Equine Diseases

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Disease Management

► Prevention is the singularly most important aspect
  ▪ Vaccinate regularly with your veterinarian’s advice
  ▪ Keep horse areas cleaned up and sanitized
  ▪ Proper feeds and feeding management

► Control is invaluable once a disease is diagnosed
  ▪ Separate ill horses (have an isolation area)
  ▪ Disinfecting is a cornerstone of many control measures

► Cure is the goal once a disease is diagnosed
  ▪ Get treatment early to avoid additional complications
  ▪ Rigorously follow the prescribed treatment guidelines
Rabies

► Common in some areas, not in others

► Viral Disease/Infection

► Animal to animal transmission by a bite

► Vaccinate
Encephalomyelitis

- **Equine Encephalomyelitis**
  - Encephalitis = inflammation of the brain
  - Commonly known as “sleeping sickness”

- **Viral Disease/Infection** (three types or stains):
  - Eastern
  - Western
  - Venezuelan

- Transmitted by mosquitoes

- Vaccinate
Tetanus

- Also known as “lockjaw”
  - Causes muscle stiffness
  - Muscle/body rigidity
  - Mostly fatal

- Caused by the bacterium *Clostridium tetani*
  - Spores can live anywhere
  - Enter body through wounds

- Vaccinate
Exertional Rhabdomyolysis

► Also known as “azoturia” and “tying up”
  ▪ Metabolic disorders involving muscles
  ▪ Soreness and stiffness of muscle usually upon exercise

► Cause is abnormal carbohydrate metabolism

► Control measures/recommendations include
  ▪ Lower soluble carbohydrates in diet is usually helpful
  ▪ More vigorous monitoring of feeding practices
  ▪ Proper conditioning of horse is essential
Influenza

► Commonly, it is simply known as the “flu”
  - Very common respiratory disease
  - Causes dry cough, clear nasal discharge fever
  - Very debilitating; esp. if put back to work too soon
  - Highly contagious

► Viral Disease/Infection

► Vaccinate, frequently
  - New strains evolve and develop
  - Traveling, different areas may have a different strain
Rhinopneumonitis

► Known as “rhino” (in many areas of US)

► Rhinopneumonitis = EHV - 1 and EHV-4
  ▪ Both cause respiratory problems; dry cough, clear nasal discharge
  ▪ EHV-1 can also cause abortion in pregnant mares
  ▪ Highly contagious

► Vaccinate, frequently
  ▪ Especially pregnant mares, due to abortion factor
  ▪ Because it is highly contagious
Strangles

► Known as “strep throat” of horses
  - Symptoms are: sore throat, abscesses of lymph nodes, off feed, and fever
  - Usually affects young horses
  - Highly contagious
  - Mortality is usually low

► Bacterial disease, caused by *Streptococcus equi*

► Daily monitoring of horse is key for early detection
Chronic Obstructive Pulmonary Disease

► Commonly known as “heaves”

► Allergic reaction by bronchioles; similar to asthma/asthmatic reactions in humans

► Control measures/recommendations include
  - Do not feed dusty or moldy hay
  - Do not feed dusty or moldy other feedstuffs
  - More vigorous monitoring of feeding practices
Chronic Obstructive Pulmonary Disease (Heaves)

Drawing: Equus

Normal airway

- bronchiole
- epithelium
- smooth muscle
- alveoli

Obstructed airway

- bronchiole
- enlarged smooth muscle
- excessive mucus
- inflammation
- alveoli
Flu, Rhino, Strangles, & Heaves: All Respiratory Problems Of Some Sort

Drawing: Equus
Other Diseases

► Other diseases may be a problem

► Can/will vary from location to location

► Others diseases that may be encountered

  ▪ Equine Viral Arteritis
  ▪ Potomac Horse Fever (transmitted by ticks)
  ▪ Equine Infectious Anemia (swamp fever)
    ► Transmitted by mosquitoes
    ► More common in warmer/humid climates
    ► Coggins Test or Elisa test for antibodies, required for all horses traveling out of state
Colic
What Is Colic?

► A syndrome (not an actual disease)

► It is caused by digestive tract problems

► Located in the abdominal cavity

► Colic = much pain for the horse
Colic Is Digestive Problems
Signs Of Colic

- Off feed
- Uneasiness and rolling
- Looking at abdomen
- Kicking at abdomen
- Sweating
- Increased heart rate (> 60 bpm)
- Increased respiration rate
Types Of Colic

- **Gaseous:** gas formation in the digestive tract
- **Impaction:** blockage of the intestine
- **Spasmodic:** severe contraction of intestine
- **Intestinal Accidents:** twists, hernia, etc.
Causes Of Gaseous Colic

- **Over Ingestion of Feed**
  - Too much grain
  - Too much lush green grass

- **Greedy Eating** (gaseous or impaction)

- **Moldy or Spoiled Hay**

- **Moldy or Spoiled Feed**
Causes Of Impaction Colic

► Low Quality Indigestible Roughage
► Sand and/or Other Foreign Objects
► Mineral Imbalance
► Improper Chewing (due to lack of tooth care)
► Greedy Eating (can be impaction or gaseous)
► Lack of Water
► Lack of effective regular deworming
Causes Of Spasmodic Colic

► Feeding large amounts infrequently
► Too much water given to hot horse
► Irregular exercise
► Stress
Treatment Of Colic

► Usually considered a veterinary emergency

► Treatment is dependent on type of colic

► Pain killers (provide comfort)

► Mineral oil (ease of movement, relieve pressure)

► Rehydration

► Surgery
Colic: Preventative Measures

- **Free Choice High Quality Water**
  - High-quality = cool, clear, and clean
  - Except immediately after work

- **Adequate Regular Exercise**
  - Daily exercise, if confined

- **Proper Health Care**
  - Keep all vaccinations current
  - Regular dental examinations
  - Follow deworming guidelines
Colic: Preventative Measures

► High Quality Feedstuffs
  - No mold or dust
  - No fines or finely ground feeds

► Adequate Forage
  - No mold or dust
  - High-quality & digestible forage/hay = fewer stems, more leaves
  - Daily, a minimum of 1% of horse’s body weight in forage or hay

► Sound Feeding Management
  - Feed horses individually
  - Feed horses at regular intervals
  - Feed up off the ground in feeders
  - Spread grain out in a shallow feeder
  - Split into 2 or more feedings if grain exceeds .5% of body weight
Related/Similar Diseases

- **Laminitis (Founder):** can be caused by over ingestion of soluble carbohydrates

- **Tying Up; Azoturia:** can be caused by over ingestion of soluble carbohydrates when workload is reduced
Reducing Colic: Why?

► “The right thing to do”

► Performance enhancement

► To reduce the chance of large and preventable veterinary bills

► Possible loss of the horse ($)$
Colic: In Review

- Pain in the abdomen
- Colic can be mild or life-threatening
- Can be caused by lack of parasite control, poor feeding management, lack of proper health care
- Management causes are largely preventable
Equine Diseases: Summary

- Prevention
- Control
- Cure