Lame Male Cats

Although femoral head and neck fractures from trauma are common, they can also occur spontaneously in young, obese, neutered male cats. Neutering reportedly causes a delay in growth-plate closure in the femoral capital physis and other locations. Furthermore, reduced testosterone leads to a delay in physeal cartilage maturation and closure. In cases of spontaneous capital physeal fracture (also called slipped capital phyysis or physeal dysplasia syndrome), both hindlimbs may be affected at the same time or a spontaneous fracture may later develop in the opposite limb. Essentially, the differential list for any young cat presenting with hindlimb lameness/weakness should include fractures of the femoral head and neck, regardless of whether the event was associated with trauma. Radiographs in a "frog-legged" position may improve visualization of capital physeal fractures that are not obvious on an extended view. Treatment may be surgical or conservative, although the latter carries a risk for nonunion. Conservative treatment includes exercise restriction (crate confinement for at least 4 weeks) and analgesia. Surgical stabilization with K-wires can be performed but should be done within 3 to 4 days of the fracture to minimize alterations in vascularization of the epiphysis and remodeling of the metaphysis. Total hip replacement has also been successful but requires greater surgical expertise. Chronic fractures in which bone remodeling can already be visualized radiographically are best managed with a femoral head and neck excision (FHNE). Surgical correction carries a good to excellent prognosis, although arthritis and bony remodeling are possible with any approach.

Commentary: Fractures of the femoral head and neck in cats likely have a similar pathophysiology to Legg-Calvé-Perthes disease in small-breed dogs, although blood supply to the epiphysis through the ligament of the femoral head is much more robust in cats. Pain and lameness in cats are often underdiagnosed, and this review highlights the importance of radiography in pursuing a diagnosis. Sometimes with capital femoral growth-plate fractures in cats and small dogs, a delayed presentation will cause primary repair to lead to hip arthritis. Therefore, FHNE may be an appropriate first approach. Options for oral pain control are buprenorphine, oxycodone, gabapentin, amantadine, dexamphetamine, or tramadol.

—Jonathan Miller, DVM, Diplomate ACVS


Double-Ballooon Endoscopy

This case report describes double-balloon enteroscopy (DBE) in a 3-year-old English setter with a 6-week history of intermittent small intestinal diarrhea. Standard gastroduodenoscopy and colonoscopy showed normal mucosa, so DBE was elected for a more complete examination. The double-balloon endoscope had a balloon mounted on its distal end with a working length of 200 cm, an external diameter of 8.5 mm, and a working channel diameter of 2.2 mm. A 145-cm-long flexible overtube on the endoscope had an external diameter of 12.2 mm, internal diameter of 10 mm, and a balloon at the tip. The balloons are easy to inflate and deflate from a one-touch pump system. During DBE, balloons are operated in combination, shortening the intestine as the endoscope is advanced. The small bowel is pleated over the endoscope as the balloons are inflated and deflated. In this case, both oral and anal approaches were used and the entire GI tract was evaluated. Inflammatory changes were noted in the jejunum and biopsy specimens subsequently confirmed a diagnosis of lymphocytic-plasmacytic jejunitis. Treatment with a tapering dose of prednisone along with metronidazole and a novel protein diet were initiated, with clinical remission achieved after 3 months.

Commentary: This report describes an exciting, novel, noninvasive technique that allows visualization of the lumen for all segments of the intestinal tract. Important disadvantages to consider, however, include the high cost of the instruments and the need for additional training. In addition, the procedure takes at least 2 hours, requiring an extended anesthetic time. So far, only a couple of case studies have been reported for dogs and the risks have not been completely assessed. In human medicine, this technique appears relatively safe, although hyperamylasemia apparently is a rather common condition and a few cases of postprocedure pancreatitis have been reported.—Kathrin F. Burke, Dr med vet, Diplomate ACVP (Clinical Pathology)