

Congenital Megaesophagus in a Pup- A case report

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Abstract

A 3 month old GSD pup was presented to VCC, CVSc, Rajendranagar, with history of vomiting for a couple of weeks. Deworming and vaccination was regular. Physical examination revealed emaciation and poor body score. Plain X Ray did not reveal any abnormality except ventral deviation of thoracic trachea. Barium contrast radiography revealed dilation of the oesophagus and the pup was diagnosed with congenital megaesophagus. Subsequently, the pup was managed with elevated feeding and dietary changes, which showed a marked improvement.

Keywords: Congenital megaesophagus, GSD Pup, management

Megaesophagus is defined as the dilation of oesophagus (Tams, 2003) and is a condition characterized by decreased or absent movement in the oesophagus, hindering the normal passage of food. In young dogs, congenital megaesophagus can be inherited or result from developmental issues affecting the nerves that control the oesophagus. Symptoms typically become apparent when the affected puppy starts consuming solid food (Saravanan *et al.*, 2010).

Case history and observations

A 3-month-old male German Shepherd pup was presented with a complaint of vomiting sometime after

feeding since a couple of weeks. It was reported that the pup was throwing out undigested food. However, vomiting was not reported when the pup was not consuming any food or water. On physical examination the animal was emaciated with a poor body condition score. The pup was subjected to a plain radiography initially which revealed no significant abnormality except ventral deviation of thoracic trachea and slight bronchitis. However, lateral thoracic X ray with barium sulphate contrast media revealed pooling of contrast material and volume in the middle oesophagus, near the base of the heart where dilated oesophagus was visualised (Fig.1 A and B).

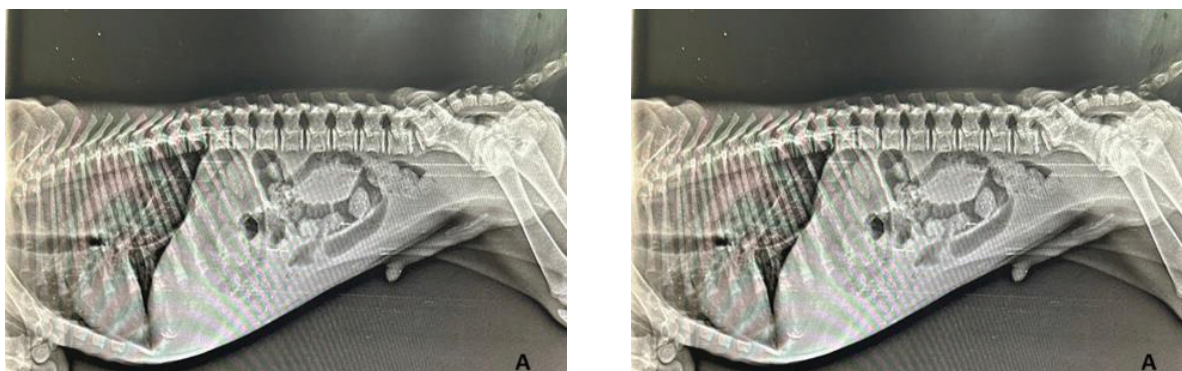


Fig. 1 Lateral plain radiograph (A) and with barium contrast (B). Note the radio contrast material in the dilated esophagus with ventral deviation of trachea (arrow)

Discussion

Dietary adjustments and posture changes were recommended for the animal during and after feeding to promote normal food transit and prevent food withholding or regurgitation. This included pasty diet

several times a day with the patient in bipedal position during and after meals. It was advised to keep the animal in an elevated position for 10-15 minutes following each meal. The patient got acclimatised to the managerial corrections and experienced a notable improvement in body condition score and a reduction in regurgitation episodes (Fig.2 A & B). Congenital megaesophagus in

dogs, often seen in certain breeds, results in oesophageal dilation and impaired motility, leading to regurgitation and stunted growth, with suspected vagal nerve abnormalities. Acquired Secondary Megaesophagus (ASM) in dogs may arise from various conditions like myasthenia gravis and hypoadrenocorticism, possibly due to neural defects akin to congenital cases. Associated conditions encompass hypoadrenocorticism, lupus myositis, polymyopathies, polyneuropathies, dysautonomia, lead poisoning, and severe esophagitis. Management includes offering small, frequent meals while the dog is in an elevated or upright position, such as using a Bailey chair. Ettinger and Feldman (2017) had recommended to vary the consistency of the food to identify the types that were better tolerated. Percutaneous gastric tubing can be tried if the elevated feeding do not provide adequate nutrition to the dog. Gastric tube enables direct delivery of food into the stomach, bypassing the dysfunctional oesophagus.



Fig. 2 The GSD pup with poor body condition score (A) which showed marked improvement with increased weight and proper growth after 4 months (B)

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