
IS41. TOXICOLOGICAL ENDPOINTS OF DOPING SUBSTANCES

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Athletes and non athletes weightlifters have tried to gain an unfair advantage through the use of doping substances since ancient times. Doping substances although enhance sports performance, represent a risk to the health of individuals and violate the spirit of competition. The use of prohibited performance enhancing drugs (PED's) or methods to improve results in competitive sports is referred to as doping. Among the PED's used are androgenic-anabolic steroids (AASs), diuretics and masking agents, narcotics and cannabinoids. The improper handling of endogenous hormones such as human growth hormone, erythropoietin, testosterone and insulin and also the use of forbidden methods such as blood transfusions or gene doping and even the refusal to take a drug test or attempt to tamper with doping controls are all considered as doping. Every year a new list of banned drugs is prepared by the World Anti-Doping Agency (WADA). Abusers of doping substances have higher mortality rates and risk of sudden death. Many adverse effects of AASs abuse such as increased body hair, acne, aggressive behaviour, mood disturbances, alteration of cardiovascular parameters, disturbances in endocrine and immune functions have been reported. Doping agents generally exert tendinopathies, rhabdomyolysis, arthralgias, abnormal bone growth, osteoporosis, joint cartilage erosion and osteoarthritis, soft tissue edema, fatigue and tremor. . In the present article the target organs that are affected by the use of doping substances will be discussed in detail.

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