Chemotherapy Adverse Effects

Most dogs and cats tolerate chemotherapy very well. Approximately 20% will experience adverse effects that are typically mild (reduced appetite, mild diarrhoea, lethargy) although they can be more severe in approximately 5% of patients.

Gastrointestinal Adverse Effects:
- Vomiting and/or reduced appetite can occur 2-5 days after chemotherapy.
- Maropitant PO or SC is recommended if side effects occur.
- Occasionally intravenous fluid therapy is required.
- Ondansetron and/or metoclopramide can be used if maropitant is not effective.
- If diarrhoea occurs treat symptomatically e.g. highly digestible diet, metronidazole, kaolin.

Myelosuppression:
- Cytotoxic drugs cause myelosuppression approximately 7 days following drug administration (10-14 days following carboplatin).
- When neutrophils are <1 x 10^9/L a patient is at risk of sepsis. Prophylactic trimethoprim sulphonamide or other broad spectrum oral antibiotic at standard doses for 7 days is recommended. These patients will need to be monitored very closely as they are at risk of sepsis.
- For patients that are unwell or at high risk of developing sepsis IV 4 quadrant antibiotic cover (e.g. amoxyccillin, metronidazole, enrofloxacim) is required as well as IV fluid therapy.
- If you are suspicious of neutropenia/sepsis start antibiotic therapy while waiting for blood results. Neutrophil counts tend to normalise within 3-7 days.
- If neutropenia results in illness or treatment delays future dose reductions will be required. Please contact Vet Oncologist for advice.

Cystitis:
- Cyclophosphamide can cause sterile haemorrhagic cystitis.
- To reduce the risk of this occurring access to fresh water, frequent opportunites to urinate and concurrent frusemide (1-2mg/kg PO/SQ/IV) is recommended on the day of treatment.
• If signs of cystitis signs develop, the drug should be stopped and urinalysis with culture performed to rule out bacterial cystitis.

Please note:
• Intravenous chemotherapy must be given through a ‘clean-stick’ IV catheter and appropriate personal protective equipment worn.
• Drug preparation carries a high risk of exposure to chemotherapy agents. It is recommended that drugs be ordered in patient specific doses in sealed syringes with Pha-seal adaptors.
• Using a closed administration system such as Pha-seal (or another if preferred) significantly reduces the risk of exposure to veterinary staff during chemotherapy administration.