

# Platelet Rich Plasma in Dogs Undergoing TPLO Surgery

## Purpose of study

Platelet-rich plasma (PRP) is a novel treatment for inflammation secondary to degenerative disorders, including cranial cruciate ligament disease and resultant osteoarthritis. It is unknown if immediate administration of PRP following surgery aids in recovery by reducing inflammation, or if it is more beneficial to administer PRP by waiting until acute postsurgical inflammation resolves. In this study, we will objectively assess the effects of immediate or delayed PRP administration on inflammation and lameness in client-owned dogs undergoing tibial plateau leveling osteotomy (TPLO) in dogs with cranial cruciate ligament instability.

## Inclusion criteria

- Dogs must be skeletally mature;
- Dogs must be clinically healthy;
- Dogs must be between 1-8 years of age;
- Dogs must weigh between 15 and 45 kg;
- Dogs must be client-owned animals with stifle joint instability secondary to cranial cruciate ligament instability;
- Dogs must have lameness and owner identified mobility impairment.

## Exclusion criteria

- Dogs administered analgesics other than an NSAID (preferably carprofen) within one week of study start.
- Immune mediated polyarthropathy;
- Clinical neurologic disease;
- Significant abnormal CBC or chemistry values.

## Study procedure

Dogs will be randomly assigned to 1 of 3 treatment groups: Control (TPLO, no PRP), Immediate PRP at time of TPLO, delayed PRP administered 4 weeks after TPLO. Recheck examinations will be performed every 2 weeks for 8 weeks, at which time synovial fluid samples and clinical evaluation will be performed.

## Study benefits

- The study will cover the expenses for PRP collection and processing, injections, and follow-up data collection.

## Costs to client

Owner will be responsible to pay for the initial exam visit, blood work, radiographs at day of first visit, surgery and anesthesia, and any cost connected with unrelated health issues of their pet during the study. **If the dog and owner comply with study procedures and all recheck examinations, a \$2000 credit will be applied to the patient's charges.**

## Contact information

Greg Woo, DVM

Samantha Shetler, DVM

Darryl Millis, DVM, MS, DACVS,  
DACVSMR, CCRP

Jessica Montoya, AAS, LVMT, CCRP,  
VTS-Surgery  
utvetortho@utk.edu | 865-974-8387

