

P117

The Effect of *Sea Tangle* Extract on Inhibition of Platelet Aggregation and Blood Rheological Properties in Whole Blood of Ovariectomized Rats

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The menopausal transition, as well as the early postmenopausal period, is associated with an increased body weight in the rate of body fat, aggravating certain cardiovascular risk factor. Therefore, we investigated whether *Sea Tangle* (ST) affects on blood flow and the platelet aggregation of ovariectomized rats being treated or untreated with ST. Three groups were surgically ovariectomized (OVX). The fourth group was sham operated. Sprague-Dawley female rats were randomly assigned to the following groups : sham-operated rats (Sham), ovariectomized control rats (OVX-Control), ovariectomized rats supplemented with ST at 50mg/kg body wt (OVX-ST50) and ovariectomized rats supplemented with ST at 200mg/kg body wt (OVX-ST200). Blood passage time of OVX-ST50 group was rapidly passed than untreated group. Microscopic observation showed that the whole blood passed smoothly through the microchannels in ST groups. Inhibitory effects of ST extract on platelet aggregation were also observed. These results suggest that ST may be used to possibly improve the quality of life in menopausal women.

Key words: *Sea Tangle, platelet aggregation, micro channel array flow, ovariectomized rat*

P118

The Effect of *Undaria pinnatifida* Extract on Lipid Metabolism in Ovariectomized Rats

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Our objective was to investigate the effect of *Undaria pinnatifida* (UP) extracts on serum lipid concentration in ovariectomized rats. Three groups were surgically ovariectomized (OVX). The fourth group was sham operated. Sprague-Dawley female rats were randomly assigned to the following groups : sham-operated rats (Sham), ovariectomized control rats (OVX-Control), ovariectomized rats supplemented with UP at 50mg/kg body wt (OVX-UP50) and ovariectomized rats supplemented with UP at 200mg/kg body wt (OVX-UP200). The serum GOT and GPT levels increased by ovariectomized were decreased after supplemented with the UP extracts. The serum total cholesterol, triglyceride and LDL-cholesterol level in UP groups was decreased than the level in the OVX-control group. The serum HDL-cholesterol in UP groups were higher than OVX-control group. These results indicate that lipid metabolism in ovariectomized rats was suppressed by feeding UP extract

Key words: *Undaria pinnatifida, ovariectomized rat, lipid metabolism, postmenopausal*