

Effect of oral administration of Yunnan Baiyao on periprocedural hemorrhage in dogs undergoing nasal biopsy: A prospective, randomized, double blinded controlled study

Purpose/Description of Study: Nasal biopsy is a routine diagnostic procedure performed in the workup of dogs with nasal disease and can be associated with significant bleeding. Yunnan Baiyao, a traditional Chinese herbal medicine has been used for over a century in China for its apparent ability to control bleeding and has gained international popularity in both human and veterinary medicine. Yunnan Baiyao has been used anecdotally in dogs with bleeding tendencies, including for rhinoscopy and nasal biopsy associated hemorrhage. The hemostatic efficacy of Yunnan Baiyao has not been clinically evaluated in dogs. The purpose of the present study is to compare the effect of oral Yunnan Baiyao to placebo controls on blood loss during nasal biopsy in dogs. If administration of Yunnan Baiyao results in a demonstrable reduction of blood loss its use would become standard of care for this procedure moving forward and fuel future clinical studies on alternative applications in veterinary medicine as a whole.

Procedures performed on enrolled dogs:

1. Blood pressure: Part of a routine pre-anesthetic exam.
2. Coagulation Profile: This is a test that looks at clotting times and platelet count. It is routinely performed in dogs prior to biopsy to ensure they will clot appropriately.
3. Packed cell volume*: A measurement of red blood cells. This will be performed prior to the procedure, at recovery and 12 hours following to measure blood loss.
4. Buccal Mucosal Bleeding Time*: This is a test of platelet function. A small cut is made on the inside of the lip and time to clot is measured. This will be performed at the time of presentation and again prior to anesthesia (before and after medication is given).
5. Thromboelastography*: This is a test that looks at platelet function, clot strength and breakdown. It will be performed prior at the time of presentation and again prior to anesthesia (before and after medication is given).
6. General anesthesia for nasal biopsy +/- rhinoscopy

*These will be paid for by the study since they are not routinely required for the nasal biopsy procedure.

Duration of the Study: March 2015-Summer 2016

Risks: Minimal risk is associated with venipuncture (blood collection) including transient discomfort during blood collection, bruising over the site of collection and, in rare cases, fainting.

Voluntary Participation: The participation in this study is voluntary and withdrawal from the study is permitted at any time requested without any repercussions.

Researchers Involved: Lauren Adelman, DVM; Shelly Olin, DVM, DACVIM; Jennifer Stokes, DVM, DACVIM; Christine Egger, DVM, MVSc, ACVAA; UTVMC Department of Small Animal Clinical Sciences. This study has been reviewed and approved by the University of Tennessee- Knoxville Institutional Animal Care and Use Committee (UTK- IACUC).

Confidentiality: Information from this study may be used in a published media and/or used for educational purposes but patient and owner names will remain confidential.

Financial Compensation: Cost of medication and non-routine testing (Buccal Mucosal Bleeding Time, packed cell volume, thromboelastography) will be funded by this study.

To enroll, contact ladelman@utk.edu.