

Kidney damage from steroid which are used in bodybuilding.

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Abstract

The use of anabolic steroids, particularly in the context of bodybuilding, is a growing concern for health professionals and fitness enthusiasts alike. While these drugs can help users build muscle mass and improve athletic performance, they also come with a host of potential health risks, including kidney damage.

Keywords: Kidney damage, Steroids, Hormone testosterone.

Introduction

Anabolic steroids are synthetic versions of the male hormone testosterone. They are often used by bodybuilders and other athletes to enhance muscle growth, strength, and endurance. While some steroids are prescribed by doctors for legitimate medical conditions, such as delayed puberty or muscle wasting, the vast majority of steroid use in the bodybuilding community is done illegally and without medical supervision. Steroids work by binding to androgen receptors in the body, which leads to an increase in protein synthesis and muscle growth. However, this same mechanism of action can also lead to a number of adverse effects, including liver damage, cardiovascular disease, and kidney damage [1].

Kidney damage is a particularly concerning side effect of steroid use. The kidneys are responsible for filtering waste products and excess fluids from the blood, which are then excreted in urine. However, steroids can interfere with this process, leading to a buildup of waste products in the body and potentially causing long-term damage to the kidneys. One of the primary ways that steroids can cause kidney damage is by increasing blood pressure. Anabolic steroids have been shown to increase blood pressure in both men and women, and this effect can be particularly pronounced in individuals who already have high blood pressure. Elevated blood pressure can damage the blood vessels in the kidneys, leading to a decrease in blood flow and ultimately impairing kidney function [2].

In addition to increasing blood pressure, steroids can also cause damage to the kidney tissue itself. This can happen in a number of ways. For example, steroids can lead to the formation of kidney stones, which can obstruct the flow of urine and cause damage to the kidney tissue. Steroids can also cause inflammation in the kidneys, which can impair their ability to function properly. Finally, steroids can increase the risk of developing infections in the kidneys, which can cause further damage and potentially lead to chronic kidney disease [3].

Symptoms of kidney damage from steroid use can be subtle and may not become apparent until the damage is significant. Common symptoms include fatigue, nausea, vomiting, abdominal pain, and changes in urine output or color. If left untreated, kidney damage can progress to kidney failure, which can be life-threatening and require dialysis or a kidney transplant. Preventing kidney damage from steroid use requires a multifaceted approach. The most effective way to prevent kidney damage is to avoid using steroids altogether. If you do choose to use steroids, it is important to do so under the guidance of a medical professional who can monitor your kidney function and provide guidance on safe dosages and cycles [4].

Maintaining a healthy lifestyle can also help prevent kidney damage. This includes eating a balanced diet that is low in sodium and high in fruits, vegetables, and whole grains, getting regular exercise, and avoiding tobacco and excessive alcohol consumption. Additionally, it is important to monitor your blood pressure and cholesterol levels, as both of these factors can increase the risk of kidney damage from steroid use. If you are concerned about kidney damage from steroid use, it is important to talk to your doctor. They can perform tests to assess your kidney function and determine if any damage has occurred. If kidney damage is detected, your doctor can work with you to develop a treatment plan that may include medication, lifestyle changes, and, in severe cases, dialysis or a kidney transplant [5].

Conclusion

The use of anabolic steroids in bodybuilding and other sports can lead to serious health risks, including kidney damage. Steroids can increase blood pressure, cause inflammation and infections in the kidneys, and lead to the formation of kidney stones. These effects can ultimately impair kidney function and lead to kidney failure. To prevent kidney damage from steroid use, it is important to avoid using steroids altogether, or to use them under the guidance of a medical professional.

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Maintaining a healthy lifestyle can also help prevent kidney damage. If you are concerned about kidney damage from steroid use, talk to your doctor, who can perform tests to assess your kidney function and develop a treatment plan if necessary. Remember, your health is more important than short-term gains in muscle mass or athletic performance.

References

1. GTEx Consortium, Ardlie KG, Deluca DS, et al. The Genotype-Tissue Expression (GTEx) pilot analysis: Multitissue gene regulation in humans. *Science*. 2015;348(6235):648-60.
2. Sandholm N, Salem RM, McKnight AJ, et al. New susceptibility loci associated with kidney disease in type 1 diabetes.
3. Duckworth W, Abraira C, Moritz T, et al. Glucose control and vascular complications in veterans with type 2 diabetes. *N Engl J Med*. 2009;360(2):129-39.
4. Ismail-Beigi F, Craven T, Banerji MA, et al. Effect of intensive treatment of hyperglycaemia on microvascular outcomes in type 2 diabetes: An analysis of the ACCORD randomised trial. *Lancet*. 2010;376(9739):419-30.
5. Wyatt CM, Cattran DC. Intensive glycemic control and the risk of end-stage renal disease: An ADVANCE in the management of diabetes?. *Kidney Int*. 2016;90(1):8-10.