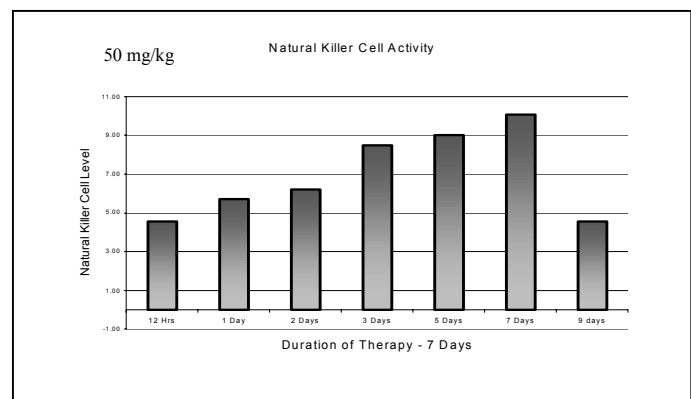
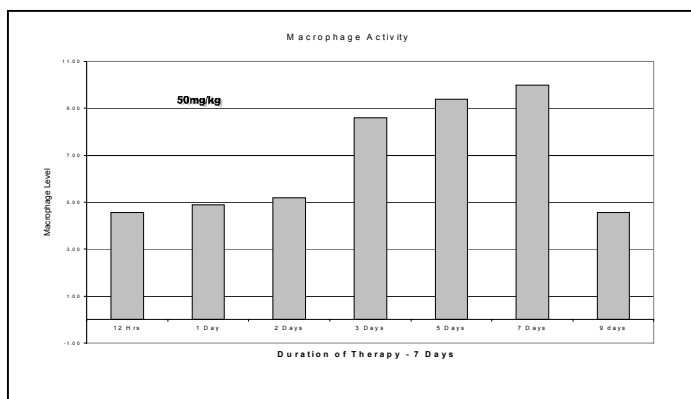
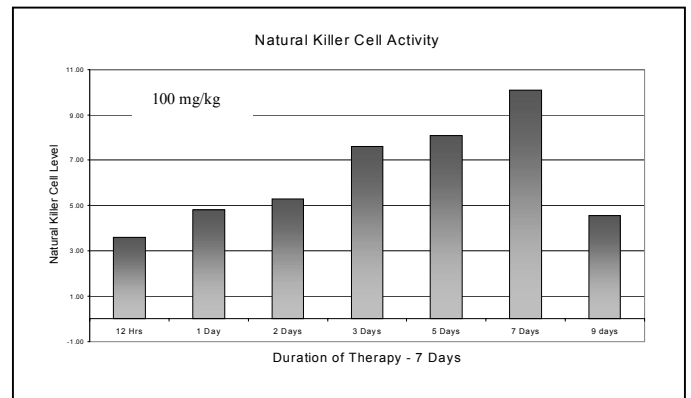
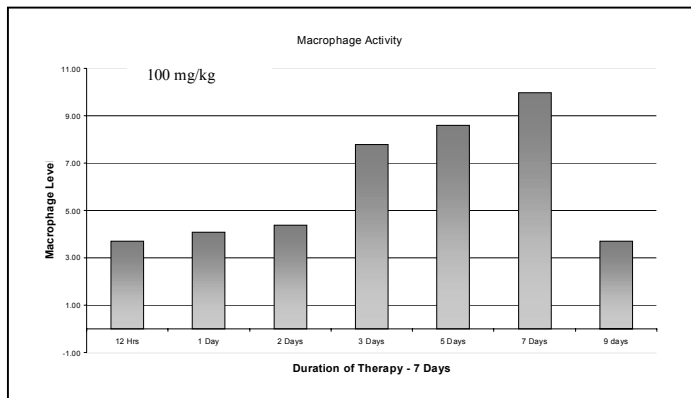


Augmentation of canine cellular immune response by administration of AHCC

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Introduction – AHCC, an IL-12 inducer, has been used with β -shark cartilage, Vitamins, Kristin and Wolson in human immunotherapy. This multi-combination therapy is expected to exert their anti-tumor effects by activation of macrophages and T h1 cells, particular in production of IL-12. It is, however, not clear as to the therapeutic effect of AHCC in dogs. We studied the effect of AHCC clinically for dogs by using chemiluminescence (CL) method, observing the activities of macrophages, neutrophils and NK cells.



Results – CL macrophage activities began to increase after administration of AHCC. Group 1, which used a dose of 100mg/kg, increased to about 2.7 times. Group 2, which used a dose of 50 mg/kg, increased 2.2 times. After therapy cessation, both groups returned to their initial level after 48 hours. CL Natural Killer cell activity also began to increase after administration. Group 1 increased to 2.8 times and group 2 increased to about 2.2 times after administration. Both groups returned to initial levels after therapy cessation. CL activities of non-adherent cells of both groups increased to about 2 times after and returned to initial level after administration.

Discussion – These results showed that CL activities of macrophages, NK cells and neutrophils increased by administration of AHCC in canine with a dose dependent pattern. This result suggests that AHCC treatment might be effective for improvement of clinical state and anti-tumor effect.