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Antioxidative Effects of Sea Cucumber *Stichopus japonicus* in Ovariectomy

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Oxidative stress plays a pivotal role in the pathogenesis of atherosclerosis and can be effectively influenced by radical scavenging enzyme activity and expression. This study was carried out to investigate the inhibitory effect of Sea Cucumber *Stichopus japonicus* uronic acid (SJU) on oxidative stress. SJU (100 mg/kg) was intraperitoneally administered into rats for 2 weeks. The antioxidative effects of SJU in ovariectomized rats were measured through the activities of Aspartate aminotransferase (AST), Alanine aminotransferase (ALT) in serum and Superoxide dismutase (SOD), Catalase (CAT), Glutathione peroxidase (GPx) in liver tissue. SJU-administered and ovariectomized (SUX) group showed more inhibitory effects in AST and ALT activity compared to ovariectomized control (OXC) group. SOD, CAT and GPx in SUX group were increased compared to those of OXC group. These results suggested that SJU could be used as the potential supplement in the pathogenesis of atherosclerosis.

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