

The Effects of Anabolic-Androgenic Steroid Drugs Consumption on Blood Factors in Bodybuilder's Athletes in Jahrom, Iran

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Abstract

Background and objectives: Mass media and the press present documentary reports of taking illegal energetic drugs by athletes who are tempted to enhance their performance. The present study aims at determining the effect of two illegal drugs on the athletes, blood factors.

Material and Methods: The participants are 20 volunteer athletes selected unrandomly, 10 as a control and 10 as an experimental group. First, their blood samples were obtained from the medial cubital vein of left hand and then they were subjected to body building exercises for six weeks. The control group did not take any drugs while, the experimental one took oxymetholone steroids and methandrostenolone orally, based on pre – determined schedule during the exercises. During this period, Venipuncture was carried out for five times and the effects of drug on the blood factors were investigated. Finally, we analysed the findings by statistical Tests.

Results: The results show that the levels of HCT (51.1 % vs. 46%), Hb (16.6 g/dl vs. 15.6g/dl) and Reticulocyte (0.9% vs. 0.5%) are increased significantly ($P < 0.05$). there is no meaningful differences in the other blood factors such as WBC, MCV, MCHC and MCH.

Conclusion: Based on this, findings, taking oxymetholone and methandrostenolone, which have prominent effects on the body functions, result in major changes in some blood factors such as Hb, Hct and Retic.

Key Words: Oxymetholone, Methandrostenolone, blood factors