Protective effects of foam rolling on muscle damage

Carlos Colmena Zaragoza
University of Valencia, Spain

Muscle issues and inflammation may be reduced by the use of foam rolling. Twenty female Wistar rats (7 months, 200-250 gr weight) were divided in 4 groups: Control (C), Foam roller (FR), Notexine without foam roller (N) and notexine with foam roller (NFR) and submitted to physical performance tests. The application of foam roller was carried out through the use of a 4.5 cm x 2 foam roller on the rat hind leg for two repetitions of 60 seconds for 3 days. An increase in time and foot faults during a beam crossing exercise in N group in comparison to C and FR group was detected. On the other hand, we observed a considerable decrease in both tests comparing NFR and N rat group. Moreover, we noticed a pro-inflammatory protein increment in N group and a fall in NFR group. We also remark a PPAR-γ increase in NFR group compared to N group showing that foam roller may have anti-inflammatory properties. Overall, the application of foam roller on the muscle damaged can generate benefits as could be the increment of anti-inflammatory proteins and the lessening of pro-inflammatory proteins, what leads to muscle recovery and performance improvement.

Biography

Carlos Colmena Zaragoza, born in Valencia in 1988, graduated in phisiotherapy by the university of Valencia at 2011 is now completing his Phd in the Physiology laboratory at the University of Valencia. Following his studies in Universitarian Máster has stayed close to the laboratory participating in multiple studies and publications. Nowadays he works as associate profesor in the Miguel Hernandez University of Elche and as a physiotherapist specialized on vestibular disorder in the Vinalopó Hospital of Elche.

carcarmafisio@gmail.com