

Recovery strategies: Medications

There is virtually no evidence supportive for medication in the context of recovery. There is some evidence for medication in some peripheral aspects and some negative studies.

There is absolutely no evidence for Growth Hormone, anabolic steroids or Testosterone [though trial doses bear no resemblance to the doses used in illegal use], nor Sympathomimetic substances improving any type of recovery.

Non-Steroidal Anti-inflammatories have been proven in a placebo blind trial to reduce the effect of DOMS [delayed onset muscle soreness] in eccentric exercise. This has been proven for the following NSAIDs Ibuprofen, Diclofenac and Naproxen. In these studies muscle force and quads torque were maintained better than placebo.

Use of the NSAIDs before exercise did not have significant effect in most trials compared with taking afterwards.

The mechanism is unlikely to be at muscle level as CK [Creatine Kinase] and LDH [Lactic Dehydrogenase] levels did not alter. It is postulated that the mechanism by which Anti-inflammatories work, is central analgesia.

Apart from the possible Gastro-intestinal, cardiac and renal side effects of NSAIDs there are evidence to suggest they blunt protein synthesis post exercise in untrained men.

In terms of medication in reducing or coping with immuno-suppression there are some medications that have been proven to reduce infection. These include Dipyridamole, diuciphon and Interferon nasal sprays all used in short periods and with significant reduction in infections with no major side-effects.

It may be worth a trial of some of these medications in some institute athletes in high risk infective conditions.

While not strictly medications Glutamine and other BCAA have been suggested as possible immune protectors but evidence is conflicting. Similarly with Zinc there is evidence to suggest that Zinc supplementation can aid immunity but excess Zinc can impair immune function.

Conclusion

Virtually no role for medication in recovery strategies other than analgesic relief, possible trial of immune modifiers and full nutritional assessment followed by targeted supplementation.

Recommendations

No place for medication in recovery. Possibly trial of infection preventers at high risk groups but obtain more info.