COMPARING THREE TYPES OF RECOVERY RO-GRAMS ON REMOVAL OF LACTATE AFTER AN INTENSIVE EXERCISE

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INTRODUCTION
For decades, many investigations have been focused on the production and removal of lactate in relation to exercise (see for example, Van Hall et al. 2002, Draper et al. 2006, and the references therein). During intense exercise, lactate is produced faster than the ability of the tissues to remove it, and thus lactate concentration begins to rise. Recovery process plays an essential role in determining subsequent athletic performance. Several studies have concluded that the recovery exercise causes significant disappearance of lactate in athlete’s blood. Bogdanis et al. (1996) observed that recovery of power output during repeated sprint exercise is enhanced when low intensity exercise is performed between sprints. Corder et al. (2000) found significant reductions in lactate during short duration low-intensity active recoveries when compared with passive recovery. Hemmings et al. (2000) also investigated the effects of massage on the disappearance of blood lactate. The goal of this study was to compare three recovery programs: active (slow running), passive (complete rest, sitting on the chair) and massage (friction type) in disappearance of stored lactate in wrestler’s blood after an exhaustive exercise.

METHOD
We selected 60 volunteered athletes’ students who participated in the university wrestling competition. They were divided into three groups, but only 53 persons could finish all the period of study. Blood samples were collected from athletes during the rest, after exercise and after recovery programs. The range of lactic was measured using a lactometer. The activity was 800 meter running with maximum possible speed of athletes.

RESULTS
Rates of lactate in passive, active and massage recovery groups in rest were 2.17, 2.11, and 2.23, after intensive exercise were 14.97, 14.81, 14.96 in final after recovery program were 10.44, 9.12 and 10.27 respectively. The measured results for three types of recovery programs (i.e., active, passive and massage) indicated that the removal rate of the lactate in athletes’ blood were not significantly different in these groups.

DISCUSSION:
It was observed that active recovery has better effectiveness on the disappearance of lactate in athletes’ blood comparing to other two groups. The result also showed that massage recovery program has a better outcome than the passive recovery group. Their results provided some support for the psychological benefits of Massage comparing to passive program; however, the efficiency of massage for blood lactate removal and speeding recovery in the repeated sports performance was questioned.

REFERENCES

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