

Effect of green-lipped mussel on biomarkers alteration in canine articular cartilage defect

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Abstract This study aim to study the effect of green-lipped mussel (GLM) supplementation on alteration of osteoarthritis biomarker in canine articular cartilage defect. Eight dogs, 3-5 year-old, 10-15 kg bodyweight, were divided into 2 groups. Both groups were fed normal food for 4 weeks after operation for made articular defect on stifle joint. Then the control group was fed normal food and the treated group was fed 0.30% GLM food for 6 weeks. To this end, serum biomarkers; chondroitin sulfate epitope WF6 and hyaluronan were analysed. The 5th and 6th week, the CS epitope WF6 was significantly decreased ($P < 0.05$) in treated group compared with control group. The relative change of HA compared with control week was not different in normal group but up-regulated in treated group ($P > 0.05$). Results indicate that green-lipped mussel supplement has the potential in treatment and prevention for osteoarthritis.

Keywords : green-lipped mussel, cartilage defect, osteoarthritis, canine
