**LISPER MURUGI**

**HSB 214-0145/2020**

**Dopamine**

**Introduction**

Doping refers to using prohibited medications and drugs for treatment by athletes to improve athletic performance. Dopamine is one of the drugs that belong to an analgesic class of drugs that athletes use as a stimulant. The mechanism of action of such a drug is by improving the heart's pumping strength and enhancing blood flow to the kidneys. Dopamine is injected into the body intravenously(IV). The drug is classified as a hormone belonging to the catecholamines class of hormones. Likewise, dopamine acts as a neurotransmitter in the brain by playing an essential role in the reward system pathway.

**Methodology**

The doctors can Measure the density of dopamine transporters that correlate positively with nerve cells that use dopamine. The test involves injecting a radioactive material that binds to the active dopamine sites, which are after that viewed by a camera.

**Results and consequences to the athlete**

There has been increased attention to correct scientific techniques used in doping tests. In the case of positive tests, lab errors and mistakes are rarely associated since the WADA, IOC, and IAAF organizations are keen on testing(Martens, Cox, & Beck, 2003). The consequences of positive results vary, including significant disqualifications of teams, suspensions, loss of support, and lots of awards. Several athletic bodies, including FIFA, regard testing as a highly scrutinized procedure due to the high magnitude of consequences.

**References**

Martens, M. P., Cox, R. H., & Beck, N. C. (2003). Negative consequences of intercollegiate athlete drinking: the role of drinking motives. *Journal of Studies on Alcohol*, *64*(6), 825-828.