

WSC 2022-2023  
Conference 14, Case 1  
Tissue from a cat.

MICROSCOPIC DESCRIPTION: Lymph node **(1pt)**: Effacing 90% of the nodal architecture **(1pt)**, there is an unencapsulated, moderately cellular, infiltrative, poorly demarcated neoplasm. **(1pt)** The neoplasm is composed of round cells **(1pt)** arranged in sheets **(1pt)** on a pre-existent fibrovascular stroma. **(1pt)** Neoplastic lymphocytes range up to 15um in diameter **(1pt)** with a small amount of eosinophilic granular cytoplasm. **(1pt)** Nuclei are irregularly round to oval with coarsely clumped chromatin and 1-2 basophilic nucleoli. **(1pt)** There is moderate anisokaryosis **(1pt)** and mitoses average 4 per 2.37mm<sup>2</sup> field. **(1pt)** Multinucleated cells are common **(1pt)** and occasional Reed-Sternberg cells are present. **(1pt)** The neoplasm contains numerous small lymphocytes with hyperchromatic nuclei. **(1pt)** There are rare tingible body macrophages. Few pre-existent follicles and compressed normal lymph node are scattered throughout the mass. **(1pt)** There is moderate atrophy of fat in the adjacent fibroadipose tissue.

MORPHOLOGIC DIAGNOSIS: Lymph node: Lymphoma **(2pt)**, large cell **(1pt)**, low-grade. **(1pt)**

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

WSC 2022-2023  
Conference 14, Case 2  
Tissue from a rabbit.

**MICROSCOPIC DESCRIPTION:** Haired skin, adjacent to mucus membrane: There is segmental papillary **(1pt)** epidermal hyperplasia **(1pt)**, covered by a thick layer of orthokeratotic hyperkeratosis **(1pt)** ranging up to 2mm thick **(1pt)**. The epidermal hyperplasia and hyperkeratosis multifocally extends down into follicular ostia. **(1pt)** There are small pustules scattered throughout the abundant hyperkeratotic keratin. **(1pt)** There is multifocal edema of the stratum corneum **(1pt)** and acanthosis of the underlying stratum spinosum. **(1pt)** There are numerous apoptotic keratinocytes within all levels of the epidermis, **(1pt)** and small numbers of heterophils and lymphocytes infiltrating the basal and spinous layer. **(1pt)** Apoptosis and mild inflammation of the follicular epithelium is present as well. **(1pt)** There are rare mitotic figures within the epidermal and follicular epithelium. **(1pt)** There is a superficial perivascular and periadnexal dermatitis **(1pt)** consisting of low to moderate numbers of lymphocytes, plasma cells, histiocytes and heterophils. There are no visible sebaceous glands within this section.

**MORPHOLOGIC DIAGNOSIS:** Haired skin: Dermatitis, cytotoxic **(1pt)** and hyperkeratotic **(1pt)**, diffuse, moderate, with follicular and epidermal keratinocyte apoptosis **(1pt)** and lymphoplasmacytic and heterophilic perivascular and periadnexal hyperkeratosis **(1pt)**

**NAME THE CONDITION:** Thymoma-associated exfoliative dermatitis is best in this species (erythema multiforme ok) **(2pt)**

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

WSC 2022-2023  
Conference 14, Case 3  
Tissue from a dog.

**MICROSCOPIC DESCRIPTION:** Skeletal muscle: Both longitudinal and transverse sections of skeletal muscle are submitted for examination; changes are best demonstrated on the transverse section. There are multifocal to coalescing areas comprising 33% of the muscle fiber in which myofibers demonstrate one or more of the following: shrinkage **(1pt)** (atrophy) **(1pt)**, hypereosinophilia, loss of cross-striations **(1pt)**, vacuolation (degeneration) **(1pt)**, fragmentation, formation of contraction bands **(1pt)**, pyknosis (necrosis) **(1pt)** and mineralization. **(1pt)** Rarely, necrotic fibers are replaced by small aggregates of macrophages **(1pt)** Some fibers are bordered by hypertrophic satellite nuclei **(1pt)** and internalization of nuclei (regenerative change) **(1pt)**. In areas of myofiber damage, the endomysium is intact; in areas of extensive myofiber damage, there is mild endomysial fibrosis with plump fibroblasts. **(1pt.)**

**MORPHOLOGIC DIAGNOSIS:** Skeletal muscle: Myofiber degeneration **(1pt)**, necrosis **(1pt)**, regeneration **(1pt)** and loss, polyphasic, **(1pt)** multifocal to coalescing, with mineralization. **(1pt)**

**NAME THE CONDITION:** Muscular dystrophy (of any type) **(2pt)**

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

WSC 2022-2023  
Conference 14, Case 4.  
Tissue from a dog.

MICROSCOPIC DESCRIPTION: Vertebra and spinal cord with nerve roots **(1pt)**: Effacing the vertebral body **(1pt)**, extending into the extradural space and compressing the ventral spinal cord, **(1pt)** there is a multilobulated, unencapsulated, well-demarcated, infiltrative, densely cellular neoplasm **(1pt)**. The neoplasm is composed of sheets **(1pt)** of round cells **(1pt)** with distinct cell borders, a moderate amount of basophilic cytoplasm, and often a variably size perinuclear hoff **(1pt)** that occasionally expands to encompass the entire cytoplasm. **(1pt)** Nuclei are round, often excentric, and hyperchromatic. **(1pt)** Anisocytosis and anisokaryosis is minimal, and mitoses are rare. **(1pt)** There is multifocal hemorrhage within the neoplasm. There is compression of nerve roots, **(1pt)** and within these roots, occasional dilation of myelin sheaths and scattered hemorrhage. There is asymmetrical and mild compression of the spinal cord with rare dilated myelin sheaths and spheroids. **(1pt)** The neoplasm infiltrates the ventral vertebral body, filling marrow cavities. **(1pt)** There is marked bone resorption **(1pt)** at the edges of the neoplasm, and there is multifocal periosteal woven bone proliferation **(1pt)** in areas adjacent to the neoplasm. Bone marrow within the vertebral body is mild to moderately hyperplastic. **(1pt)**

MORPHOLOGIC DIAGNOSIS: Vertebra and spinal canal: Myeloma. **(3pt)**.

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