

Gastric Leiomyoma in a Twelve Year Old Pulli dog – A Case Report

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INTRODUCTION

Leiomyoma is a benign tumor arising from smooth muscle of hollow organs viz. uterus, vagina, intestines, stomach, urinary bladder and esophagus and is common in cow, dogs and fowl. Leiomyoma have slow-growing behaviour, locally invasive, malignant tumor of smooth muscle origin that typically is slow to metastasize⁴.

CASE REPORT

Signalment, anamneses, and clinical signs. A twelve year old Pulli dog was referred to My Vets Animal Clinic Clinic and Animal Teaching Hospital Faculty of Veterinary Medicine Bogor Agricultural University to do ultrasound with history of frequently vomiting and diarrhea. Ultrasound examination revealed mass between gastric, liver, and spleen measuring 3,416 cm.

Physical examination. On physical examination patient showed a bit lethargy, palpation abdomen tense and had abdominal pain.

Differential diagnose. Differential diagnoses include many systemic disease (uremia, inflammatory disease), nonneoplastic disease (foreign body, mucosal hypertrophy).

Diagnose. The diagnose could be made ultrasonographically associated with a mix echogenity (anechoic-hypoechoic) structure. Laboratory findings usually are not spesific.

Prognosis. Prognosis depends on identification and treatment underlying diseases. The prognosis is good if there is no perforation and peritonitis.

Treatment. Pre surgery was done by giving intravena fluid by vena cephalica, cefotaxime intravena injection (30 mg/kg BW) and pethidine sub cutan injection (2 mg/kg BW). Surgical correction was attempted under general anaesthetics using combination of ketamine (10 mg/kg BW) and diazepam (0,5 mg/kg BW) as preanaesthesia and isoflurane as inhalation anaesthetics. Food should be withheld for 12 hours before surgery.

An exploratory laparotomy was performed to remove the greater curvature of the stomach,

Ligate the branch of the right and left gastric artery and vein



Figure1. Explore the stomach



Figure 2. Ligate the branch of the right and left gastric artery

After removal of the suspect tissue, leaving 2 cm margins of normal tissue, perform a two-layer end-to-end anastomosis of the stomach. Close the mucosa and submucosa of the dorsal surface of the stomach in a simple continuous pattern using 3-0 monofilament absorbable suture, close the serosa and muscularis layers in a simple continuous using the same suture.

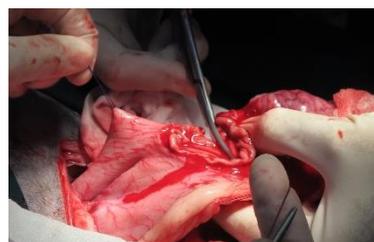


Figure 3. Removing the suspect tissue

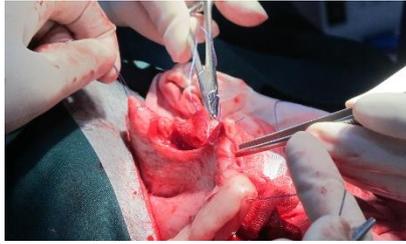


Figure 4. Suturing the incision area

Post treatment. Electrolyte was monitored after the surgery and soft low fat nutrition was given until 3 days post surgery. Biopsi was done and the result revealed the mass in the stomach as neoplasia leiomyoma. Ultrasonographs was performed two months post surgery and so on, in order to confirm no metastasis to other organ (liver and spleen).

DISCUSSION

Gastrointestine mesenchymal tumors are currently divided into Gastrointestinal stromal tumor (GITs) and leiomyoma/sarcoma. Both this tumor constitute the majority of mesenchymal tumors of the GI tract and most common found in the stomach and smal intestine. In this case the tumor confirmed pathologically as leiomyoma¹.

Surgery is the primary treatment of choice in localized or potentially resectable. It is imperative to avoid tumor rupture. The tumors are fragile and should be handled with care, with an aim to achieve complete gross resection of the tumor with an intact pseudocapsule⁵. It is important to identify between normal tissue and damage tissue, carefully remove the suspected tissue and leave margin 2 cm from normal tissue.

Considering underlying disease such as liver changes related to chronic metabolism disorder, nutrition and supplementation for hepatoprotectant are needed postoperatively.

CONCLUSION

Leiomyoma are the most common benign canine gastric tumor with almost no clinical signs appear until the tumors are large. Considering to prevent metastasis of its tissue it is important to leave a margin between the suspect tissue and normal². Food intake should be monitored moderate amounts of protein and carbohydrate and low fat¹.

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