Selected Abstracts From the Literature


Multiple cytoplasmic inclusion bodies were observed in the intestinal smooth-muscle cells of an adult canary from an aviary with a history of high mortality (50%). Grossly, a mild enteritis was the only lesion appreciable. Smears of the proventricular content contained a few megabacteria (Macrorhabdus ornithogaster). The intestinal inclusions were found in high numbers in all parts of the tract examined. They appeared round to oval, amphophilic, and hyaline in sections stained with hematoxylin and eosin, and magenta with Feulgen stain. Inclusions of the same type were occasionally detectable in the wall of splenic and pancreatic arteries. No inclusions or lesions were seen in the other organs examined. Transmission electron microscopy of the intestinal wall revealed circovirus-like particles, either in paracrystalline arrays or loose arrangements, mostly within the cytoplasm of the intestinal-muscle cells. Polymerase chain reaction amplification and sequence analysis confirmed infection with canary circovirus.


An adult female white-tailed trogon (Trogon viridis) was presented with abdominal enlargement and hard subcutaneous masses. Necropsy findings included bony masses extending from skeletal structures, disseminated pale foci in the liver, and a pale mass in the kidney. Histologic examination revealed multifocal to coalescing granulomatous inflammation in the bone, liver, kidney, lung, and spleen. Mycobacterium celatum was isolated from the liver and identified by DNA sequencing. This is the first report of M celatum infection in an avian species.


A case of unilateral seminoma with visceral metastases in a mallard duck (Anas platyrhynchos) is reported. The right testis was markedly enlarged. The liver surface showed multifocal to coalescent, regular, circular, umbilicated grayish-white spots. In addition, multiple rough whitish nodules were evident on the pancreas and the visceral peritoneum lining the intestine. Histologically, the right testicular parenchyma was diffusely affected and replaced by neoplastic growth, consisting of sheets of large round to polyhedral cells with conspicuous vesicular nuclei having distinctly granular chromatin and prominent nucleoli. Sheets of cells with similar features were observed in the other affected organs. Multiple lung metastases were detected on histology. This is the first known report of seminoma with hepatic, pancreatic, pulmonary, and peritoneal metastases in a mallard duck.

Hematology and biochemistry in healthy young pheasants and red-legged partridges and effects of spironucleosis on these parameters. Lloyd S, Gibson JS. Avian Pathol. 2006;35:335–340.

Plasma biochemistries and hematologic parameters were examined in 4-week-old to 12-week-old game birds. Healthy pheasants and partridges had similar levels of total protein, albumin, osmolality, sodium, chloride, potassium, magnesium, and glucose. Triglyceride, globulin, and calcium were significantly higher and phosphorus was lower in the partridges. Pheasants carrying a light to moderate infection with Spironucleus had significantly lower total protein, albumin, osmolality, sodium, chloride, calcium, and phosphorus. In severely affected pheasants, the osmolality, sodium, and chloride fell further. Triglyceride and glucose were significantly lower than in healthy birds, and magnesium was higher. Similar data were obtained from infected partridges. Red-cell parameters rose significantly in pheasants severely affected by spironucleosis. The percent of heterophils was significantly higher and lymphocytes and basophils lower in their blood smears. The breast- and leg-muscle wet weights from severely affected pheasants was 22.2% and 37.7% that of uninfected birds, although the water content of the breast muscle was significantly higher.

The presence of quill mites (Gabucinia bicaudata) and lice (Struthiolipeurus struthionis) in ostrich wing feathers. Cooper RG, El Doumani HAA. J S Afr Vet Assoc. 2006;77:9–11.

Quill mites (Gabucinia bicaudata) and lice (Struthiolipeurus struthionis) may infest ostrich feathers, resulting in skin damage, pruritis, and excessive feather preening and loss. Four different feather types (prime white, femina extra wide, femina class 1, and femina short; n = 10) were collected. The quill mites and lice were removed with fine forceps, studied using a photographic optical microscope, and counted microscopically at ×100 magnification following collection by sedimentation. They were placed in separate Petri