Cat/dog cancer risk only about 25% of that of human (continues)

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One cat dies from cancer every three minutes; yet, a catâ€™s risk of cancer is only about 25%. Moreover, it appears that radiation and cancer are very similar, with two percent chance of cancer and five percent chance of death from radiation in mice. [1]

So far, cancers have been studied for metastasis. However, they do not distinguish cancer from other forms of cell damage. In the recent development of a new breed of chemotherapeutic drugs (MDX-1.0), shown to be effective against tumors in animals, naturally occurring mechanisms to stop tumors from metastasis are not tested. They are based on evaluating oncogenic mechanisms of cells at the molecular level, in a way that is similar to that of zinc finger nucleases. Since metastasis can be caused by a multitude of pathways in different cancers, it is therefore important to make better assessments of the mechanism of oncogenic progression in cancer patients.

To explain the fact that cat/dog cancer risk only about 25% of that of human, Taku inokuchi, Japan, recently gave another explanation. He has disclosed that it is not the amount of radiation, but the amount of potentially relevant carcinogenic xenogastric toxins [2] that are contributing to these lower cancer risk rates.

Most cat/dog tumors are caused by â€œhasselback mammary tumorsâ€. These tumors secrete damaging vesicles that induce oxidative stress in the hormone-producing systems of the fetus, resulting in increased motility of the pituitary gland and thyroid gland. Thus, having a stressful environment does not make its impact more profound in cancer patients than that of other tumors.

As far as observed from animal models of cancer, cancer cells remain cancerous under stress conditions for longer than the fetus. Thus, they are biologically indestructible and that is why, in developing the MDX-1.0 drug, we also found that it was effective against cancer cells after irradiation. [3]

MDX-1.0 drug exhibits unique properties in cancer cells from cancer patients that makes it useful against tumors. Specifically, it applies oxidative stress and effects oxidative tumor-cell death through destructive cell cycle change. This does not require severe radiation exposure to kill cancer cells. In fact, it is currently under investigation whether this drug might also be effective in treating human disease.

References:

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A Small Bird Sitting On A Tree Branch