Large Animal Clinical Quiz

James Jorgenson and Robert Abraham*

Case 1. You are called out to examine a six year old Brown Swiss cow which freshened four weeks ago. She was okay at the morning milking yesterday; however, yesterday evening she was somewhat depressed and ate only half her grain. Your partner was called out last night and treated her for ketosis. She did not respond, and today she is severely depressed and completely off feed. Her milk production has declined from 86 pounds per day to 37 pounds per day. Physical exam reveals the following:

- Temperature 100.8°F.
- Pulse 96 per minute
- Slight evidence of dehydration
- Complete absence of rumen motility
- Distention of the right paralumbar fossa

Excess fluid sounds are noted in the right paralumbar fossa, the cow is very uneasy, and she continuously gets up and down as if in pain.

Rectal exam reveals a tense fluid and gas-filled organ filling a major portion of the right side of the abdominal cavity.

What is your diagnosis? What treatment is recommended?

Case 2. You are called out by a client to look at some of his new lambs which are ill. These lambs range in age from birth to three weeks. Some of them walk very stiffly and nearly all of them are letting their heads droop low rather than holding them erect. Several of the younger lambs are down and apparently unable to get up. These down lambs are unable to rise and nurse by themselves, but when held up to the ewe they nurse vigorously.

Temperatures of these lambs range from normal to slightly elevated, and several lambs show a marked increase in their respiratory rates.

One lamb died during the night so you proceed to do a postmortem examination of it. Upon opening the body cavities, you find a large amount of pleural and peritoneal effusions. The lungs are very edematous, and there are well-defined plaques (chalky white in color) in the subendocardium. No other gross lesions are visible.

The owner has never had this problem before, but on further questioning you discover that the ewes have been getting alfalfa from a different pasture than he has ever used in the past. What is your diagnosis? What preventive measures can you suggest? How will you treat these lambs?

Case 3. A client of yours operates a large beef-cattle feedlot. He has recently shipped in 150 steers weighing about 500 pounds from Oklahoma. None of the cattle are prime feeder stock, but five of the group are especially emaciated and weak. The body temperature of these five steers ranges from 104°F to 107°F. Their respiration and heart rates are accelerated. No lung involvement or respiratory difficulty is noted. Pallor and icterus are discernible in the mucous membranes of the mouth and in the sclera. The next day one of the animals dies and you do a necropsy. You find that the blood is watery, and most tissues are pale and icteric. Petechial hemorrhages are seen on the epicardium

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respons. The adrenal gland may be involved in the nursing cow although its role is unclear at the moment. FSH content in the pituitary is high at parturition, declines for 1–2 weeks and then increases. LH content is low at parturition and gradually increases until cyclic levels are attained.

On the basis of present data it appears that it would be possible to select normal individuals in the cow population for breeding at 30 days postpartum with acceptable fertility. Sows should be ready to breed at 3–2 weeks postpartum and this practice has already shown promise. It is clear that much work remains to be done especially in regard to the fertility of the female as these many factors affect it. If one wishes further information regarding the postpartum cow, Research Bulletin No. 270, University of Wisconsin, 1968, gives an excellent summary.

REFERENCES


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other serous membranes. The spleen is enlarged and the liver pale.

a. Your diagnosis is: _____________.
b. To back up this diagnosis you might want a _________________________.
c. Treatment is _________________.

Case 4. A client of yours who raises thoroughbred horses calls you to his farm ot check a three year old gelding. You had looked at this horse about a month before, when the horse had been coughing and showing signs of having influenza. The symptoms were never very severe and the gelding seemed to recover on his own.

This time the gelding showed signs of edema in all four legs. He was sore in the large muscle masses and was reluctant to move around to any great extent. The owner told you that the horse had started "stocking" up about four days ago and had that the lips and eyelids are edematous. Upon examination of the mucous membranes you noticed that they were somewhat icteric and that there were petechial hemorrhages on the ventral surface of the tongue. The temperature, pulse, and respiration were normal. The hose ate and drank normally. No other horses in the barn were affected. The blood picture was as follows:

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>R.B.C.</td>
<td>4,563,000</td>
</tr>
<tr>
<td>W.B.C.</td>
<td>15,000</td>
</tr>
<tr>
<td>Hemoglobin</td>
<td>8 mg %</td>
</tr>
<tr>
<td>Hematocrit</td>
<td>36.5 %</td>
</tr>
<tr>
<td>Platelets</td>
<td>adequate</td>
</tr>
<tr>
<td>Prothrombin</td>
<td>11 seconds</td>
</tr>
</tbody>
</table>

What is your diagnosis? _____________.

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Answers to Clinical Quiz
Large Animal

Case 1. Acute torsion of the abomasum. Surgical intervention is required. The fluid and gaseous contents causing the distention must be drained off and the torsion must be corrected. Supportive therapy with isotonic fluids is also desirable.

Case 2. White muscle disease (stiff lamb disease). It should be noted that lambs may die with white muscle disease and show only lesions of cardiac insufficiency on post-mortem examination. Others may show evidence of aspiration pneumonia due to involvement of the tongue muscles. More typically, the bilaterally symmetrical pale demarcated areas of the skeletal muscles and diaphragm are noted. A subcutaneous injection of 2.5 mg. of selenium per 100 pounds given to the ewe one month prior to lambing should prevent the condition. The lambs can be treated with 1.0 mg. of selenium given subcutaneously.

Case 3. A. Anaplasmosis  
   B. Blood smear  
   C. Chlorotetracline or oxytetracycline which are anaplasmacidal

Case 4. Purpura hemorrhagica

Answers to Clinical Quiz
Small Animal

Case #1 Canine Brucellosis; serology. 
Case #2 Ethylene glycol (antifreeze) poisoning; demonstrating calcium oxalate crystals in the urine; grave. 
Case #3 Ruptured gracilis muscle; surgical repair; good if enough normal muscle remains to suture. 
Case #4 Feline Infectious Peritonitis; grave; symptomatic and supportive treatment along with antibiotics may be of some value.

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