

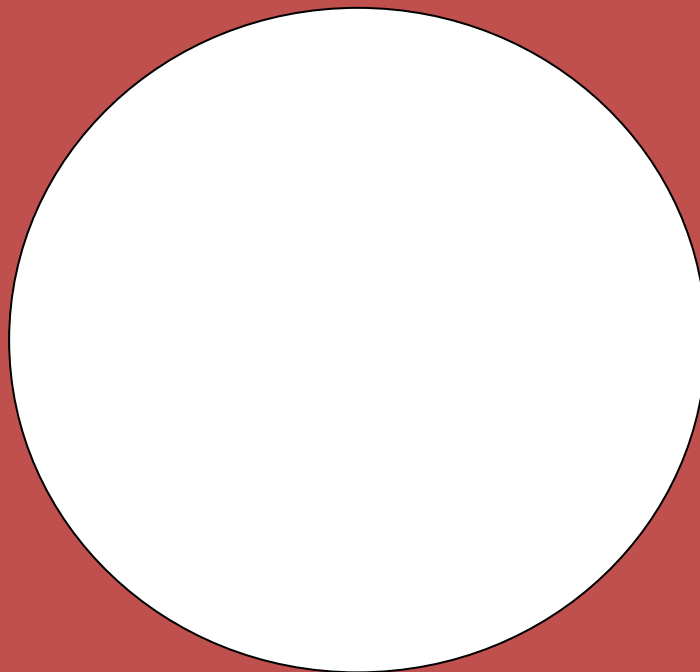
Organ: tongue

Stain: H&E

Lesion: glossitis (FMD)

Microscopic findings:

- 1- Within the epithelium, there are multifocal coalescing pustules and vesicles that contain many viable and degenerate neutrophils and variable amounts of homogenous eosinophilic material, cellular and karyorrhectic debris
- 2- There are intracellular edema and intercellular edema(spongiosis)
- 3- subepithelial perivascular connective tissue is expanded by moderate numbers of neutrophils, fewer macrophages, lymphocytes and plasma cells



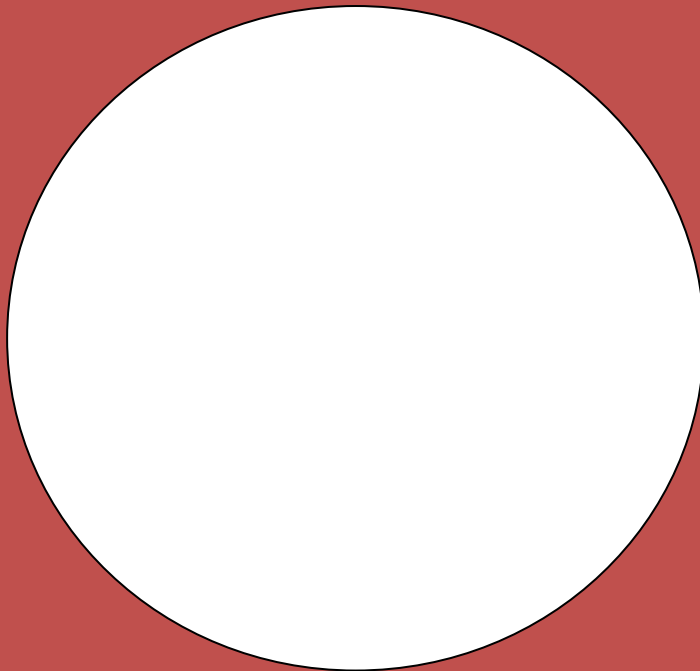
Organ: tongue

Stain: H&E

Lesion: Vesico-pustules (FMD)

Microscopic findings:

- 1- Within the epithelium, there are multifocal to coalescing pustules and vesicles that contain many viable and degenerate neutrophils and variable amounts of homogenous eosinophilic material, cellular and karyorrhectic debris
- 2- intracellular edema and intercellular edema(spongiosis)
- 3- perivascular subepithelial connective tissue is expanded by moderate numbers of neutrophils, fewer macrophages, lymphocytes, and plasma cells.



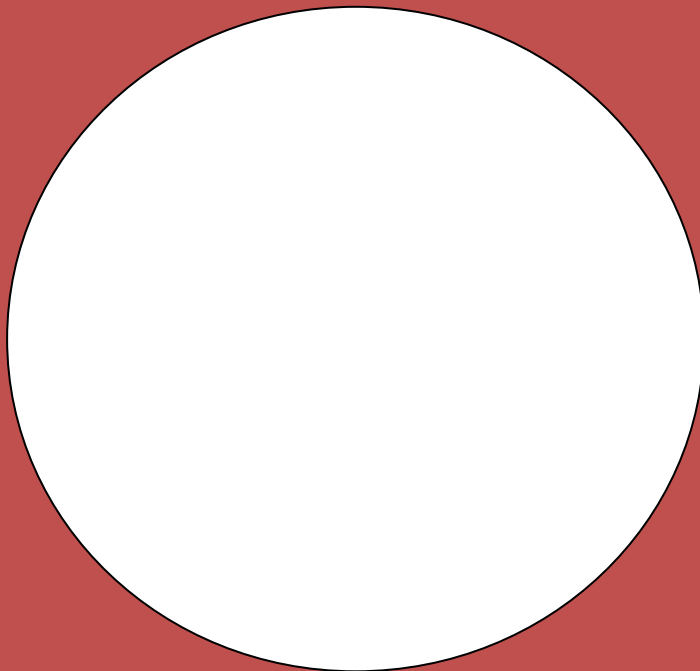
Organ: liver

Stain: H&E

Lesion: necrosis (rift valley fever)

Microscopic findings:

- 1- Hepatic cords are lost replaced by variable amounts of homogenous eosinophilic material, cellular and karyorrhectic debris (necrosis)
- 2- Hepatocytes are shrunken, angulated and have hypereosinophilic cytoplasm, with pyknotic, karyolytic and karyorrhectic nuclei.
- 3- Sinusoids are filled with abundant cellular and karyorrhectic debris, admixed with scattered fibrin, few neutrophils and macrophages.
- 4- Some degenerate hepatocytes contain eosinophilic intranuclear inclusion bodies that marginate chromatin



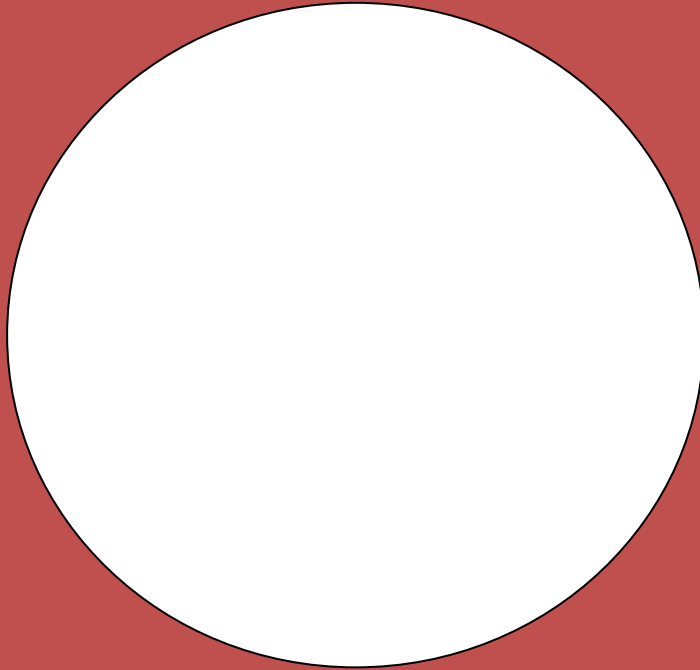
Organ: brain (meninges)

Stain: H&E

Lesion: meningitis (**Eastern equine encephalitis**)

Microscopic findings:

- 1- Multifocally, meninges are expanded by inflammatory cells mainly lymphocytes, fewer neutrophils and macrophages



Organ: brain (Cerebrum)

Stain: H&E

Lesion: gliosis (Eastern equine encephalitis)

Microscopic findings :

- 1- Multifocally, the white matter contain scattered inflammatory cells mainly lymphocytes and neutrophils admixed with many glial cells.

