WSC 2022-2023
Conference 21, Case 1
Tissue from a dog.

MICROSCOPIC DESCRIPTION: Cerebrum: Expanding the leptomeninges and infiltrating the underlying neural parenchyma **(1pt.)** (and focally extending outward from the leptomeninges) there is a poorly-demarcated, unencapsulated, infiltrative, multilobular, and moderately cellular neoplasm. **(2pt.)** The neoplasm is composed of sheets **(1pt.)** and poorly formed streams and bundles of polygonal **(1pt.)** cells on a moderate, often hyalinized fibrovascular stroma **(1pt.)**. Lobules are separated by dense bands of fibrous connective tissue. **(1pt.)** Neoplastic cells range up to 30um in diameter **(1pt.)**, and have distinct cell borders with abundant densely granular eosinophilic cytoplasm. **(1pt.)** Nuclei are ovoid, often peripheralized and crescentic **(1pt.)**, with finely stippled chromatin and 1-2 small basophilic nucleoli. **(1pt.)** Mitoses are rare. **(1pt.)** There is mild spongiosis **(1pt.)** at the advancing edge of the neoplasm and mild increase in microglia and astrocytes **(1pt.)** and rare spheroids. There are foci of mineralization and chondroid metaplasia in fibrous bands arising from the meninges and projecting into the neoplasm. **(1pt)**

MORPHOLOGIC DIAGNOSIS**:** Cerebrum: Granular cell tumor. **(4pt)**

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

WSC 22-23
Conference 21, Case 2
Tissue from a dog.

MICROSCOPIC DESCRIPTION: Urinary bladder **(1pt)**. One section of urinary bladder mucosa and submucosa is submitted for examination **(1pt)**. The submucosa is markedly expanded by an infiltrate of large numbers of macrophages **(2pt)**, admixed with smaller numbers of lymphocytes **(1pt)** and neutrophils **(1pt)** and fewer plasma cells **(1pt)**. Macrophages range up to 20um in diameter **(1pt)** with finely granulated cytoplasm **(1pt)**. Nuclei are usually round with finely stippled chromatin – they are sometimes hyperchromatic, compressed, and peripheralized **(1pt)**, or have intranuclear cytoplasmic invaginations **(1pt)**. Vessels are congested with prominent endothelium. The infiltrate extends to the overlying mildly hyperplastic **(1pt)** urothelium which is multifocally erode and has mild diffuse intracytoplasmic edema **(1pt)**.

MORPHOLOGIC DIAGNOSIS: Urinary bladder, submucosa **(1pt)**: Cystitis, histiocytic **(2pt)**, diffuse, severe.

NAME THE CONDITION: Malakoplakia **(3pt)**

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

WSC 2022-2023
Conference 21, Case 3
Tissue from a dog.

MICROSCOPIC DESCRIPTION: Lymph node **(1pt)**: There is loss of normal nodal architecture **(1pt)** affecting approximately 50% of the node **(1pt)**. In the most severely affected area, the architecture is effaced by proliferating endothelial cells **(1pt)** which form slit-like blood-filled spaces of variable diameter. **(1pt)** Endothelial cells are plump and monomorphic with minimal atypia **(1pt)** and occasional apoptosis **(1pt)**. Rare multinucleated cells **(1pt)** , presumptively endothelial cells, are widely scattered in areas of vascular proliferation. There is minimal stroma **(1pt)**, and vascular spaces are filled with blood and polymerized fibrin **(1pt)**. There are multifocal areas of necrosis within the areas of vascular proliferation. There are low numbers of siderophages **(1pt)**, macrophages, and lymphocytes scattered throughout areas of proliferating endothelial cells. Similar proliferations expand the subcapsular and medullary sinuses in less affected areas. In the remaining cortex, follicles are prominent and the paracortex is moderately hyperplastic, **(1pt)** with large numbers of tingible body macrophages **(1pt)**. Medullary cords are expanded by large numbers of plasma cells **(1pt)**, and aggregates of siderophages. There is dilation of perinodal veins and mild edema. **(1pt)**

NAME THE CONDITION: Nodal plexiform vasculopathy **(3pt)**

NAME AN APPROPRIATE DIFFERENTIAL DIAGNOSIS: Metastatic hemansgiosarcoma **(1pt)**

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

tWSC 2022-2023
Conference 21, Case 4.
Tissue from a dog.

MICROSCOPIC DESCRIPTION: Lung: A single section of lung is submitted for examination; normal pulmonary architecture is lacking. Diffusely, alveolar architecture is not evident. Air spaces approximate the diameter of small bronchioles and many are lined by cuboidal epithelium. At one edge of the slide, much of the airway epithelium is lost or sloughed into the lumen due to autolysis. Bronchiolar- like structures are separated by loosely arranged fibrous tissue which contains well formed capillaries and scattered macrophages, lymphocytes, and plasma cells. There is multifocal mineralization scattered throughout the fibrous septa. There are several well-formed bronchioles of a larger diameter scattered through the tissue, some of which have a continuous wall of smooth muscle. Multifocally at the periphery of the section, fibrous scepta are collapsed against each other, almost resembling a sheet of fibrous connective tissue. Occasional airspaces contain or are surrounded by macrophages, lymphocytes, and cellular debris. There is multifocal mesothelial hyperplasia along the pleura. **(1pt.)**.

NAME THE CONDITION : Lung: Congenital pulmonary airway malformation (Pulmonary hypoplasia, diffuse) **(5pt.)**

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