CASE STUDIES IN EQUINE MEDICINE
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CASE 1

Signalment: 29-year-old mixed breed pony mare

Presenting complaint: esophageal obstruction

History: The pony is fed soaked senior feed with no hay or treats. The owner’s observed feed refusal with excessive salivation in the morning. Esophageal lavage by referring veterinarian failed to resolve the obstruction. A barium swallow was performed which confirmed an obstruction with an unknown material. The pony was given ceftriaxone crystalline free acid intramuscularly and started on intravenous fluids prior to referral for further evaluation.

Physical examination findings: QAR, T: 99.4°F, Pulse 48/min, Resp: 32/min, BCS: 6/9, Weight 460 lbs, MM: pink with CRT < 2 sec. Auscultation of heart and lungs did not identify any abnormalities. Digital pulses were within normal limits. A small amount of mucoid ocular discharge was apparent with scleral injection. The hair coat was moderately long and abnormal fat distribution was evident.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
CASE 2

Signalment: 18-year-old Thoroughbred mare

Presenting complaint: Colic of 12 hours duration

History: Colic signs of flank watching and decreased appetite were observed the evening prior to referral. The mare had improved after the administration of flunixin meglumine and hand walking. The mare passed a small amount of dry manure, but remained mildly depressed and inappetant. The mare had a history of frequent episodes of colic that had been responsive to flunixin, oral fluids and/or mineral oil. A new batch of hay was introduced two weeks ago. The mare had been vaccinated for Potomac horse fever 1 week prior to referral.

Physical examination findings: BAR, T: 100.1°F, Pulse: 44/min, Resp: 20/min., MM pink, slightly tacky with a CRT of < 3 seconds. Auscultation of heart and lungs did not identify any abnormalities. Gastrointestinal sounds were decreased in all quadrants. Digital pulses were normal. Rectal palpation did not identify any abnormalities. Periodic fevers (102.8 to 103.2°F) were observed during hospitalization.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
Presenting complaint (Visit 2): Fever of unknown origin, 12 days after previous hospitalization

History: Fever of 103°F began the day before presentation which responded to the administration of flunixin meglumine. Complete blood count and serum chemistry performed by referring DVM was normal. Temperature increased to 105°F in the evening, and flunixin meglumine was administered prior to referral for further evaluation. The horse was housed next to a horse that had recently had Potomac horse fever.

Physical examination findings: BAR, T: 103.1°F, Pulse: 40/min, Resp: 16/min, BCS 5/9, mm color pink with a capillary refill time of 3 seconds. Auscultation of heart and lungs was normal. Nasal discharge was not present and a cough could not be elicited upon trachea pressure. Gastrointestinal sounds were normal in all quadrants. Feces were formed. Digital pulses were normal in all limbs. The right front shoe was loose.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
CASE 3

Signalment: 12-year-old grey Andalusian gelding

Presenting complaint: Dermal masses

History: Owner has had horse for 9 months. At the time of purchase, multiple dermal masses were present in the perineal and ventral tail region. There has not been any change in the appearance of the masses since purchase.

Physical examination findings: BAR, T: 100.2°F, Pulse: 36/min, Resp: 16/min, BCS 7/9, MM are pink, moist, with capillary refill of < 2 sec. Heart and lungs are normal upon auscultation. Gastrointestinal sounds are normal in all quadrants. Digital pulses are within normal limits in all 4 limbs. Dermal masses are observed in the following areas: 1) lower lip near the left commissure (1.5 cm diameter), 2) the right scrotal region (5x 4 cm mass that is well circumscribed and moveable), 3) the perineum (multiple masses between 1 and 2 cm in diameter), and 4) the entire ventral surface of the tail.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
CASE 4

Signalment: 10-year-old Quarter horse mare

Presenting complaint: progressive lethargy, anorexia, and ataxia

History: Clinical signs were first observed 2 days prior to referral. After initial signs of lethargy and anorexia, the mare developed icterus, fever (102.3°F), and ataxia. The referring DVM identified increased bilirubin and liver enzymes on serum chemistry. Intravenous flunixin meglumine was administered, and the mare collapsed with almost immediate recovered during hypertonic fluid administration. The mare was referred for further evaluation.

Previous health concerns had not been evident. The mare had delivered a healthy foal 2 months previously. The foal has been healthy. Both the mare and foal had received 5 ml of tetanus antitoxin immediately after the delivery of the foal.

Physical examination findings: Depressed, temp was not taken, heart rate: 60 bpm, Resp: 24/min, BCS 6/9, estimated weight 500 kg. MM are icteric/red with a capillary refill time of > 3 sec. Jugular fill time is prolonged. The mare is standing in the trailer with her head low. She is very ataxic and appeared blind. The mare compulsively walks forward and head presses on the stall. Several small abrasions are present on the face, and dried blood is seen around the muzzle. The muzzle appears mildly edematous. Pupillary light responses and menace are present in both eyes. The ears and distal limbs are cool to the touch. The heart and lungs sounds are normal upon auscultation. Gastrointestinal sounds are decreased in all quadrants. Ventral edema is present. Vulvar mucosa is deeply icteric with multiple petechial.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
CASE 5

Signalment: 14-month-old Paint gelding

Presenting complaint (Visit 1): Epistaxis from left nostril

History (Visit 1): Owners discovered the horse with epistaxis in the morning. Bleeding continued unabated during referring veterinarian’s examination, and horse was referred.

Physical examination findings (Visit 1): BAR, Temp: 101.9°F, pulse: 66/min, Resp: 28/min, Weight 905 lbs, BCS 5/9, MM: pink, moist with capillary refill time of <2 sec. Left nostril is smeared with dried blood. Other physical examination findings were normal.

Signalment (Visit 2): Now 30-month-old Paint gelding

History (Visit 2): While at a horse show, the owner discovered the horse in the stall with bilateral epistaxis. No obvious signs of trauma were present. The horse had been healthy with no problems observed during the interval since the episode of unilateral epistaxis 16 months earlier.

Presenting complaint (Visit 2): bilateral epistaxis

Physical examination findings (Visit 2): BAR, Temp: 100.8°F, Pulse: 48/min, Resp: 36/min, weight 1300 lbs, BCS 7/9, MM: pink, moist and capillary refill time < 2 sec., jugular fill time: prompt. Auscultation of heart and lungs is normal. Gastrointestinal sounds are normal in all quadrants. Digital pulses are normal in all 4 limbs. Evidence of epistaxis is present bilaterally and a slow trickle of blood is still present.

Diagnostic approach to epistaxis:

Diagnosis (Visit 1):

Diagnosis (Visit 2, 3, &4):

Therapeutic plan:
Signalment (Visit 5): Now 33-month –old Paint gelding

Presenting complaint (Visit 5): Behavior changes

History: Owner noted at last recheck that the horse was spooky and high strung. He now has poor ground manners which is a definite change from his previous behavior. Now he has begun to have frequent head shaking in a side-to-side manner. He occasionally has a right-sided head tilt. There does not seem to be a pattern to head shaking and no identifiable triggers of this behavior. He has abrasions around both eyes and occasionally has inspiratory stridor. Appetite seems mildly diminished. A dental was last performed 5 months ago.

Physical examination (visit 5): QAR, Temp: 100.1°F, Pulse: 40/min, Resp: 28/min, weight 1288 lbs, BCS 5/9, MM: pink, moist with a capillary refill time of, 2 sec, Heart and lungs sound normal. Occasionally, there inspiratory stridor is heard. Normal gastrointestinal sounds are detected in all quadrants. Lameness is not observed. Mentation, cranial nerve function, and gait appear normal. Horse is observed to shake head in a side-to-side direction.

Diagnostic approach to head shaking:

Diagnosis:

Treatment:
CASE 6

**Signalment:** 16-month-old Standardbred filly

**Presenting complaint:** Worsening signs of pneumonia

**History:** The filly presented with a ten day history of fever, tachypnea, occasional cough, and scant mucoid nasal discharge. Ultrasound evaluation of the thorax identified ventral consolidation. Leukocytosis with a left shift was present. The filly was given ceftriaxone crystalline free acid. At re-examination 4 days later, the filly appeared improved. Upon recheck on day 8 after initial signs, the filly is again febrile (102.8°F), nasal discharge is increased, and the cough has worsened. The white blood cell count is increased. Ultrasound with a 5 megaHz probe identifies an abnormality in the caudal dorsal portion of the right lung, but ultrasound penetration is not sufficient to characterize the abnormality. Filly is referred to VTH for further evaluation.

**Physical examination findings:** QAR, Temp: 102.5°F, pulse: 52/min, Resp: 48/min, Weight 700 lbs, BCS 3/9, MM are pink, moist and capillary refill time is < 2 sec. A spontaneous cough and occasional mucopurulent nasal discharge are present. Heart is normal upon auscultation. No wheezes or crackles are heard over the lung fields, but an area with decreased lung sounds is identified in the right mid-thoracic lung field between the 8th and 11th rib.

**Problem list:**

**Diagnostic plan:**

**Diagnosis:**

**Therapeutic plan:**
CASE 7

Signalment: 2 -month-old Quarter horse filly

Presenting complaint: Depression with 104°F and hock abrasions

History: The filly had a 5 day history of lethargy and fever. She had had a brief history of a cough and had been treated by the referring veterinarian with ceftiofur and gentamicin for 5 days. On the morning of referral, the owner’s observed that the filly was quieter than normal, reluctant to nurse, and persistently febrile. An abrasion was discovered on the right hock. Flunixin meglumine was administered before transport.

Physical examination findings: QAR, Temp: 101.9°F, pulse 112/min, Resp: 32/min, MM pink, moist with a capillary refill time of < 2 sec. Lung sounds are harsh bilaterally. Abrasions are observed over the right hock with moderate soft tissue enlargement. The filly is not lame. The filly is now eating hay and nursing from the mare. A 2 finger umbilical hernia is evident, but is soft and reducible. BCS is 5/9, weight is 286 lbs.

Problem list:

Diagnostic plan:

Diagnosis:

Therapeutic plan:
CASE 8

**Signalment:** 3-year-old Quarter horse filly

**Presenting complaint:** Fever, myopathy, submandibular lymph node abscess

**History:** The owners initially observed the filly to be dull while being ridden 5 days ago. A fever of 105°F was observed the following morning. At that time the filly was started on PPG, gentamicin, and flunixin meglumine. The fever decreased in response to therapy, but muscle firmness and pain upon movement was evident on day 2 of illness. Injectable antibiotics were discontinued and clinical pathology testing was performed. The filly was given flunixin meglumine, 10 liters of intravenous fluids, and started on oral trimethoprim-sulfa. On day 3 an abscess in the area of the submandibular lymph node ruptured. The muscle stiffness and pain did not resolve and muscle enzymes were increased. Other horses on the property had displayed serous nasal discharge and mild fevers, but enlarged lymph nodes had not been observed.

**Physical examination findings:** QAR, Temp 101.4°F, pulse: 68/min, Resp: 12/min, Weight estimated at 500 kg, BCS 7/9, MM are pink, moist, and capillary refill time is < 2sec. The filly is reluctant to move and is stiff and painful when walking. No nasal discharge is present. The right submandibular lymph node is abscessed with minimal discharge. The left submandibular lymph node is firm and mildly enlarged. Heart is tachycardic with normal rhythm. The trachea and lungs sound normal, and a cough could not be elicited. Gastrointestinal sounds were normal in all quadrants. The tibiotarsal joints are mildly distended, bilaterally. The triceps and quadriceps muscles are firm upon palpation and moderate to severe edema is seen over the quadriceps muscles. Mild ventral edema is evident.

**Problem list:**

**Diagnostic plan:**

**Diagnosis:**

**Therapeutic plan:**