

# Steroids and Monkey Glands

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Anabolic steroids have become familiar to the public as drugs which are widely assumed to boost athletic performance. The Ben Johnson scandal at the 1988 Seoul Olympic Games only confirmed the widespread view that steroids have become an essential, if illicit, ingredient of certain record-breaking performances in track and field as well as Olympic weightlifting.

But the association of steroids with athletic performance is only part of the story. Anabolic steroids, first isolated by chemists in the 1930s, are synthetic male sex hormones which mimic or amplify the effects of natural testosterone, which produces the male secondary sex characteristics and the sex drive itself. So it is not surprising that for centuries primitive precursors of synthetic steroids have been used as aphrodisiacs and rejuvenating elixirs.

Fantasies about the restorative powers of certain human or animal organs and fluids has been a part of medicine since ancient times. In antiquity the blood of powerfully built athletes was believed to have special curative properties. In the Middle Ages powders made from the testicles of horses, foxes, rabbits, and roosters were used to boost sexual potency. Even today such potions remain the most popular performance-enhancing substances known to man.

One of the most interesting chapters in the long history of the male hormone involves the medical career of Dr. Serge Voronoff, a Russian-French surgeon who earned an international reputation—and a great deal of money—back in the 1920s by transplanting slices of monkey testicles into aging men seeking a new physiological lease on life. Even today, many people who lived through the 1920s and 1930s will recall the term “monkey glands” and what it suggested about the men who sought to have them implanted on or near their own sexual organs.

The monkey gland operation played a very marginal and rather bizarre role in the sporting life of that period. A former middle-weight boxing champion of the world named Frank Klaus, clearly hoping for a comeback, publicly announced his own operation, but even the simian glands could not revive his career.

Meanwhile, similar operations had been underway at San Quentin Prison in California. From time to time the testicles of executed criminals were transplanted into other inmates who were judged to be gland-deficient. At the prison's Thanksgiving Games in 1923, sportsmedical news was being made. As the medical historian David Hamilton reports: “Gland-

transplanted inmates did well, and the seventy-year-old John Person, who was carrying an extra grafted testicle, came a good second in the fifty-yard dash, beating several younger inmates with only two testicles.”

Another sports-related event involving gland transplants was the 1928 meeting of the British Thoroughbred Breeders Association, which refused to list gland-grafted horses in the stud book in order to preserve equine racial purity. The most interesting aspect of this little controversy was the widespread assumption that gland-grafting actually worked. One horse breeder called this sort of research “contrary to nature,” but the major concern was polluted blood lines.

It goes without saying that gland-transplanting was an exercise in pseudo-science. Voronoff himself appears to have been a sincere if self-deluded crusader who believed he was conferring a blessing on mankind. The benefits reported by his patients resulted from Voronoff's considerable personal charm and power of suggestion.

Voronoff's operations were highly publicized, and it seems that the general public, like his patients, were rooting for him to succeed. Such fantasies about miraculous hormone cures are a reminder that, despite the anti-drug campaign now in progress, our own attitudes toward anabolic steroids are likely to be highly ambivalent whether or not we are aware of it.

It was Voronoff's misfortune that his work preceded the synthesis of testosterone in the 1930s. By the 1940s, clinical experiments with testosterone were actually being discouraged, due in part to reports that this hormone was nothing less than “medical dynamite” and “sexual TNT.” The potential use of testosterone as an aphrodisiac is, in fact, the unpublicized aspect of the steroid issue.

## References:

David Hamilton, *The Monkey Gland Affair* (London: Chatto & Windus, 1986).

Hermann Schelenz, Organtherapie im Laufe der Jahrtausende, *Arkiv fur die Geschichte der Medizin*, Vol. IV (1912) : pp. 138-156.

William N. Taylor, Synthetic Anabolic-Androgenic Steroids: A Plea for Controlled Substance Status, *The Physician and Sportsmedicine*, Vol. 15, No. 5 (May 1987): pp. 140-148.

Henner Vorwahl, Zur Geschichte der Organotherapie, *Arkiv fur die Geschichte der Medizin*, Vol. XVII (1925) : pp. 201-203.