WSC 2010-2011. Conference 8
Slide 3. Tissue from a parrot.

(NOTE: This is not a good descriptive slide. Best to note the changes and move on.)

MICROSCOPIC DESCRIPTION: Brain, cross section including cerebrum and cerebellum: Multifocally, vessels within the cerebral and cerebellar gray and white matter **(1 pt.)**, as well as those of the meninges are surrounded by low to moderate numbers of histiocytes and lymphocytes **(1 pt.)** with fewer plasma cells.

Crop **(1 pt.)**: Multifocally within the myenteric plexus **(2 pt.)**, there are low to moderate numbers of histiocytes **(1 pt.)** and rare lymphocytes **(1 pt.)**. Within the smooth muscle layer, occasional fibers are infiltrated by aggregates of macrophages **(1 pt.)** and fewer lymphocytes with replace smooth muscle fibers.

MORPHOLOGIC DIAGNOSIS: 1. Cerebrum, cerebellum and meninges, vessels: Perivascular lymphocytic and histiocytic cuffing, multifocal, moderate. **(2 pt.)**

2. Crop, myenteric plexus: Ganglioneuritis, histiocytic and lymphoplasmacytic, diffuse, mild. **(2 pt.)**

3. Crop, smooth muscle: Leiomyositis, histiocytic, multifocal, mild. **(1 pt.)**

NAME THE CONDITION: Proventricular dilatation syndrome **(3 pt.)**

CAUSE: *Avian bornavirus* **(3 pt.)**

O/C: **(1 pt.)**

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Slide 4. Tissue from a tortoise.

MICROSCOPIC DESCRIPTION: Kidney. Multifocally, tubular epithelial cells are often swollen **(2 pt.)**with prominent granular to cleared eosinophilic cytoplasm (degenerate) **(1 pt.)**, or lifted off the basement membrane, fragmented, with pyknotic to karyorrhectic nuclei **(2 pt.)** (necrotic) **(1 pt.)**. Numerous tubules contain sloughed necrotic epithelial cells admixed with cellular debris, eosinophilic granular and purple to pink homogenous protein, as well as rare heterophils. **(1 pt.)** There are scattered large epithelial cells with prominent anisokaryotic nuclei **(1 pt.)** (regeneration) **(1 pt.)**. Occasionally, tubules are collapsed and basement membranes and cellular remnants contain abundant deeply basophilic mineral **(1 pt.)**. Multifocally, numerous intact and sloughed tubular epithelial cells have large cytoplasmic vacuoles which contain up to eight oval **(1 pt.)** myxozoan spores **(2 pt.)**ranging up to 10um in length with a 1-2um hyaline amphophilic wall, paired polar capsules, and a centrally located dark purple nucleus **(2 pt.)**. Scattered throughout the interstitium, there are low numbers of heterophils, lymphocytes and histiocytes laden with yellow granular pigment. **(1 pt.)** The renal pelvis contains aggregates of sloughed epithelium, low numbers of heterophils, and hemorrhage. There are multifocal aggregates of mineral within the renal pelvis. Perirenal fat is absent (atrophy).

(NOTE: Although the glomeruli appear to have markedly expanded mesangium, this is normal for a tortoise. Sorry, if you wasted time describing it – no points taken off, just no point given).

MORPHOLOGIC DIAGNOSIS: Kidney, tubules: Degeneration and necrosis, multifocal, moderate, with rare tubular regeneration and intraepithelial myxozoan parasites. **(3 pt.)**

O/C: **(1 pt.)**