

# Splenomegaly (Enlarged Spleen) in Ferrets

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The normal spleen

The spleen is an organ located in the abdomen. It has a very large blood supply because one of its chief functions is filtering blood. It removes damaged blood cells, bacteria, and other particles from the blood. It also stores blood, and in some species, such as the ferret, manufactures blood cells.

Splenomegaly (enlarged spleen)

"Splenomegaly" is the medical term for the condition of having an enlarged spleen. Splenomegaly is very common in ferrets. Approximately 5% of all cases of splenomegaly are due to cancer. [Lymphosarcoma](#) is the most common cancer of the spleen. [Adrenal gland tumors](#) have been associated with enlarged spleens. Very rarely, splenomegaly can be caused by mast cell tumors and hemangiosarcomas. In the other 95% of cases, the enlargement is due to an increase in developing blood cells, but no one knows what causes this increase in cell production. Conditions associated with an enlarged spleen and increased blood cell production include:

Eosinophilic gastroenteritis: With this disease, there is inflammation of the stomach and small intestine.

Gastrointestinal obstruction: This condition occurs if the food cannot move out of the stomach or intestine. In ferrets, this is commonly caused by them swallowing an object such as a piece of rubber, which blocks the intestine.

Infections: [Infections of the respiratory](#) tract, including influenza, may result in splenomegaly, as will infections of the kidney. Splenomegaly is also seen in connection with infections of the stomach, especially with [Helicobacter](#), and with dental disease. [Aleutian Disease](#) is also associated with splenomegaly.

Insulinoma: An insulinoma is a tumor which secretes excess insulin. This causes the glucose level in the blood to become lower than normal.

Cardiomyopathy: This is a condition in which the heart muscle does not work correctly, and the heart does not pump blood efficiently.

Other chronic illnesses: An enlarged spleen is often observed when a ferret has a disease of a long duration, other than those listed above.

Idiopathic splenomegaly: "Idiopathic" means the cause of the condition is unknown. Many ferrets can develop an enlarged spleen, and no other disease conditions can be found.

Hypersplenism

Hypersplenism is an uncommon condition in which the enlarged spleen is associated with a lowered production of blood cells. There may be decreased numbers of white blood cells ( leukopenia), red blood cells (anemia), and/or platelets (thrombocytopenia). Ferrets with hypersplenism often have fevers and are depressed and lethargic. Although the spleen is enlarged, in this condition, the spleen tissue is actually being destroyed. To confirm a diagnosis of hypersplenism, a [complete blood count](#) and bone marrow biopsy are performed. [Radiographs](#) (x-rays), an [ultrasound](#) examination, and a [chemistry panel](#) may also be performed to rule out other diseases.

Treatment of splenomegaly

Splenomegaly resulting from hypersplenism is treated by surgical removal of the spleen. Affected ferrets may also require blood transfusions, antibiotics to protect against infection, and supportive care including vitamin and mineral supplementation, intravenous fluids, and corticosteroids. Surgical removal of the spleen is also the treatment of choice for splenomegaly caused by cancer.

Ferrets with other causes of splenomegaly need to be treated on a case by case basis. If the enlarged spleen is causing discomfort or lethargy, or there is concern it may rupture, the spleen may be removed. In other cases, it is advisable to leave the spleen intact, and monitor the ferret for other signs of disease and treat them accordingly.

Conclusion

Although enlarged spleens are common in ferrets and usually do not require treatment, all cases of splenomegaly should be investigated, and the ferret examined by a veterinarian.