

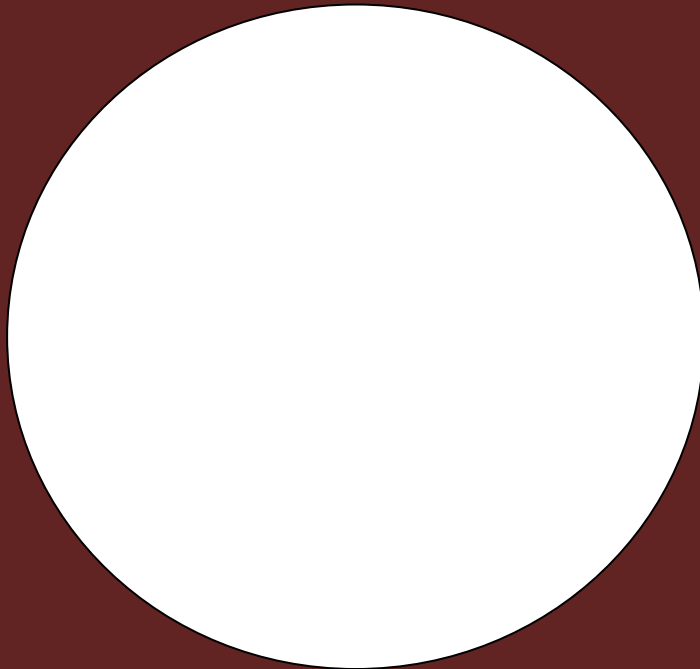
Organ: lung

Stain: H&E

Lesion: Pulmonary adenomatosis

Microscopic findings:

- 1- The nodules are unencapsulated and are composed of single to multiple layers of cuboidal to columnar epithelial cells that line alveoli and form acinar or papillary projections. They are supported by a fine fibrovascular stroma.
- 2- The nodules are compressing adjacent alveoli (atelectasis)



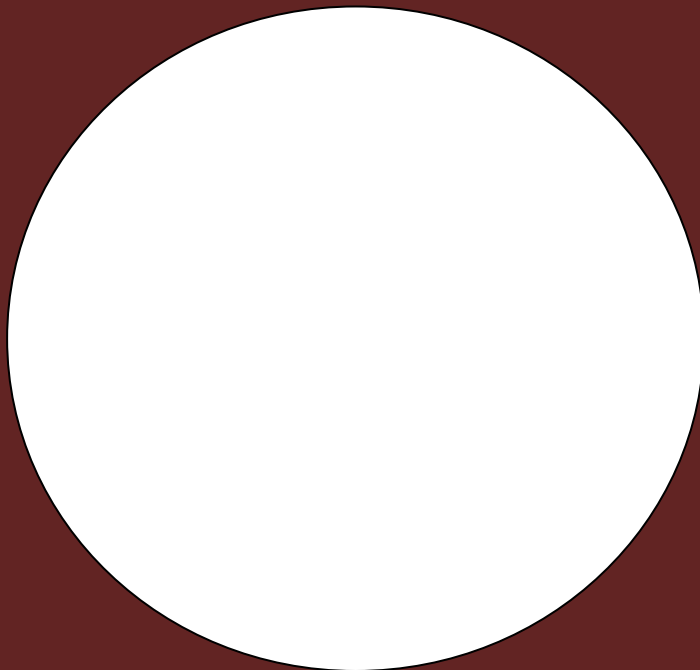
Organ: brain

Stain: H&E

Lesion: Demyelination and necrosis (**canine distemper**)

Microscopic findings:

- 1- The white matter contains numerous clear vacuoles up to 100 um in diameter (spongiosis).



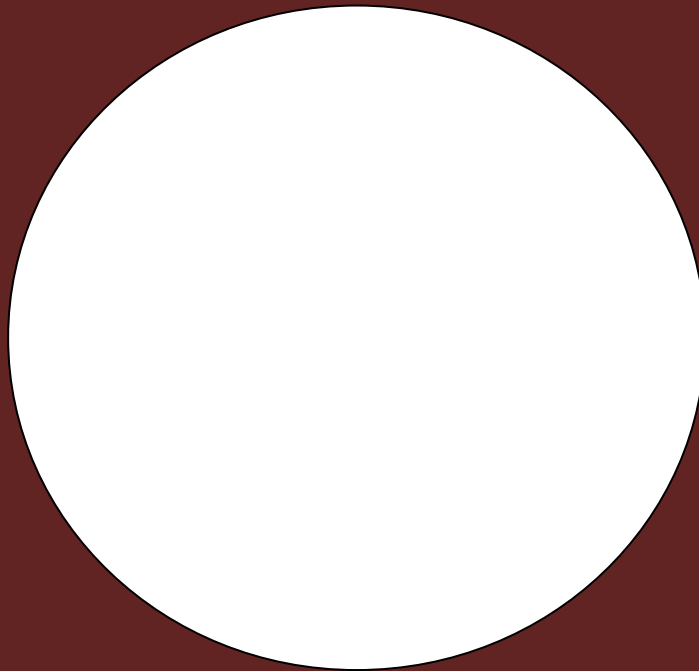
Organ: brain

Stain: H&E

Lesion: intranuclear inclusion bodies (**canine distemper**)

Microscopic findings:

- 1- round to oval, eosinophilic inclusion bodies that marginate the chromatin within small neurons which surrounded with glial cells.
- 2- the white matter contains numerous clear vacuoles



Organ: skin

Stain: H&E

Lesion : necrotic vasculitis (**Malignant catarrhal fever**)

Microscopic findings :

1. inflammatory infiltrate markedly expands and disrupts the tunica media and adventitia, admixed with cellular and karyorrhectic necrotic debris
2. vessel lumen is partially to completely occluded by fibrin thrombi (eosinophilic fibrillar material entrapping erythrocytes and low numbers of inflammatory cells).
3. perivascular dermal inflammatory cellular infiltrations composed of numerous lymphocytes, fewer macrophages, neutrophils and plasma cells

