# EVALUATING THE EFFECT OF MINIMALLY INVASIVE SURGERY ON THE INTRACRANIAL PRESSURE IN DOGS

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#### **Purpose of the Clinical Study**

Minimally invasive techniques like laparoscopy offer benefits such as less pain and quicker recovery, but they can also increase pressure inside the skull. This pressure change has been studied in humans but not in dogs. The optical nerve sheath contains cerebral spinal fluid and when intracranial pressure increases, the walls of the sheath expand. Ultrasound can be used to measure the changes in the optic nerve sheath diameter (ONSD). Understanding how intracranial pressure changes affect dogs could help with anesthesia and surgery planning for laparoscopic procedures in veterinary medicine.

## **Is Your Pet Eligible?**

- Healthy female dogs (>10kg) undergoing an open spay
- Healthy dogs (>10kg) undergoing a laproscopic spay or spay and gastropexy

## **Visits / Samples Required**

The non-invasive ocular ultrasound will be performed at the same time as your dog's surgery. There are no additional visits for this study.

#### **Financial Incentives**

The costs associated with a complete blood count (CBC), biochemistry profile, blood gas analyses (2) and the ocular ultrasonographic assessment will be covered. Funding is generously provided by:









Questions about this study? Please contact: ovc.clinicaltrials@uoguelph.ca