S. Cleveland-Massillon Road Akron, OH 44321 Phon

Phone: 330-666-2976 or 330-670-2351

# **Chemotherapy**

Client Handout

Your pet has been started on a chemotherapy protocol (see discharge instructions). Almost all anticancer drugs have the potential to cause serious side effects, fortunately, these side effects are relatively uncommon. Most pets tolerate chemotherapy very well, with minimal problems. However, being aware of the potential problems that can occur will help you to know what to expect and when it is important to be concerned about a particular symptom your pet may be experiencing. In any case, if you are uncertain about a particular symptom that your pet is showing, it is always best to contact Metropolitan Veterinary Hospital.

#### **IMPORTANT:**

- ⊗ If your pet is taking a drug that causes low blood counts and she starts feeling ill (lethargic, not eating, vomiting, and/or diarrhea) take her rectal temperature. Call us IMMEDIATELY if the temperature is above 103.5°F.
- ⊗ If vomiting is frequent or persists longer than 24 hours, please call us.
- ⊗ If you are uncertain about the significance of any sign/symptom you are seeing, it is better to be safe and call us rather than waiting and watching to see if the symptom resolves.

**METROPOLITAN VETERINARY HOSPITAL Emergency Numbers:** Call (330) 666-2976. One of our staff doctors or technicians will be available to help you with problems and questions weekdays and Saturday mornings at this number. On nights or weekends the emergency service (330) 666-2976 can answer basic questions and provide immediate support if needed. One of the Akron Veterinary Internal Medicine Practice clinicians is on call for consultations if the need arises and can also be reached by the emergency service.

## **DOXORUBICIN (ADRIAMYCIN®)**

- 1. Nausea, poor appetite and vomiting- usually mild and self-limiting.
- 2. Diarrhea- 1-3 days of soft stools is fairly typical after Doxorubicin chemotherapy, but if any fresh blood or blood with mucus is seen, please call. This can usually be controlled with medications.
- 3. Low white blood cell and/or platelet counts- when seen, occurs 7-10 days after treatment. This can cause decreased ability to fight infection and can possibly inhibit the blood's ability to clot, resulting in bleeding.
- 4. Loss of hair, darkening of skin-more common in certain breeds (curly coated breeds such as Poodles, Old English Sheepdogs).
- 5. Inflammation, pain, tissue damage if drug is injected outside of the vein.
- 6. Heart disease can be seen secondary to Doxorubicin, however, in the normal heart, this only occurs after a maximum number of dosages have been exceeded (generally no less than 7 or 8). It is important that we know that your dog or cat's heart is normal prior to the use of this drug. An echocardiogram may be necessary if underlying heart disease is suspected prior to using Doxorubicin.

## **VINCRISTINE (Oncovin ®/VINBLASTINE (Velban®)**

- 1. Constipation or diarrhea
- 2. Inflammation, pain, tissue damage if drug is injected outside of the vein.
- 3. Muscle weakness (rare).
- 4. Low white blood cell and/or platelet count- usually only seen as a potential problem with vinblastine. When seen, this occurs 7-10 days after the vinblastine treatment, and can result in decreased ability to fight infection and can possibly inhibit the blood's ability to clot resulting in bleeding.

# **CYCLOPHOSPHAMIDE** (Cytoxan®)

- 1. Nausea, vomiting, diarrhea, loss of appetite. If any of these occur, it is usually 2-5 days after treatment.
- 2. Low white blood cell counts- if seen, occur 7-10 days after treatment, and can result in decreased ability to fight infection. Platelets are usually spared in the case of Cyclophosphamide.
- 3. Bladder irritation- encourage water intake, adequate exercise, and frequent walks outside on the days you give Cyclophosphamide. If you notice blood in the urine or straining to urinate, please stop this and call Metropolitan Veterinary Hospital.

#### PREDNISONE/ PREDNISOLONE

- 1. Increased appetite
- 2.Increased water drinking and resultant increased need to urinate.
- 3. Stomach irritation (much like aspirin can cause GI upset)- can cause vomiting, poor appetite, dark stools. Please call if any GI symptoms are noted.
- 4. Increased panting, restlessness.

#### **CISPLATIN** (Platinol®)

- 1. Nausea and vomiting- usually only seen during administration of the drug or within 24-48 hours, often controlled with medication.
- 2. Low white blood count and/or platelet count- typically not a problem with cisplatin, but can occur. Seen 7-10 days after and sometimes up to 16 days after treatment- resulting in decreased ability to fight infection, and possibly bleeding.
- 3. Kidney damage- the mechanism of this problem is not completely known, but we do know that "flushing" the kidneys (diuresing with large volumes of fluids) prior to and during the administration of the drug usually prevents kidney damage.
- 4. Increased frequency of urination- generally only lasts for several days following treatment and is due to the high volumes of fluids used during treatment.

## **CARBOPLATIN** (Paraplatin®)

- 1. Nausea, vomiting, diarrhea, loss of appetite-relatively uncommon, but can occur 2-5 days after treatment.
- 2. Low white blood cell and/or platelet counts- highest risk at 7-10 days after treatment.
- 3. Kidney damage DOES NOT appear to be a problem with carboplatin unless pre-existing kidney disease is present.

## **MITOXANTRONE** (Novatrone®)

- 1. Nausea, vomiting, loss of appetite can occur, but are extremely uncommon with Mitoxantrone.
- 2. Low white blood cell and/or platelet counts- highest risk at 7-10 days after treatment.

#### **METHOTREXATE**

- 1. Nausea, vomiting, diarrhea, loss of appetite- can be quite severe in some patients. If these symptoms occur, please discontinue the drug and call Metropolitan Veterinary Hospital.
- 2. Low white blood cell and/or platelet counts- can result in decreased ability to fight infection and possible secondary bleeding.

## DACTINOMYCIN/ACTINOMYCIN-D (Cosmegen®)

- 1. Nausea and vomiting, usually mild and self-limiting.
- 2. Diarrhea- sometimes with fresh blood and mucous, can often be controlled with medications, so call call Metropolitan Veterinary Hospital.
- 3. Low white blood cell and/or platelet counts- highest risk 7-14 days after treatment.

#### **CHLORAMBUCIL** (Leukeran ®)

1. Low white blood cell and/or platelet count- can occur at almost anytime during treatment, so patients on longer-term therapy must be periodically monitored. Drops in counts tend to be mild and take several weeks to several months to occur.

# **CYTOSINE ARABINOSIDE/CYTOSAR (Cytarabine®)**

- 1. Low white blood cell and/or platelet counts- highest risk 7-14 days after treatment. Degree of suppression of counts depends on route of administration. Longer IV infusions have greater risk of lowering blood counts; subcutaneous injections seem to have lower risk.
- 2. GI upset (nausea, vomiting) can occur, but tend to be rare.

## L- ASPARAGINASE (Elspar®)

- 1. Acute allergic reaction- usually within 30 minutes of administration of drug. Is usually prevented with administration of Benadryl ® (anti-histamine) prior to treatment.
- 2. Pancreatitis and resultant vomiting and diarrhea is possible, but uncommon.
- 3. Cannot be given if platelet counts are low prior to treatment as coagulation abnormalities could result.

## **MELPHALAN** (Alkeran®)

- 1. Nausea and vomiting are infrequent.
- 2. Low white blood cell and/or platelet counts can occur, however, may not occur for weeks to months after being on the medication.

#### **LOMUSTINE (CCNU®)**

- 1. Low white blood cell and/or platelet counts- can be marked, cumulative, and delayed (up to 6 weeks).
- 2. Nausea and vomiting- risk greatest 2-5 days after administration of the chemotherapy.
- 3. Significant liver toxicity has been noted, especially in patients with abnormal liver function.
- Therefore, periodic evaluation of liver enzymes is warranted.
- 4. Kidney damage has been occasionally seen with extended use.