



Carboplatin chemotherapy after surgery for osteosarcoma

Carboplatin is a cytotoxic agent that we injected intravenously with a drip. We typically give 4-6 injections, at 3 week intervals. Occasionally we need to sedate patients to ensure safe administration.

Carboplatin, like other cytotoxic drugs, targets any rapidly dividing cell population rather than cancer cells specifically. Populations of rapidly dividing normal cells are found in the intestinal lining, bone marrow, the immune system and hair follicles. This explains the most common cytotoxic side effects of intestinal problems (vomiting, nausea, diarrhoea), neutropenia (reduced white cell count) with increased risk of infection, anaemia (reduced red cell count) with reduced oxygen transport, and thrombocytopenia (reduced platelet count) with reduced blood clotting. Normal cell populations can usually regenerate and recover after cytotoxic therapy. Hair loss with cytotoxic drugs, common in people, is rare in animals because animal hair does not grow continually like it does in people. Exceptions are certain breeds whose hair grows continually (eg poodles, Old English Sheepdogs). If your pet needs periodic clipping then some degree of hair loss is more likely with chemotherapy. Cats may, lose all or most of their whiskers.

Side effects from chemotherapy are less common in animals than in people. However you do need to be aware of the possible side effects, so that action can be taken.

Potential side effects of carboplatin:

Irritation at injection site. Carboplatin is given into the vein with a drip, but it is irritant to surrounding tissues if it comes into contact with them. If there is evidence of irritation at the injection site on the forelimbs, seek advice.

Neutropenia. This may occur 1, 2, or occasionally 3 weeks after chemotherapy, reducing defences against infection. High temperature, lethargy, weakness and a refusal to eat usually accompany infection. There will sometimes be vomiting and diarrhoea. Before each carboplatin treatment, we advise a blood test to check the number of white blood cells. There may be a need for antibiotics to help counter infection.

Anaemia and thrombocytopaenia. These commonly occur, but are rarely cause clinical problems.

Gastrointestinal issues. Some patients experience some form of stomach or intestinal discomfort two to seven days after a chemotherapy treatment. Signs include lack of appetite, nausea, vomiting and/or diarrhoea (sometimes with blood) and appropriate action includes:

1. Administer prescribed anti-nausea and anti diarrhoea medication
2. Do not give your pet any food for 12 hours (but keep water available at all times)
3. After 12 hours, start feeding small, frequent meals of bland food rather than one large meal
4. Seek veterinary advice, especially if signs persist

Rare side effects:

Allergic reaction. Any allergic reaction would develop upon administration.

Hair Loss (Alopecia).

Kidney damage. Kidney function is monitored by blood tests and measuring urine concentration prior to treatment. Intravenous fluids given with the carboplatin help support kidney function.

Deafness. This has not been reported in animals but it occasionally occurs in people.

Carboplatin, like other cytotoxic agents, is potentially harmful to humans. Young, old, pregnant and immune-suppressed people are most vulnerable and should not be in contact with urine / faeces from patients undergoing chemotherapy.

Encourage urination on grass rather than non-absorbant surfaces. Carboplatin will probably be excreted for no more than 2 days following injection, but assume 5 days to be on the safe side.

Use disposable gloves and scoops to handle urine / faeces. Contain and absorb any soiling rather than spreading it.

Solid waste should be disposed of down the toilet or double bagged and disposed of in domestic refuse.

Segregate young children or supervise regular hand washing.

For further advice please contact us by phone on 07944 105501 or on mail@wm-referrals.com