

The Effect of Platelet-Rich Plasma Application on Recovery of Contusional Muscle Injury in Trauma Induced Rabbits

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ABSTRACT The purpose of this paper was to evaluate the effect of platelet-rich plasma (PRP) application after the contusion muscle injury. In the study, New Zealand type rabbits were placed into a trauma model. The rabbits were divided into three groups. In the 1st group PRP was applied just after the trauma, in the 2nd group PRP was applied one day after the trauma and in the 3rd group PRP was not applied. Fibrosis decreased in the groups in which PRP was applied in the first day or in the first hour but fibrosis increased in the control group steadily. Dystrophic calcification developed less in the group in which PRP was applied in the first hour compared with the control group. It is concluded that particularly with its effect on dystrophic calcification, PRP may reduce the possibility of re-injuries and help athletes in terms of returning to sports more quickly.