**SURGICAL CORRECTION OF PERSISTENT RIGHT AORTIC ARCH IN A DOG: A CASE REPORT**

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**A Report**

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**ABSTRACT**

Persistent right aortic arch (PRAA) is the most common vascular ring anomaly in dogs frequently diagnosed in young, large-breed dogs. It occurs when the fourth right aortic arch persists instead of left to form the aorta. This malformation causes extraluminal compression of the esophagus up to the base of the heart and leads to esophageal dilatation. The food which cannot pass beyond the narrowing is regurgitated intermittently. Surgical removal of the stricture caused by the persistent right aortic arch is the preferred treatment. It is important to perform surgery early in the disease, before permanent growth damage has occurred. The purpose of the present case report was to describe a surgical approach for correction of PRAA in a dog. The case was recorded in the Veterinary Teaching Hospital, Khon Kaen University, Thailand during an internship placement. A four-month old French bulldog was presented to the Veterinary Teaching Hospital, Khon Kaen University with a history of regurgitation. On physical examination no other abnormalities were noticed. The diagnosis was confirmed based on the result of the esophagram, where the image was characteristic (esophagic dilatation at the cranial base of the heart). Based on the clinical and radiographical examination it was decided to perform a surgery immediately. General anaesthesia was given and maintained throughout the surgery. The surgical procedure was included thoracotomy by fourth intercostal space, then ligature and transaction of ligamentum arteriosum was performed. As a part of post-operative care fluid and antibiotic were administered. No complication was noted and the dog was improved over the subsequent days.

**Key words:** Persistent right aortic arch, Esophagram, Thoracotomy