THE EFFECT OF L-ARGININE ON DECREASING FOAM CELL DEVELOPMENT AT POST SURGICAL EMBOLECTOMY WITH FOGARTY BALLOON CATHETER ON ILIAC ARTERIES OF RABBIT

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ABSTRACT

Vascular injury caused by Fogarty balloon catheter lead on endothelial dysfunction and trigger the development of foam cell, early atherosclerosis plaque. L-Arginine, as a nitric oxide precursor, has shown to decrease foam cell development. The aim of this study is to prove the effect of L-Arginine on the decreasing of amount of foam cell at post surgical embolectomy with Fogarty balloon catheter on iliac arteries of rabbit. Sixteen male rabbits were randomized divided into two group of treatment (n=8). After surgical embolectomy in right iliac artery has done, rabbits were fed standard ration (T0) and standard ration with oral L-Arginine (T1). At 28 days after surgical embolectomy, all samples were sacrificed for histopathological assesment. Based on unpaired $t$ test result shows significantly different ($p<0.05$) between T0 (15.28 ± 13.60) and T1(3.96 ± 4.26). The conclusion of this research is L-Arginine affecting on the decreasing of amount of foam cell at post surgical embolectomy with Fogarty balloon catheter on iliac arteries of rabbit.

Keywords : vascular injury, Fogarty balloon catheter, foam cells, L-Arginine, nitric oxide