

# Hypocholesterolemia

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## FOR MORE

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- Panting
- Hypercholesterolemia
- Hypoalbuminemia
- Neutropenia
- Decreased Total Thyroxine
- Increased Total Thyroxine
- Hypoglycemia
- Epistaxis
- Regurgitation

Following are differential diagnoses, listed in order of likelihood, for patients presented with hypocholesterolemia.

- Severe icterus (false decrease)
- Protein-losing enteropathy (eg, lymphangiectasia, inflammatory bowel disease, lymphoma, infectious agents such as *Heterobilharzia americana*)
- Liver disease such as portosystemic shunt, ductal plate malformation, or liver failure (eg, secondary to toxins such as Sago palm)
- Hypoadrenocorticism
- Exocrine pancreatic insufficiency
- Hemophagocytic syndrome; can be seen in association with a variety of infectious and noninfectious diseases, including immune-mediated diseases and certain tumors (due to decreased synthesis and/or increased catabolism secondary to inflammatory cytokines)
- Histiocytic sarcoma (dogs)
- Multiple myeloma (cats)
- Acute myeloid leukemia
- Lymphoma

## References

- Center SA, Magne ML. Historical, physical examination, and clinicopathologic features of portosystemic vascular anomalies in the dog and cat. *Semin Vet Med Surg (Small Anim)*. 1990;5(2):83-93.
- Moore PF. A review of histiocytic diseases of dogs and cats. *Vet Pathol*. 2014;51(1):167-184.
- Pirro M, Ricciuti B, Rader DJ, et al. High density lipoprotein cholesterol and cancer: marker or causative? *Prog Lipid Res*. 2018;71:54-69.
- Simmerson SM, Armstrong PJ, Wünschmann A, et al. Clinical features, intestinal histopathology, and outcome in protein-losing enteropathy in Yorkshire Terrier dogs. *J Vet Intern Med*. 2014;28(2):331-337.
- Soare T, Noble PJ, Hetzel U, Fonfara S, Kipar A. Paraneoplastic syndrome in haemophagocytic histiocytic sarcoma in a dog. *J Comp Pathol*. 2012;146(2-3):168-174.
- Suwa A, Shimoda T. Lymphoma-associated hemophagocytic syndrome in six dogs. *J Vet Med Sci*. 2018;80(8):1271-1276.
- Wakayama JA, Furrow E, Merkel LK, Armstrong PJ. A retrospective study of dogs with atypical hypoadrenocorticism: a diagnostic cut-off or continuum? *J Small Anim Pract*. 2017;58(7):365-371.
- Westermarck E, Wiberg M. Exocrine pancreatic insufficiency in dogs. *Vet Clin North Am Small Anim Pract*. 2003;33(5):1165-1179.