## **Orthopedic Exams in Cats**

When owners observe lameness in cats, clinically important disease is almost always present; other presenting signs (eg, decreased appetite, grooming/ behavioral changes) may also be seen. Orthopedic examination should, therefore, be performed consistently. Observance of gait and jumping ability can be facilitated by allowing the cat to move in a room devoid of hiding places, with or without a laser pointer to chase. Asymmetry, head bob, short choppy steps, and plantigrade stance should be investigated. The limbs and spine should be palpated for symmetry; each portion of the limb and joint should be palpated with attention to flexion and extension of each joint. Palpation in lateral recumbency can facilitate the cranial drawer test, the Ortolani sign, and examination of claws and digits. Apparent painful areas should be examined last. Sedation may allow collection of valuable information in some cases. Having a scoring system for the record is helpful.

### Commentary

Unlike in dogs, lameness in cats is often overlooked by owners: in 2 studies of cats with radiographically documented osteoarthritis, only 4% to 16% were noted to be limping by the owners. A validated owner questionnaire for orthopedic disease remains elusive. Asymmetry of the limbs may be noted at a sit or walk. Palpation of joint range-of-motion, muscle mass, and bone sensitivity can be performed with the cat awake or sedated. Examination for patellar luxation, cranial drawer, and hip laxity is important for the hindlimbs.

Use of a quiet room and an unhurried examination cannot be overemphasized. A towel or cat bag with limb access can be useful, but a sedated orthopedic examination is invaluable. Also, musculoskeletal tumors can often be palpated in cats.—*Jonathan Miller, DVM, MS, DACVS* 

### Source

Orthopedic examination in the cat: Clinical tips for ruling in/out common musculoskeletal disease. Kerwin S. *J FELINE MED SURG* 14:6-12, 2012.

# Lyophilized Platelets: Transfusion Solution?

Fresh platelet concentrate (FRESH) must be stored under gentle agitation and has a 5-day shelf life. Because of expense and logistics, most veterinary institutions limit platelet transfusions to platelets in fresh whole blood. Lyophilized platelets (LYO), a recently developed product in which platelets are lyophilized and reconstituted with preservation of platelet structure and hemostatic function, can be stored for up to 24 months in the refrigerator.

In this preliminary clinical trial, 37 dogs with hemorrhage associated with thrombocytopenia (platelet count, <70,000/ $\mu$ L) were randomized to receive LYO (n = 22) or FRESH (n = 15). Outcome was assessed by determining bleeding score, response to transfusion, adverse reactions, hospitalization time, need for additional transfusions, survival to discharge, and 28-day survival. No difference in outcome was found between LYO and FRESH groups. Although efficacy of LYO compared with FRESH could not be determined because of small sample size, transfusion of LYO was found to be feasible and associated with low transfusion reaction rate. Human albumin was used in the formulation of LYO, but no type III hyper-

### Commentary

sensitivity reactions were observed.

Administering therapeutic platelet transfusions to bleeding with either thrombocytopenia or platelet dysfunction can be hampered by limited availability and accessibility of platelet products. Acquiring, processing, and administering fresh products in a timely manner can be challenging with lifethreatening hemorrhage. To date, the only alternative has been cryopreserved platelets. While this product can be stored frozen and therefore be available for on-demand use, information on its clinical efficacy is scarce. This paper is the first to describe the use of LYO, an alternative product that might become available in the near future.—*Gretchen Lee Schoeffler*, *DVM*, *DACVECC* 

#### Source

Use of fresh platelet concentrate or lyophilized platelets in thrombocytopenic dogs with clinical signs of hemorrhage: A preliminary trial in 37 dogs. Davidow EB, Brainard B, Martin LG, et al. *JVECC* 22:116-125, 2012.