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Hematological aspects of *Pteridium* spp. (bracken fern) toxicity in K14-HPV16 transgenic mice

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Pteridium spp. (PTE) is a plant species that is very well adapted to environmental conditions. It is used as food by animals and various human populations. Its toxic chemical composition can induce various diseases upon acute or chronic consumption. Animals infected with papillomavirus that frequently feed on PTE tend to manifest a synergistic effect on lesions associated with this virus, since PTE has an immunosuppressive power. Our objective was to evaluate the effects of PTE in hematological parameters of human papillomavirus type 16 (HPV16)-transgenic K14-HPV16 mice. We used females aged 23-25 weeks randomly divided into 6 groups: (n=5 *per* group) G1 (WT, control), G2 (WT, 50% PTE), G3 (HPV, control), G4 (HPV, 12.5% PTE), G5 (HPV, 25% PTE) and G6 (HPV, 50% PTE). The animals ate freeze-dried PTE fiddleheads for 28 days, and for two weeks they ate normal food. At the end of the test, the animals were sacrificed, and the blood was collected for analysis. G6 erythrocytes were statistically lower than G3 (p<0.05). Leukocytes, neutrophils, hemoglobin, lymphocytes, and hematocrit tended to increase at 50% PTE concentration. Glucose tended to decrease with increasing PTE concentrations. The increase of the mentioned parameters may reflect the presence of HPV16 transgenes aggravated by the

extract. However, more studies are being processed to better understand the relationship between the extract and HPV16.

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