Renal Tumors in Budgerigars

The budgerigar has the highest incidence of neoplasia of the psittacines. Renal tumors are one of the most common, consisting mostly of adenocarcinomas and adenomas. Metastasis is uncommon. Male, young- to middle-aged budgerigars are most often affected, and the tumors are often located on the anterior pole of the kidney. The most common clinical sign is unilateral or bilateral leg lameness resulting from nerve compression by the tumor. Other less specific signs due to intracoelomic pressure or organ displacement may be seen. Increased serum uric acid levels may act as a clinical marker of bilateral renal involvement. Hematuria might indicate renal disease, but studies are needed to confirm. Radiography is important in diagnosis. A right or left lateral view and a ventrodorsal view are recommended, although tumors are seen more frequently with use of a lateral view. On plain radiographs, the ventriculus can be used as a landmark for detecting changes in renal size. Contrast studies can help to determine the origin of a coelomic mass, as can ultrasonography. However, ultrasonography is limited because of the budgerigar’s small size. Therapeutic options for these tumors are limited. Surgical removal is almost impossible because of difficulties in accessing the tumor and in maintaining hemostasis. Corticosteroids might help reduce inflammation and edema, but must be used cautiously to prevent secondary disease (eg, fungal infection). Limited data exist on the use of chemotherapeutic agents in birds, although 1 study suggests that carboplatin may be useful. Investigations have suggested a link between retroviruses and renal tumors in budgerigars, but no definitive proof of a causal relationship exists.

COMMENTARY: This article provides a fairly comprehensive overview of renal tumors in budgerigars. With the high incidence of these tumors in this bird (approximately 15% to 20% according to studies cited), such information can be very useful to practitioners. The first half of the article provides practical clinical information on diagnosis, with plentiful images comparing normal and affected patients. The second half of the article has more of a research focus, describing the latest reports on treatment options and possible links to a retroviral etiology. While the treatment section is not as helpful from a clinical standpoint, the authors do refer readers to another source for information on the use of platinum drugs in avian cancer patients.—Jennifer L. Schori, VMD


Avian H5N1 Influenza in a Dog

A report from Thailand of a dog infected with highly pathogenic avian influenza (HPAI) H5N1 confirms that this virus crosses species barriers. Previously, cats and tigers have also been infected. In 2004, this dog was reported to have ingested the carcasses of ducks in an area with reported HPAI H5N1 infections. About 5 days after eating the carcasses, the dog developed high fever, panting, and lethargy; it died the following day. Virus was isolated from the dog’s lung tissue, and sequencing indicated that the dog’s H5N1 infection resulted from virus circulating during the second wave of outbreaks of H5N1 infection in Thailand. The virus was most closely related to the virus isolated from tigers.

COMMENTARY: H5N1 has not been reported in the United States, but the Centers for Disease Control and Prevention have been working with the World Health Organization and other international partners to monitor the situation. The risk for infection is generally low in humans, but there have been cases of disease in which people had direct contact with infected poultry. The case reported here does emphasize the need to monitor domestic animals when there is an outbreak of infection.—Patricia Thomblison, DVM, MS