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MASSAGE AND STRETCHING IN FOOTBALL

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A soccer match leads to a physical performance decrement associated with the disturbance of psychophysiological parameters that progressively return to initial values during the recovery process. More than 72 hours are sometimes required to achieve pre-match values for physical performance as well as normalizing muscle damage and inflammation.
In high-level football, the schedule is particularly congested (i.e. two matches per week over several weeks), the recovery time between two successive matches can be between 2 and 4 days, which may be insufficient to restore normal homeostasis. As a result, players may experience acute and chronic fatigue potentially leading to underperformance and/or injury. Dupont et al. (2) reported a 6.2-fold higher injury rate in players who played 2 matches per week compared to those who played only 1 match per week.
Bengtsson et al (Br J Sports Med 2013; 47: 743-747) confirmed these results with a study involving 27 professional teams over 11 seasons. Total injury rates and muscle injury rates were increased in league matches when the recovery time was lower or equal to 4 days compared with matches where the recovery time was higher or equal to 6 days. The present data highlight the need for improved recovery strategies to maintain a low injury rate during periods with congested match fixtures.
Massage and stretching are common recovery strategies used by 78% and 50% of the practitioners in charge of recovery strategies in French professional soccer teams (3).
In terms of recovery of performance (strength, power or physical performance outcomes), most of the studies failed to find a significant beneficial effect of massage on subsequent exercise after local exercises (Barlow et al, Int J Sports Med 2007; 28: 253-256) or global exercises (Robertson et al, Br J Sports Med 2004; 38: 173-176). Massage therapy attenuates inflammatory signaling after exercise-induced muscle damage (1), and presents psychological benefits. Massage decreased the subjective symptoms of delayed onset muscle soreness and increased perceptions of recovery (Hemmings et al, Br J Sports Med 2000; 34: 109-14).
No substantial scientific evidence was established to support the use of stretching to enhance the post-exercise recovery of soccer players. In a meta-analysis including 12 studies, Herbert et al. (Cochrane Database Syst Rev 2011 Jul 6;(7):CD004577) reported that stretching is not clinically worthwhile in reducing muscle soreness in the days following exercise. Recovery of physical performance is not improved after stretching (Lund et al, Scand J Med Sci Sports 1998; 8: 216-221).

Conclusions

Scientific evidence for massage and stretching, is still lacking in the ability to accelerate the return to the initial level of performance.
It does not mean that these strategies do not help to recover, but that the protocols implemented up until now were unable to accelerate the recovery of physical performance.

References

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