Vesicular Lesions in a Feral Swine

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Signalment & History

Adult, female, feral hog

Observed lethargic and unafraid of humans

Euthanized May 21, 2014

Necropsy performed by Florida Fish and Wildlife Conservation Commission personnel

Gross findings included
  • Moderate pulmonary edema
  • A small amount of yellow mucoid material in the renal pelvis
  • An enlarged, friable spleen
  • ...

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Morphologic Diagnosis

**Haired skin:** Vesiculopustular, neutrophilic and eosinophilic, perivascular dermatitis, multifocal to coalescing, moderate, acute, with intrapustular cocci

- **Other organs:** Systemic perivascular inflammation, pulmonary edema
- Bacterial culture of the spleen and liver:
  - *Vagococcus carnophilus*
- **Diagnosis:** Bacterial septicemia with cutaneous vesicles

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Vagococcus carniphilus

Motile, gram positive cocci

Often isolated from the environment: chicken and pig feces, river water, ground beef

Has been isolated from live domestic swine
Feral Hog + Vesicle =

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**BOARDS REVIEW!**

<table>
<thead>
<tr>
<th>Vesicular Diseases of Swine</th>
<th>Cause</th>
<th>SWINE</th>
<th>CATTLE</th>
<th>HORSES</th>
<th>FAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foot and Mouth Disease</td>
<td>Picornavirus</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Swine Vesicular Disease</td>
<td>Enterovirus</td>
<td>X</td>
<td></td>
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<td>X</td>
</tr>
<tr>
<td>Vesicular Exanthema of Swine</td>
<td>Calicivirus</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Vesicular Stomatitis</td>
<td>Rhabdovirus</td>
<td>X</td>
<td>X</td>
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<tr>
<td>Swine Pox</td>
<td>Poxvirus</td>
<td>X</td>
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</tbody>
</table>

Fortunately, all of these diseases were ruled out in this case thanks to the NVSL Foreign Animal Disease Diagnostic Laboratory, Plum Island Disease Center

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Other differentials...

- **Seneca Valley Virus** (Picornavirus)
  - Snout and coronary band vesicles
  - Present in USA, Canada, Australia, New Zealand, Italy, Brazil
  - Not tested for in this case

- **Erysipelothrix rhusiopathiae**
  - “Diamond Skin Disease”
  - Not detected by bacterial culture

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- UGA Histotechnicians

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