted this to us after some prodding. We were very suspicious, as Michael was built like a statue. He was definitely "cut," especially for his age. However, not like he was getting ready to be, as surgery was in his future. On a side note, never keep anything from your parents and your doctor, because it is information we must know. As you have seen above in this article, steroids can affect other body systems. It is vital for us to know this before we subject you to a general anesthetic to put you to sleep for your operation. Remember, your heart, blood pressure, liver, and other vital organs can be affected, and all of these organs play a major role during your anesthesia and surgery. That being said; let us proceed with Michael's story.

No question, he got bigger, faster, and stronger. He knew he was going to have a great season and hit home runs at a pace equal to his major league heroes. One day, he decided to try his maximum on the bench press. He was going to lift over 300 pounds, which would have been a first for him. He weighed about 185 pounds. The first repetition was easy. He went for another. The weight hit his chest, and he pushed with everything he had. His right side collapsed, and if not for his spotter, the weight could have killed him. He screamed in pain, and later said he heard "something pop," inside his chest. By the way, never bench press with free weights alone. Always have a spotter. All pre-operative evaluations lead to a diagnosis of pectoralis major muscle tear.

He was taken to the operating room and the incision made. The pre-op diagnosis was confirmed, as he had a severe tear of the pectoralis major muscle (pecs) and the associated tendon. There was a large collection of blood, called a hematoma, which we had to evacuate. The repair went well, and he was taken to the recovery room in stable condition.

He underwent an extensive rehabilitation for almost a year and did return to the field. However, his baseball career went no further than high school.

You must remember; taking anabolic steroids can cause severe injury and even death. In fact, you may not know the effect for months, years, or decades. Our patient was truly lucky he survived the injury in the weight room.

All doctors strongly agree with the Surgeon General of the United States that physical activity and proper nutrition are critical components of great health. Establishing healthy lifelong habits while you are young is the key. I don't want to see you sick or injured. In fact, my goal is to keep you from becoming patients in the first place or at least delay it for as long as possible. This is why I write these articles and created my protein snack. Please remember: The athlete who takes the best care of their body will usually win

the competition. Sports, especially soccer have become a year-round activity. Don't take short cuts thinking steroids will be of benefit. As you've seen, it is quite the contrary and can literally destroy your life. I created this food product, Dr. Steve's Pro Bites to help you build lean body muscle mass, naturally, the way it is supposed to be. Take great care of your body, and it will take great care of you. In my opinion, excellent nutrition is the foundation, or cornerstone of human health.

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Dr. Steven Snodgrass, M.D., is a board-certified surgeon, a member of the American Medical Association, a Fellow of the American College of Surgeons, and Chief Executive Officer of Peak Performance Foods.

His new product, Dr. Steve's Pro-Bites, was made for people who care about their bodies and want the best quality food they can eat.

Dr. Steve works with athletes and patient groups to help them meet their special physical and nutritional needs.

His functional food, Dr. Steve's Pro Bites are available at [www.probites.com](http://www.probites.com) or [www.samsclub.com](http://www.samsclub.com) by entering search words dr steve

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Please give us a try, and see for yourself.

Thank you.

Dr. Steve

Steven L. Snodgrass, M.D., F.A.C.S.