The Androgen Group-Anabolic Steroids

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These compounds are related to the male hormone testosterone. They are referred to as the anabolic steroids because they cause the formation of new proteins. As we stated before, they are often abused by athletes trying to increase strength and muscle mass. Their use in canine medicine, while infrequent, is related to these and similar properties. Anabolic steroids come in liquid forms for injection and tablets for oral administration. Two of the most commonly used in canine medicine are stanozolol (Winstrol-V) and nandrolone (DecaDurabolin).

Animals that have been sick for a long time or who have been through severe, debilitating injuries often have generalized weakness and atrophied muscles. In some, this has progressed to the point where the animals can no longer walk or even stand. Their bodies are just too run down, and without some outside stimulation, they simply may give up the will to live.

Anabolic steroids are sometimes useful in these situations. The therapy may take several weeks. The medications can be most helpful if the veterinarian recognizes the condition before too much strength is lost. Anabolic steroids assist the body in regaining its muscle mass by building new proteins, which are the primary constituent of muscle fibers. Additionally, they help strengthen existing muscles.

In some of these same cases, anabolic steroids are frequently used to stimulate the debilitated or recovering patient's appetite. To achieve this effect usually requires several days to several weeks of therapy for significant changes.

The anabolic steroids are also useful in treating certain types of anemia. Anemia is the term used to describe lower than normal numbers of red blood cells (RBCs). In certain cases where the bone marrow has stopped producing new RBCs, administration of anabolic steroids will stimulate this system and bring the number of these cells back to normal levels. They also are known to stimulate the production of white blood cells and platelets (tiny cells in blood that assist in clotting) to a lesser degree. In these situations, the anabolic steroids are useful only in increasing the numbers of these cells. They do not increase the ability of the cells to function.

Kidney failure often brings on anemia because these organs may fail to produce the substance erythropoietin. Its normal function is to monitor the level of RBCs in the body and to stimulate the bone marrow to increase production when RBC numbers are too low. In its absence, anabolic steroids are often useful in reversing the effects of this anemia. They do not cause new erythropoietin to be produced; they only replace its function.

In many situations, the anabolic steroids fail to provide the benefits described here. Regardless of which particular product is used, it is often impossible to reverse the condition present. These are not miracle drugs that can save every debilitated or severely ill patient, but in some they can help.

As stated, these medications are closely related to testosterone and many of the problems associated with their usage are brought on by the normal actions of the male hormones. They can cause cessation of heat cycles and imitation mounting behavior in females. In males, they have been found to increase the incidence of prostate disease and certain hernias and tumors that are caused by normal testosterone levels in older male dogs. Normal sperm production is often disrupted, with few new cells being formed. None of these problems are considered significant in these cases, as many of the patients are already in a life or death situation.

Anabolic steroids also cause water retention and this can cause additional complications in kidney or heart failure patients. These products also increase the absorption of calcium by the intestinal tract and cause the kidneys to retain calcium during normal urine production. Both of these actions lead to excessively high calcium levels in the blood which can be disastrous to normal heart function. This can be quickly fatal in those with already failing hearts.