

LPVS Oncology Service

Safe Handling of Chemotherapeutic Drugs at Home

Can these drugs harm me or my family?

The risks to people caring for pets receiving chemotherapy are considered to be small, but unnecessary exposure to these drugs should be avoided.

Chemotherapy drugs are given to damage the cancer cells but they have the potential to cause damage to normal cells. This is why we see some of the side effects in people receiving aggressive cancer treatment (this is far less common in pets due to the lower doses we administer, as our main goal is often not a cure but extension of good quality life). Exposure to chemotherapy drugs or patient waste (faeces, urine or saliva) can theoretically pose a risk, despite the fact that the concentrations of the drug are either very low or non-detectable.

Exposure to small amounts of chemotherapy drugs over a long period of time may present hazards to people who are not receiving the drugs for cancer treatment (i.e. doctors, nurses and pharmacists who prepare, transport or administer the drugs). This is unlikely to be too much of a problem for pet owners who may be dealing with chemotherapy drugs over a relatively short period of time, but reducing exposure to a minimum is always wise.

Using proper techniques when handling, administering or disposing of chemotherapy drugs will maximise the benefits to the pet and minimise the risk to people.

How can I protect myself?

Pregnant or nursing women (or those planning to start a family) and young children should not handle chemotherapy medication – this is a sensible precaution.

Always wear gloves when handling your pet's medication. Most oral drugs have a protective coating, but we recommend that you wear disposable gloves when handling these medications. Tablets/capsules must never be split, or crushed unless you are specifically asked to do so. Please ask your vet or a nurse for a demonstration on how to administer a pill to your pet if you are not sure.

Try to make sure your dog or cat swallows the medication and does not spit it out.

·Keep your pet's medication stored away from food areas and in its original container which should be child-proof and clearly labelled. Keep in mind that there are a few drugs that will need to be stored in the fridge, please make sure they are appropriately labelled and separated from food.

Wash your hands after removing the gloves.

·There is no known risk associated with routine contact with your pet such as grooming, playing, or handling of food and water bowls; however, we would advise wearing gloves to wash food and water bowls, and keeping them separate from the human washing up.

A pet's interaction with children is allowed but should be supervised, avoiding contact with excreta, and with thorough hand washing afterwards. If inadvertent direct contact with contaminated saliva, urine or faeces of a patient occurs, the skin should be rinsed with water and washed with liquid soap for a minimum of 5 minutes.

We encourage you to keep a medication log to document the drug administration day(s) and any adverse events. If you happen to miss a dose, do not double-up on the medication, please contact us for advice.

Should any unused chemotherapy drugs remain after treatment, please return them to Lumbry Park Veterinary Specialists so that they can be safely disposed of. We are not able to provide refunds for medication dispensed and not used.

Keep all medication, containers and waste away from children.

How do I dispose of my pet's waste?

Much of this information merely reinforces common sense and good hygiene precautions which should always be followed when caring for your pet.

Always wear gloves when coming into contact with pet's waste products such as faeces, urine or vomit.

Try to absorb any fluid waste first with paper towels and dispose of this by double bagging. The aim should be to try to 'contain and absorb' any contamination rather than 'dilute and distribute'. After that, put everything in 2 plastic bags (the 'double bagging' technique) and tie firmly at the top. This can then be put into normal household waste.

The final cleaning process for household areas soiled with vomit, faeces or urine should include household products containing bleach.

If clothes, bedding, towels, etc. are soiled, then these should be machine washed separately to normal household laundry.

For cats, clean the litter tray as soon as possible after it has been used. Remove faeces and flush it down the toilet or dispose along with the litter by the double bagging technique and clean the tray regularly. Keep children away from litter trays.

How long should I continue these measures for?

The precautionary measures stated above should be continued during treatment and for a minimum of 48 hours and maximum 7 days after your pet has received the last dose of chemotherapy. This 7 day time period represents the longest time it should take for most drugs to be fully eliminated from the body.

This time is taken from studies in people and it is safest to assume the same is generally true with dogs and cats. In case of doxorubicin, one study reported presence of its metabolites (by-products) in urine for up to 3 weeks post administration.

Can my dog use the garden?

Yes, but try to restrict your dog to one area of the garden only, to minimise exposure of the garden to contaminated waste, if possible. Because ultraviolet light is believed to inactivate many drugs, an area with sunshine exposure or an area that can be cleaned easily is recommended.

Clean up faeces/stools as soon as possible and try to keep your family and visitors away from this designated area. It is not known whether these minimal residues pose any relevant threat to other pets so we would not advise to restrict your pet's contact with other animals.

If you take your dog for a walk, please try to avoid community areas where children may be exposed for at least 48 hours after drug administration, if possible. Try to encourage your dog to urinate/defecate on soil, rather than on concrete.

To whom do I speak to if I have any questions?

You can speak to any of our oncology staff (including clinicians and nurses).

References

Hayes, A. (2005) Safe use of anti-cancer chemotherapy in small animal practice. In Practice 27, 118-127.

Vail D, Thamm D, Liptak J, editors. Withrow and MacEwen's Small Animal Clinical Oncology. 6th ed. St Louis: Elsevier; 2019.