

Cancer In Small Animals

Cancer prevention is possible in some small animal species, but veterinary checkups are a must for all.

By Angela Pham

Posted: November 15, 2008, 5. a.m. EDT

The xray reveals where possible cancerous areas may be in your small animal.

When a male hamster was recently brought into a San Diego, California, veterinary clinic and diagnosed with a glandular tumor in his cheek pouch, his owners didn't hesitate to say, "OK. Let's take it out." With treatment and hospitalization time, the medical bill rang up to about \$600 — all for a little hamster whose original purchase cost probably didn't exceed \$15.

This kind of devotion to helping pets become free from cancer is not uncommon among small animal owners, said Jeffrey Jenkins, DVM, the veterinarian at the Avian and Exotic Animal Hospital who treated the hamster. Despite their small size, these pets are given full attention by both pet owners and veterinarians when cancer strikes.

Unfortunately, with some species of small mammals, cancer can strike unpredictably and can be difficult to treat. Certain species are more prone to cancer than others because of genetics and a history of inbreeding in the species, said Dr. Gregory Rich, DVM, of the West Esplanade Veterinary Clinic in Metairie, Louisiana. But other factors, such as sex, tumor location and nutrition can also play a role in whether or not a cancer forms and spreads in a small animal. Owners must stay informed about their particular pet's species and recognize the best ways to prevent and treat cancers in their small animals to help ensure their pets stay healthy and happy throughout their lives.

Ferrets

Dr. Rich said ferrets are more prone to cancer than any other species of animal that he deals with at his clinic.

He said he deals with a ferret with either insulin-secreting cancer of the pancreas or adrenal gland cancer at least once a week. Lymphoid tumors also occur frequently in ferret species.

Such cancers are "very, very common" among ferrets, agreed Laurie Hess, DVM, an avian and exotic species veterinarian in New York. Insulin-secreting tumors produce excess amounts of insulin that causes low blood sugars, and adrenal gland tumors produce hormones that cause hair loss and suppression of bone marrow. In male ferrets, adrenal gland tumors can enlarge the prostate and block their ability to urinate, Hess said.

Jenkins said that while cancer is prevalent in ferrets, removal of tumors is generally successful in treating the cancer. Adrenal gland cancer is very treatable through surgery and removal of the diseased or cancerous adrenal gland, and lymphoid cancer is responsive to intravenous and oral chemotherapy, Rich added.

Although genetics are often the prime culprit, neutering a ferret at a young age may help prevent cancerous tumors from forming, Hess said. Most of all, regular preventive checkups with veterinarians is the best way to catch cancers while they are still easily treated.

Rodents

Rodents such as mice, rats and hamsters are typically fairly prone to cancer, although Rich said it is uncommon in gerbils.

Like ferrets, inbreeding in species like rats and mice makes them more apt to get cancer. But neutering a young rodent can help prevent cancers related to reproductive functions, like the common breast cancers in rats, Hess said. Mammary tumors notoriously occur in rats, Jenkins agreed.

"I've done three rat mammary tumors in the same day, so if you spay the rats when they're young, then they don't get those tumors," Jenkins said. "It's actually cheaper at our practice to spay your rat than it is to take the mammary tumors off, so we try to get people to spay their rats when they're young."

According to Rich, rodents are prone to any type of cancer, making bone cancer, skin cancer and internal organ cancer all common among the different species. Syrian hamsters in particular are prone to lymphomas, Hess said. Yet cancers are not inevitable in rodents: Jenkins recommends that in addition to early neutering, rodents be fed a nutritional diet with plenty of vegetables and vitamins. Purchasing a female rodent can also help avoid the many cancers related to the

reproductive organs, he said. Rich said regular veterinary examinations can lead to early detection, which is vital to prevent excessive spreading of cancerous cells.

Rabbits

Reproductive cancers in female rabbits are so common that early spaying — before the rabbit reaches a year old — is a must, Hess said. After the age of three, an increase in uterine cancer is common, especially among the unspayed, she said. About 80 percent of cancers in rabbits seen by Rich are mammaryian, ovarian and uterine cancers.

"With [female] rabbits, you get three choices: babies, cancer or get spayed," Jenkins said. "Once cancer is spread, it spreads everywhere, and it is too late."

Spaying a female rabbit that isn't going to produce offspring is essential to prevent cancer from growing in the unused reproductive organs because, as Jenkins said, "reproductive tracts really do not like to be [unused]."

Tumors of the bone and muscle tissue can also occur in rabbits, which are "very aggressive and hard to treat," Jenkins said. "If we're lucky, we can remove them surgically, but they have a bad habit of spreading to the tissue around them; they spread these long fingers of tissue around and come back later if you don't get them all out."

Jenkins said his clinic currently has four or five rabbits undergoing chemotherapy for phinomas, which are tumors of the phimus. These, he said, respond well to treatment.

Other Small Animals

Cancer is a concern for other small animal species as well. In guinea pigs, breast tumors commonly occur with age, in addition to adenocarcinoma, which originates in glandular tissue, Hess said. Benign subcutaneous cysts are "extremely common" in guinea pigs, Rich added.

Chinchillas hit the genetic jackpot in terms of cancer; veterinarians rarely see cancer occur in the species. Likewise, sugar gliders are rarely seen with cancerous cells.

"As a matter of fact, marsupials get less cancer than mammals," Jenkins said. "I don't know that anybody knows for sure why."

However, it's a different story for hedgehogs. Jenkins called hedgehogs "cancer factories" because of their lack of cell immunity. Rich said oral cancers are especially common among the species, though Jenkins said that glandular, skin and reproductive cancers are all frequent with hedgehogs.

But for every small animal species, regular checkups are an absolute must to help prevent cancers from forming.

"If we catch the signs early on, we can start doing surgery early on in life before they get really, really sick," Hess said. "It's a good preventive measure, not just for cancer but really for everything."