



VETCT

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Feline Pancytopenia – FAQs

Please check back for regular updates, or contact info@vet-ct.com if you have any further questions you would like us to answer.

Diet	
Question	Response / Preliminary Information
Where can I find information on the affected diets?	A link to the diets being voluntarily recalled can be found here OR https://drive.google.com/file/d/1-ySa4AY4Qcs3ktbkb01jtw8z7kgZ6MVN/view OR https://www.food.gov.uk/news-alerts/alert/fsa-prin-36-2021-update-1
How long do cats have to be consuming the diets before a problem is seen?	Currently as the exact mechanism remains unknown, it is unclear whether short-term feeding is likely to result in bone marrow failure. Current reports of affected cats indicate that they have been eating the recalled foods for several weeks.

<p>If a cat has been fed one of the affected diets, should a haematology be performed regardless of the clinical presentation?</p>	<p>Owners should stop feeding the recalled food immediately. Cats with pancytopenia may remain clinically quite well until the disease is advanced. Where a cat has been fed one of the recalled diets, a haematology to check for cytopenias is advisable. If mild decreases in platelets, neutrophils or red cells are detected, then repeat haematology within 3-14 days is advised to monitor for progression.</p> <p>Where a cat is unwell and has exposure to one of the recalled diets, a haematology should definitely be performed. Ideally haematology at an external laboratory is being recommended, however in acutely unwell patients it may be best to obtain results patient side using in house machines and then obtain confirmation by sending the sample for external verification.</p>
<p>Is there a risk of diet related pancytopenia outside of the UK?</p>	<p>At this time the food recall affects products made by one manufacturer, that provides the domestic UK market only.</p>
<p>Have dogs been affected by this?</p>	<p>There are no reported cases in dogs.</p>
<p>Will the food retailers pay for blood tests and treatments?</p>	<p>If blood tests are performed following veterinary advice for a cat which has eaten any of the recalled foods, some retailers are reimbursing owners for the costs of blood test with proof of purchase of the food and confirmation of veterinary recommendation. However, it is unclear whether they will cover additional costs of further diagnostics and treatment.</p> <p>Advise owners to contact the merchant directly.</p>

Research

Question	Response / Preliminary Information
<p>I have a suspected case, where can I find the RVC survey?</p>	<p>A link to the RVC survey can be found here.</p>
<p>Is there an identified cause?</p>	<p>Low levels of mycotoxins T2 and HT2 were found in the batches of recalled dry cat food. However, no causal link was found between these toxins and pancytopenia in cats. At this stage the exact mechanism contributing to bone marrow failure is unknown. Mutli-agency investigation into the cause is ongoing. Latest information and FAQs can be found on the Food Standards Agency website here: https://www.food.gov.uk/news-alerts/news/further-update-from-the-food-standards-agency-and-food-standards-scotland-following-the-ri-se-in-cases-of-feline-pancytopenia.</p> <p>There are many other known causes of pancytopenia, including infectious disease, immune-mediated disease, diseases affecting the bone marrow, and some cancers. For more information on causes of pancytopenia, please refer to our news article</p>

	https://www.vet-ct.com/gb/news/2021/jun/21/product-recall-following-recent-spike-pancytopenia/
How many cases have there been?	Although the exact number of cases is unknown, approximately 500 have been reported, sadly with a high fatality rate of around 60%.
Are the RVC conducting a survey into cases?	The RVC had been conducting a study collating information about affected cats. We believe this survey has now closed.

Signalment and Diagnosis

Question	Response / Preliminary Information
Which cats seem to be most likely to be affected?	This remains a little unclear, however preliminary information indicates that kittens and young adults may be more likely to be affected, with available data indicating a median age of 2 years of age. This may reflect increased susceptibility with younger age, or a dose-dependent effect due to body weight.
What is the clinical presentation?	Cats may present with very vague clinical signs of lethargy and inappetence, but have also presented with evidence of spontaneous bleeding, or collapse. Some cats have presented clinically well, and have been diagnosed based upon precautionary testing where another cat in the household was affected.
What changes are noted on haematologic evaluation?	Patients appear to have profound cytopenias with platelet counts of $< 20 \times 10^9/L$, neutropenia (often $< 0.5 \times 10^9/L$) and a varying level of non-regenerative anaemia.

	<p>Early disease appears to be characterised by thrombocytopenia alone, with neutropenia and anaemia subsequently developing and the anaemia may be partly secondary to the bleeding. In some younger cats, a regenerative anaemia has been noted at diagnosis.</p> <p>As in-house machines can sometimes underestimate platelets in particular, it is advisable to perform a blood smear evaluation to confirm thrombocytopenia, and/or to review haematologic findings at an external reference laboratory.</p> <p>Bone marrow aspiration / biopsy may help to confirm hypo- or aplasia, and could be discussed as an option, but might not change management of these cases where a compatible dietary exposure has been noted. It is advisable to test for other infectious causes such as FeLV, FIV and panleukopenia.</p>
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Treatment and Management	
Question	Response / Preliminary Information
Is there a link to hypocobalaminaemia, and should I supplement?	Some preliminary information has suggested some cats have low to undetectable serum cobalamin concentrations. Cobalamin supplementation may therefore be indicated, and is unlikely to do harm, although care should be taken in thrombocytopenic patients being administered parenteral cobalamin supplementation. If possible oral supplementation may be preferred.
Is there financial support available for affected cats?	If a cat developed pancytopenia after being fed one of the recalled diets, the pet owner should contact the manufacturer directly to ask if financial support is available.
Is Filgrastim (granulocyte colony stimulating factor/rhG-CSF) recommended?	Filgrastim may help and is being used in some cases. It is being dosed at 5 micrograms/kg once daily by subcutaneous injection for up to 5 days. In view of the severe neutropenia, it is advised to perform a sterile preparation of the skin before injection and to apply pressure after injection to reduce bleeding due to the thrombocytopenia. It is possible that antibodies against G-CSF will develop and therefore repeat treatment may not be advisable. In people, reported side effects include: musculoskeletal pain, transient hypotension, dysuria, proteinuria, haematuria, allergic reactions, splenomegaly and increased liver enzymes. Irritation can be seen at the site of injection. Steroids may potentiate the effects of G-CSF.

<p>If the cat needs a blood transfusion what should I give?</p>	<p>Feline blood transfusions are challenging both because of the necessity to use typed and matched blood, because of the lack of blood banking facilities and the challenge of finding suitable donors in the time scale when the blood is needed. Therefore, often a xenotransfusion (transfusion for dog blood to cats) is being given initially. If a further transfusion is required, feline blood must then be used. If blood products are available, plasma would be indicated if there is evidence of a coagulopathy which is presumed to be secondary to consumption from ongoing bleeding secondary to thrombocytopenia. In patients with severe anaemia and cardiovascular compromise, packed red cell transfusion would ideally be given where available. We have some information sheets that may be helpful on transfusion medicine.</p>
<p>Are steroids of any use?</p>	<p>It is uncertain whether steroids/glucocorticoids are helpful but they have been used at 0.2mg/kg dexamethasone IV or 1 mg/kg prednisolone orally, with some cases seemingly showing a response. However, given that this is presumed to be a toxic insult on the marrow with a high risk of sepsis due to neutropenia, there is a risk associated with using an immune suppressive medication and the current viewpoint is not to use them.</p>
<p>Would IVFT be recommended in case there is a toxic cause, or would this be contraindicated with the first stage being thrombocytopenia?</p>	<p>Supportive care should be implemented as required on a case-by-case basis and IV fluid therapy may form part of this for patients that have clinical or suspected subclinical dehydration, or that remain anorexic with reduced fluid intake. Based on current knowledge, chronic exposure is more likely to be required to develop the disease and bone marrow hypoplasia / aplasia is observed, thus IVFT alone to diurese a toxin is unlikely to be helpful or resolve the haematologic changes.</p>
<p>Should emesis be induced or charcoal administered if these foods have been recently ingested?</p>	<p>Cases appear to have been affected after eating food for several weeks, suggesting that chronic dietary exposure is more likely to be needed to induce disease. Therefore inducing emesis of a single meal is unlikely to be required and may carry more risk particularly if the cat is already thrombocytopenic.</p>
<p>Are antibiotics needed?</p>	<p>Where a significant neutropenia is identified, antibiotics may be needed. General guidance (not specific to this condition) is that where the neutrophil count is $<1 \times 10^9/L$ and the cat is afebrile, a broad spectrum antibiotic should be prescribed and continued until the count is documented to have improved to $>2 \times 10^9/L$. During this time the cat should be kept indoors, at home, with monitoring of the temperature, demeanour and appetite. Where neutropenia is seen together with a fever and/or the neutrophil count is $<0.5 \times 10^9/L$ the patient should be hospitalised, administered intravenous antibiotics with aseptic protocol and monitored closely. Neutropenic cats should not be feed raw food.</p>
<p>Is tranexamic acid indicated?</p>	<p>Tranexamic acid is an anti-fibrinolytic drug which is used off licence to try and reduce bleeding e.g. after trauma or with rodenticide</p>

	<p>intoxication. It promotes blood clotting by inhibiting clot breakdown. Whilst it is not licensed in cats, some centres are using it in these affected cats that have had persistent bleeding. The dose range is uncertain in cats but could consider a dose range of 10-20 mg/kg intravenously until bleeding stops . In dogs the most common side effect after administration is vomiting, with increased frequency at doses >10 mg/kg.</p>
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