HGH in Men’s Sports

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**Introduction**

Humans have always been obsessed with the idea of living forever or remaining young forever. Both these ideas are highly fascinating and keep going on side by side. These fantasies keep the scientist and researchers busy and motivated to do more and more research in this field. The concept that humans can never die and life forever has not been much successful yet and the scientists are still finding a way to make them immortal but the idea that human being never gets old has gained a success to some extent. Doctors, scientists, experts, and researchers have succeeded to some extent to devise some of the ways in which the aging process can be, if not completely stopped, can be slowed down a little bit.

 Various approaches have been adopted by scientist and medical professionals all over the world to slow down the aging process in humans. These multiple anti-aging techniques or process include a number of methods that can be adopted by one’s own self and can be easily applied by bringing some simple life changes in the lifestyle whereas there are some methods that need to be surgically inculcated in the body of a person. These practices include the oral or injectable introduction of various hormones and rugs in the body. These medicines or drugs include caloric restrictions, Hormonal therapies, Anti-oxidants, stem cell therapy, ALT-711 therapy and many other. All these therapies have been proved to be extremely successful and beneficial in at least bringing the age of a person to a little halt or at least make them feel younger for a little while. One of such therapies is the induction of Human Growth Hormone (HGH) in the bloodstream. As the name suggests it is a hormonal therapy that is used to slow down the effects of age in a person. This method is recently becoming extremely popular in every field especially the area of sports and athletics. Athletes and sportspeople are currently taking high advantage of this technology but is it worth the risk? Is the usage ear inculcation of Human Growth Hormone useful for human beings? Is this hormone even safe for human health and how much quantities should be taken by humans so that it can never be harmful? The following research paper tends to answer all these questions.

**Discussion**

Human Growth Hormone or HGH is a peptide hormone that helps in the stimulation of growth, cell reproduction and cell regeneration in humans. It is not only present in human beings but also in other animals as well and perform the same function as it performs in humans. This hormone is most commonly known as the growth hormone or GH (in its short form) when it is generalized in terms of all living beings or animals. Also known as somatotropin, this hormone is highly crucial for the growth and development in animals and humans (De Vos, Ultsch, & Kossiakoff, 1992). It raises the concentration of glucose and free fatty acids in a person’s body in addition to the stimulation of the production of IGF-1.

 The history of usage of hormones for the treatment of various diseases in animals and humans is not very long and does not date very far back. As discussed earlier scientists had been conducting experiments to slow down the aging process and they had been looking for means to slow down or stop the declination process in the humans from a very long time. The information about growth hormone came into existence in the early 1920s but the usage of Human Growth Hormone was only started in 1963. Initially, these hormones were used to treat children with developmental disorders (Cai, Xu, Yuan, Liu, & Yuan, 2014). These disorders happen because of the malfunctioning pituitary gland in the body. Initially, the use of this hormone garnered great controversy due to its short supply. Sin those times, the only source of this hormone was the humans. The matter became so serious that the extraction of this hormone was even banned for six months. But then a recombinant of this growth hormone was developed by the name of Protropin and thus the usage of HGH could be possible once again in the region of the United States of America.

 Apart from the usage of Human Growth Hormone in general purposes, this hormone is also being extensively used in the field of sports and surprisingly, its use is legal in the USA. This hormone is mostly used by the players or athletes involved in power sports and endurance sports. These include bodybuilding, mixed martial arts, baseball, swimming, professional wrestling, soccer, cycling, weight-lifting, skiing, track and field and strength sports (Momaya, Fawal, & Estes, 2015). The drugs that contain HGH are commonly known as anabolic steroids and they are used in combination with a number of other performance-enhancing drugs to boost up the energy levels of a player. These performance-enhancing drugs often include androgenic anabolic steroids that contain testosterone that enhance the production and growth of erythropoietin.

The pure form of HGH is strictly banned not only in the sports circle but for the general use by the doctors and medical practitioners all over the country but the recombinant form is always available and permissible to be used. The history of usage of Human Growth Hormone dates back to the Ancient Olympic Games, where athletes reportedly took huge quantities of figs to bring an improvement in their performance. With the advancements in the area of science, especially endocrinology, many athletes tried experimenting with the mixture and cocktails of various drugs in order to increase their physical strength, overcome fatigue and perform for a longer time. These practices were completely considered legal and athletes, taking complete advantage of this leverage, went to surprising lengths to win the games.

 Growth Hormone, especially Human Growth Hormone, is easily available as a prescription drug and in some cases, can even be found over the counter. This easy availability of the drug is due to the fact that it is used in the treatment of various developmental and growth diseases and the children who have short stature. Moreover, these drugs are also used in the case of adults to treat malfunctioning pituitary gland and various other gland s that assist in the process of growth. Coming towards the question of the effectiveness of HGH in order to improve the efficiency of sportsmen and athletes in the field of sports, it is still in doubt. Studies are being carried on in the respect that whether the inculcation of HGH is effective in the case of sportsmen or not and does it improve the performance of athletes in their respective areas of sports.

Although, the usage of HGH or GH does not guarantee success by any means and neither it has been proven to boost up the performance by any means, still, sadly many sports celebrities and athletes have admitted taking these drugs and hormones in order to get ahead of their other competitors. This situation has raised serious concerns among the regulators and controllers of the sports boards as this raises an alarm that these drugs, especially the hormone is being highly abused (Voss, et. al., 2014). This abuse of this hormone has led to a ban on all the drugs that contain GH or HGH by all the major sports regulatory authorities like Major League Baseball, the National Football League, International Olympic Committee, and the World Anti-Doping Agency. Despite all these bans, a number of athletes have still been found and caught to be using HGH and doping drugs during their practice sessions or when a series starts. These practices are detected and caught by regular conduction of dope tests and drug tests and the player may face a lifetime ban on him if the use of HGH or any performance-boosting drug is proved (Green, 2014).

**Conclusion**

Hence, it can be clearly seen that Human Growth Hormone or HGH has clearly many benefits and it is being used at a high level in the medical field by expert medical professionals and endocrinologists to treat many growth and development disorders. But this popularity or effectiveness of the hormone does not nullify or even reduce the fact that HGH also has some downfalls or side effects like every other drug or medicine. The usage of HGH can be seen at a very high level in the area of sports and athletes where the sportspeople and sportsmen take heavy doses of this growth and development hormone to increases the physical strength and boost up their stamina. The positive side effects of this hormone are still unknown but it has been completely immoral and unethical that one sportsman is getting a benefit over his or her other counterpart with the help of artificial means. This has led to the ban on the drug or hormone by various leading sports regulatory authorities like International Olympic Committee and it is highly expected that the player will get a lesson out of it and stop using this kind of means and shortcuts to get success.

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