Aim: The eccentric exercise (EE) cause severe muscle damage and consequently the oxidative stress. The pulsed ultrasound (UTP) is a therapeutic strategy that accelerates muscle recovery after an injury. However, there are doubts about the biochemistry modulation of the UTP on the oxidative stress parameters after the EE. Objectives: Measure the effects of the therapy with UTP+DMSO about the oxidative stress parameters after the eccentric exercise (EE). Methods and Results: It was used 36 male rats, weighing from 250 to 300g, and divided on the following groups (n=6): control group (CG); (EE); (EE+Gel+saline 0,9%); (EE+TPU 0.8W/cm2); (EE+DMSO); (EE+TPU+DMSO). The animals was submitted to the EE protocol (16° inclination run) followed by treatment. Forty-eight hours later of EE the animals was sacrificed and the gastrocnemius was removed for posterior analysis. It was measured the Creatine Kinase (CK), Superoxide Dismutase (SOD), Catalase (CAT), Superoxide Anion radical production, Carbonylation of Proteins (CP) and the reactive species to Thiobarbituric Acid (TBARS). The significance level was set in 95% (p<0,05). Our search shows that the group EE+TPU+Gel DMSO decrease significantly the levels of CK, superoxide production, CP, TBARS, SOD and CAT in comparison to control group, though the other groups have shown an increase of these markers in comparison with CG. Conclusion: According to results, the TPU combined with the Gel DMSO can decrease the oxidative stress in injuries induced by eccentric exercises.