

Equine Gastric Ulcer Syndrome (EGUS)

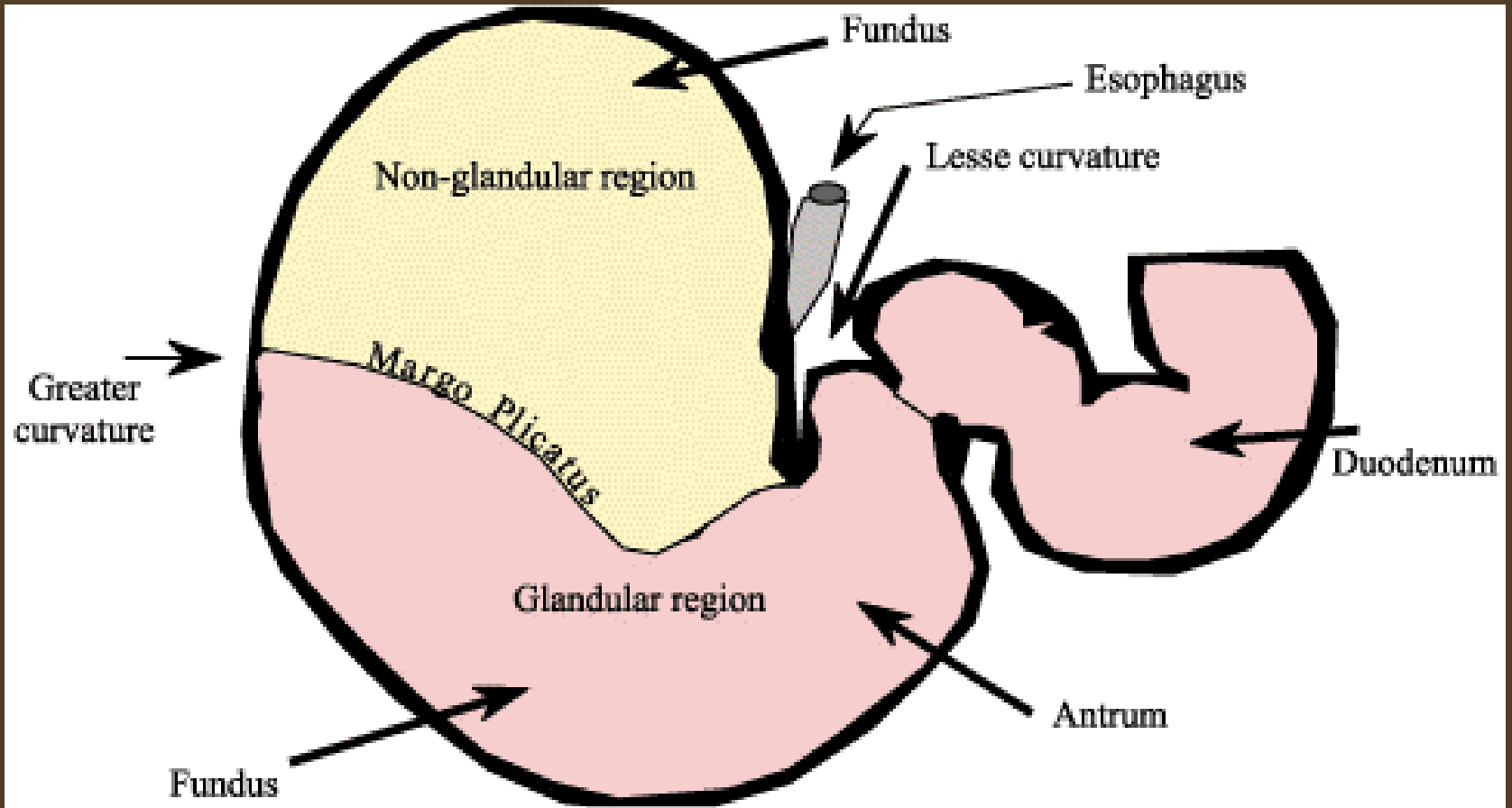
South Shore Equine Clinic and
Diagnostic Center

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Equine Stomach



Gastric Ulcers

- Up to 93% of racehorses have stomach ulcers.
- Almost 60% of other performance horses have stomach ulcers.
- Up to 57% of foals have ulcers, usually during the first 3 months of life.
- 50% of horses with ulcers show no outward signs of gastrointestinal disease.



Gastric Ulcers

- Acid is normally produced 24 hours a day in the horse's stomach.
- When too much acid is produced, ulcers result.



Risk Factors

- Feeding
- Training
- Physical Stress
- Changes in Growing Foals
- Other Factors



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Some people are betting all their savings on me...
I can't handle the pressure anymore...

Diet

- Horses are designed to eat roughage steadily throughout the day.
- In the wild, horses spend 75% of their day grazing and eating.
- Domestic horses spend only about 15% of their time eating.
- Excessive amounts of grain and low amounts of roughage predispose horses to ulcers.

Training

- Intense training increases acid production in the stomach.
- Performance horses go without feed several hours per day, permitting acid build-up.
- Exercise reduces blood flow to the stomach.



Physical Stress or Illness

- Horses and foals that are sick, hospitalized or in pain often get ulcers.
- The stomach of growing foals is still developing and is easily injured by acid and enzymes.



Other Factors

- Shipping
- Extended time confined
- Certain medications given at high doses



Typical Symptoms

Horses:

- Attitude change
- Dullness
- Poor performance
- Poor appetite/won't eat
- Colic
- Behavioral changes

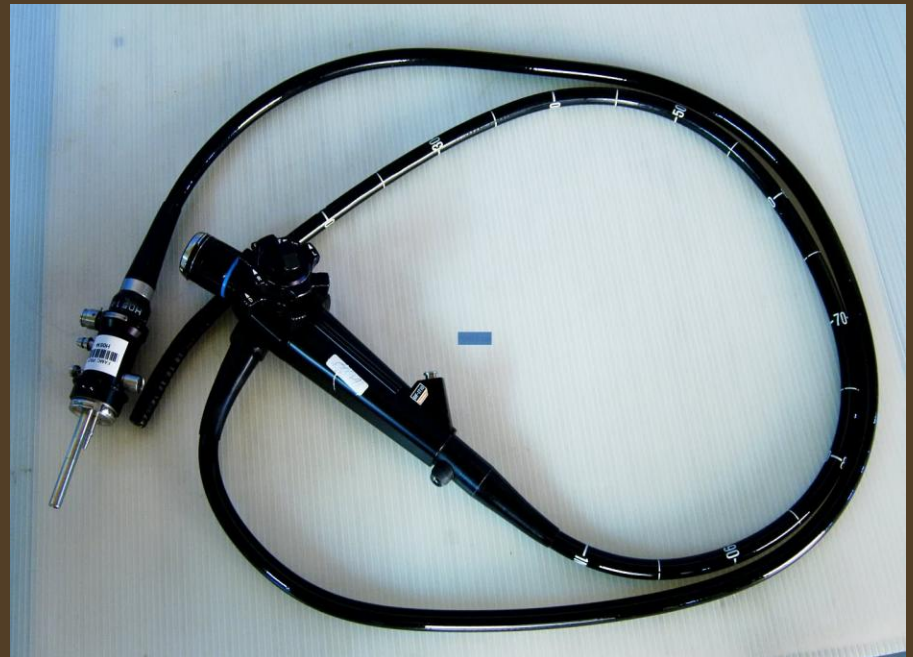
Foals:

- Diarrhea
- Poor growth
- Rough hair coat
- Pot belly
- Teeth grinding
- Colic/lying on back
- Excessive salivation
- Interrupted nursing



Diagnosis

- Definitive diagnosis is made by gastroscopy.
- Often response to treatment is enough to make a presumptive diagnosis of EGUS.
- Requires a 3-meter endoscope
- Horse fasted for 12 to 16 hours
- Patient sedated for procedure



Results From Today

- Twelve horses scoped today
- Age range: 2 years to 22 years
- Mares and geldings represented
- Group included competitive Standardbred racehorses, show horses and pet/leisure horses
- Major complaints included not wanting to eat, frequent low-grade colics, decreased performance and difficulty keeping weight on.





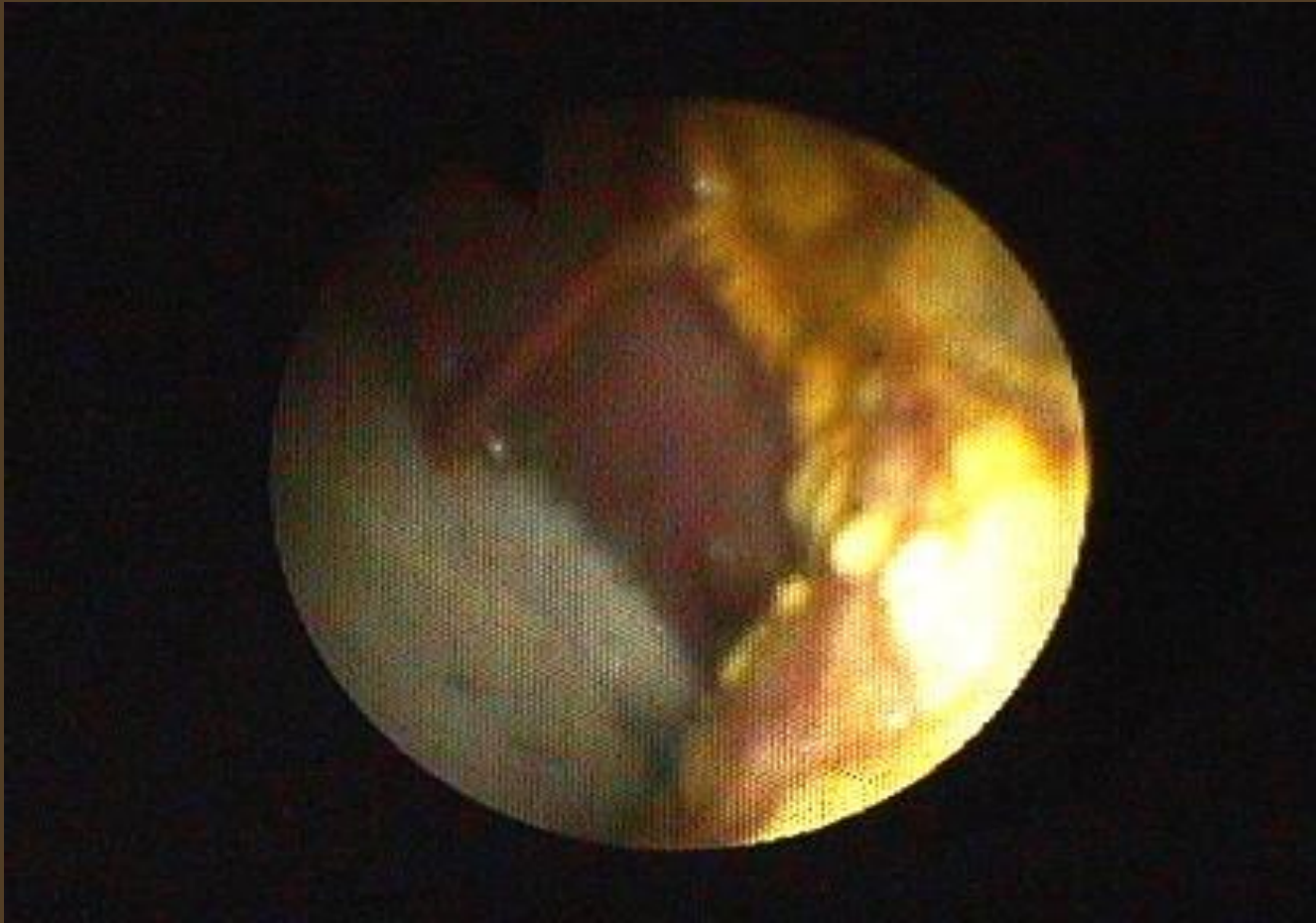
Horse 1

2 y.o. STB Mare

- Stabled most of the day
- Trains heavily on a daily basis
- Trailers weekly
- Last raced 6/20/08
- Fed twice daily: grass hay and pellets
- Recently started on generic omeprazole every other day
- Poor appetite



Yes! Grade 3 Chronic Ulcers



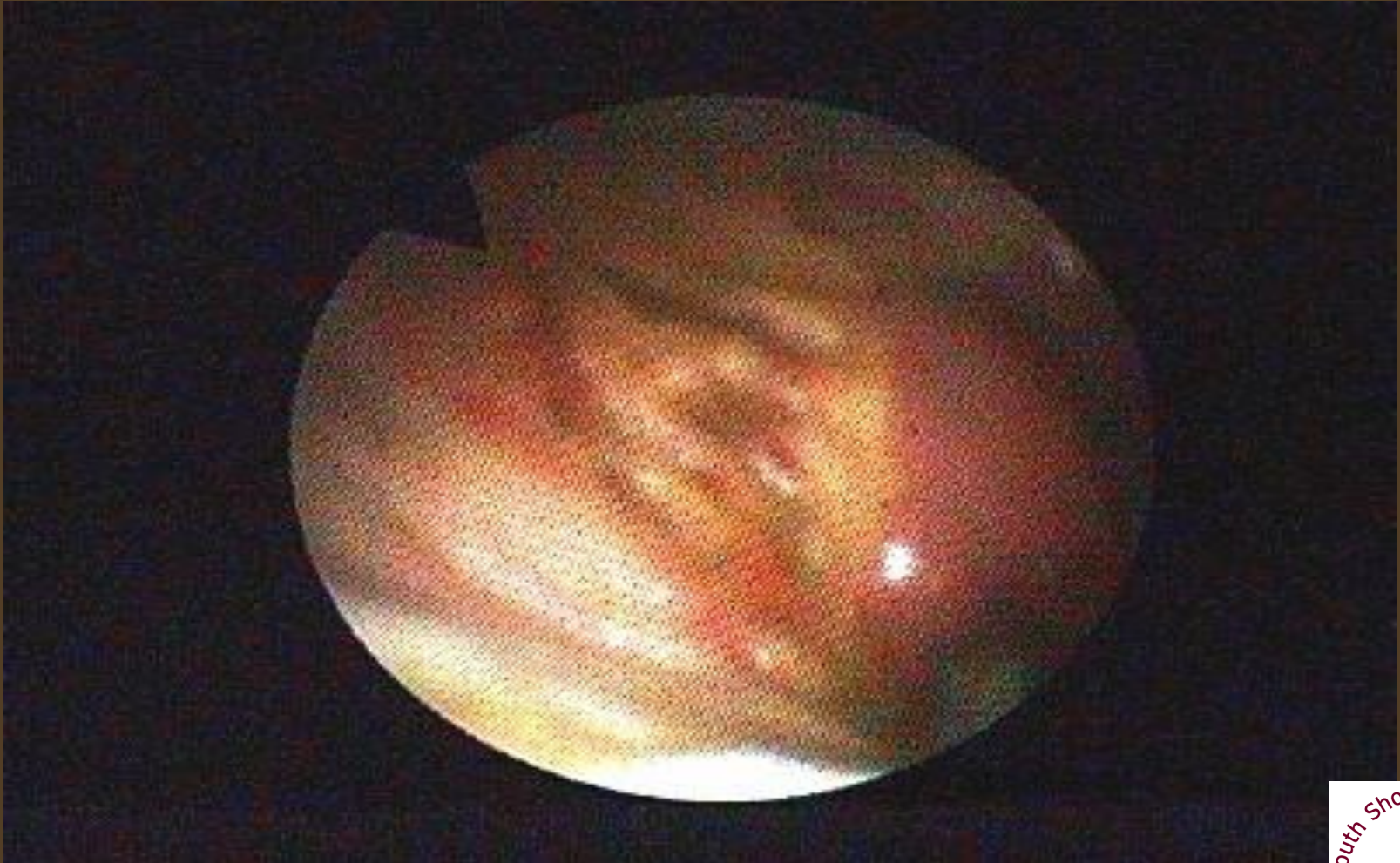
Horse 2

4 y.o. STB Mare

- Stabled most of the day
- Trained heavily on a daily basis
- Trailered weekly
- Last raced 7/7/08
- Diet consists of hay and pellets fed twice daily
- Last dose of Gastrogard 2 weeks ago
- Poor appetite



Yes! Grade 3 Bleeding Ulcers





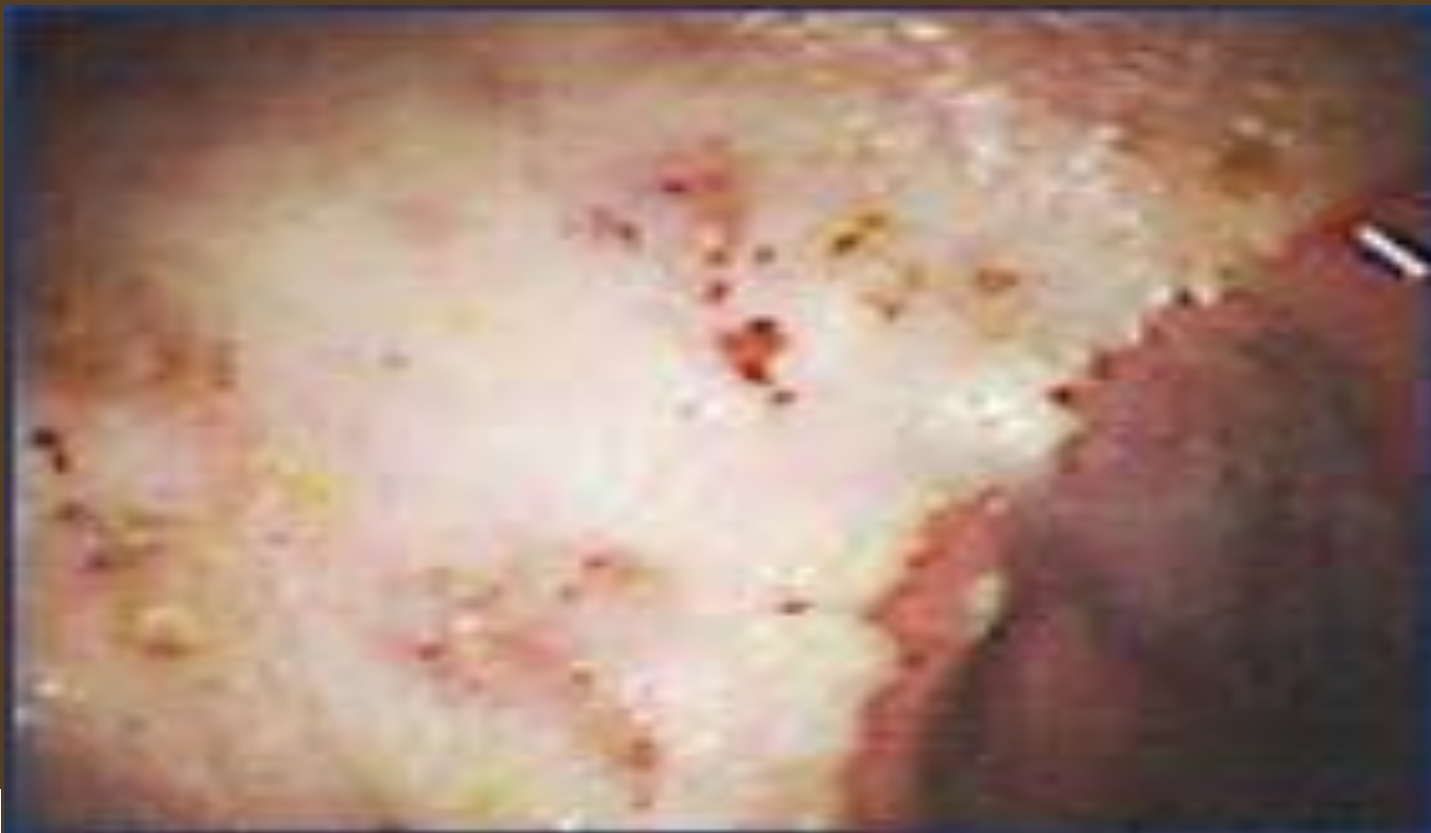
Horse 3

15 y.o. TB Gelding

- Shows year-round, jumps 3', usually medicated with Banamine for shows
- Turned out on grass for part of the day
- Fed hay and pellets
- Has had a series of mild colics
- All colics occur after feeding
- In good general condition



Yes! Grade 1 Ulcers



Horse 4

21 y.o. TB Mare

- Extensive melanomas
- Long history of low grade to severe colics
- Used for pleasure 4 times weekly
- Turned out on grass for half of the day
- Diet is Timothy hay and pellets

No Ulcers!



Horse 5

22 y.o. Arabian Mare

- Ridden lightly once every three weeks
- Very difficult to keep weight on
- Eats 12 quarts of pellets and 2 flakes of hay daily
- Grazes 2-3 hours per day
- Currently on 1/5 tube of Gastrogard daily
- Thin body condition



Yes! Grade 3 Chronic Ulcers





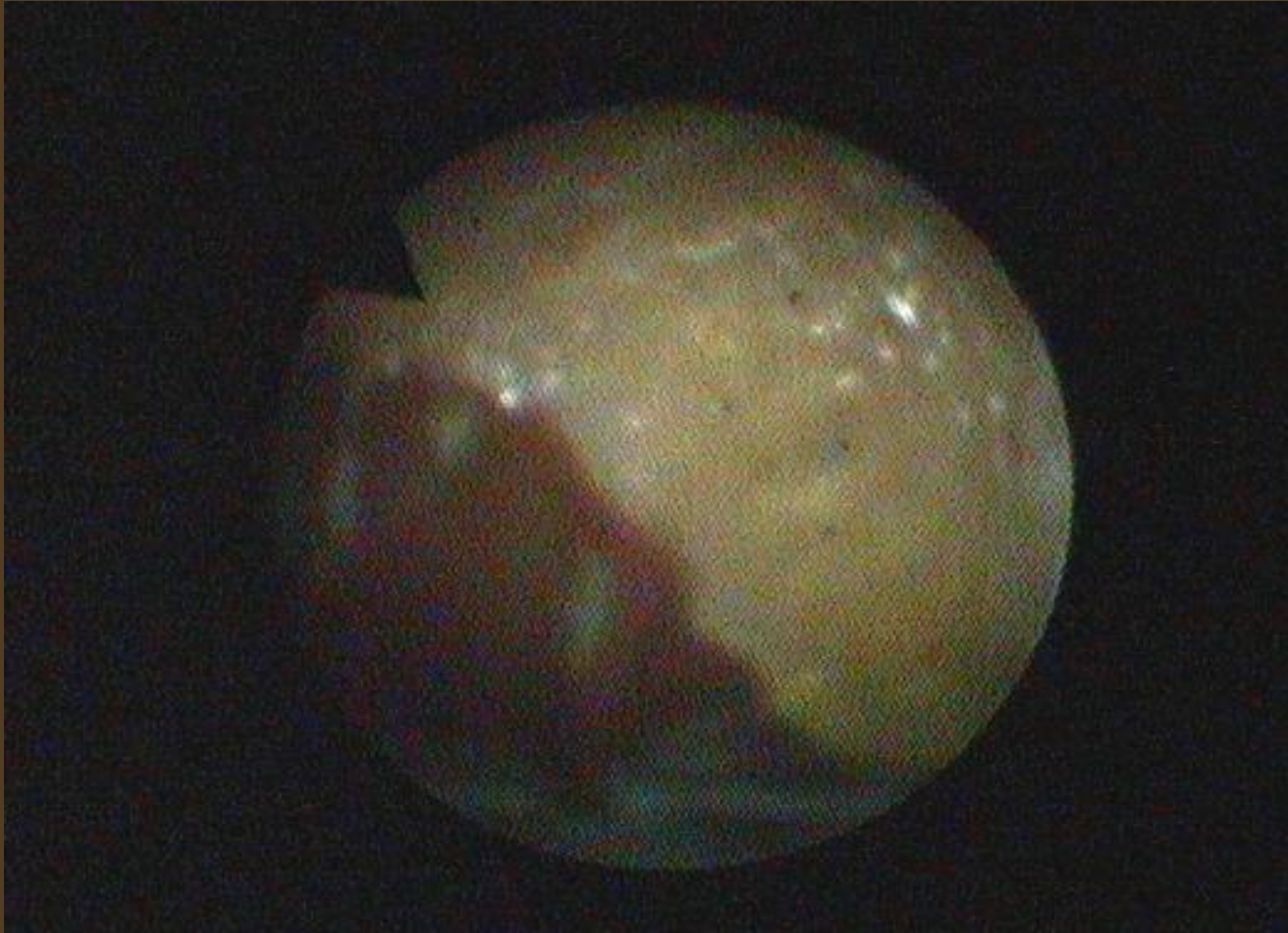
Horse 6

9 y.o. DWB x TB Gelding

- Previously used for cross country, now used for equitation
- History of three injuries this year
- Previously turned out 7-8 hours/day
- Currently on stall rest for leg injury (only 10 minutes of grazing daily)
- Owner reports that he gets very upset when other horses are turned out
- Currently on antibiotics for Lyme disease
- Fed 1.5 quarts pellets and 2 flakes of hay twice daily



No Ulcers!



Horse 7

5 y.o. Arabian Mare

- Extensive history of diverse medical issues
- Decreased performance lately
- Recently changed environments, previously with other horses, now housed alone
- Worked 3 days per week
- Turned out with little to no grazing available
- Owner reports a change in attitude lately



No Ulcers!





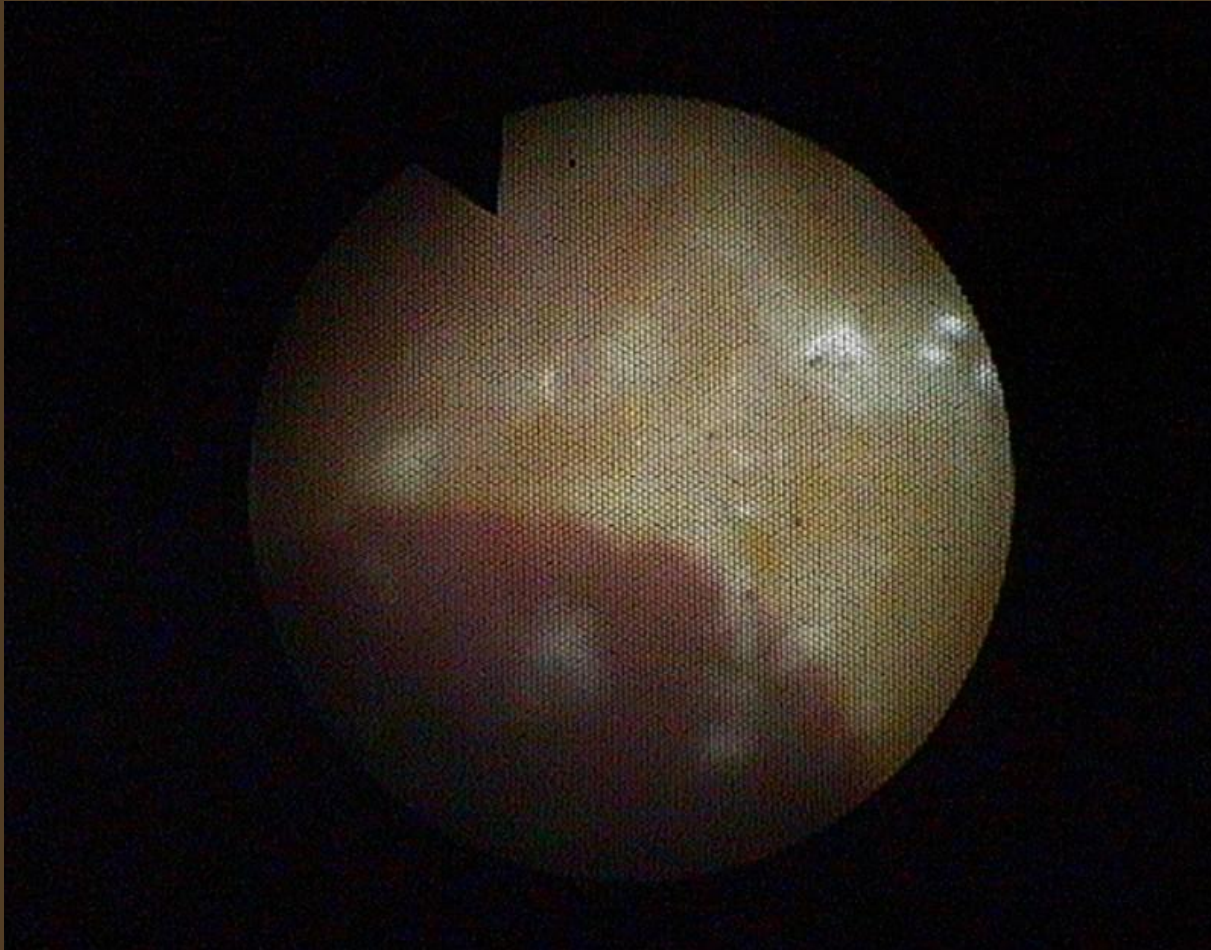
Horse 8

5 y.o. TB Gelding

- Ex-racehorse
- Wood chewer
- Chronic lameness
- Owner reports that he is slow finishing hay.
- No known history of colic
- Turned out but little grazing available



Yes! Grade 1 Ulcers



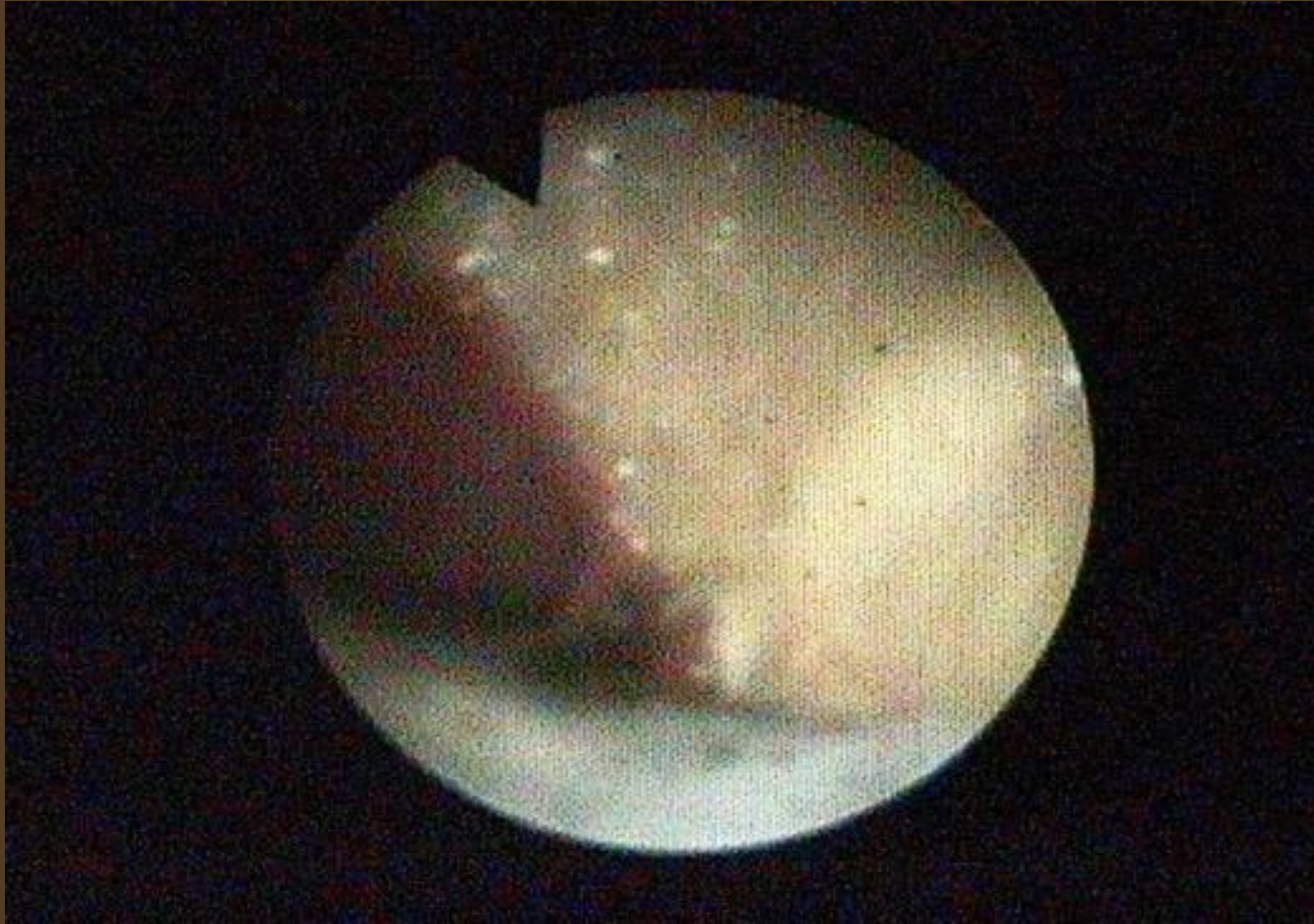
Horse 9

9 y.o. TB Gelding

- Ex-racehorse
- Displays several stereotypic behaviors: paces the fence, chews wood, stifle bites
- Very nervous
- Eats pellets and 5-6 flakes of hay daily
- On U-guard powder
- Turned out but little grazing available



No Ulcers!



Horse 10

19 y.o. TB Gelding

- Stabled 24 hours per day (jumps out of paddocks)
- Very nervous
- Thin, difficult to keep weight on
- Previously showed and competed at a high level
- Currently used for lessons 5 days per week



No Ulcers!

- Stomach had excessive fluid raft present and we were not able to visualize all of the stomach.



Horse 11

13 y.o. Gelding

- Turned out daily for part of the day
- Does not finish meals
- Thin and difficult to keep weight on
- Owner reports that he is grumpy
- Used for lessons and light riding
- On U-Guard twice daily
- Eats Senior pellets, Hay Stretcher and hay twice daily



Yes! Grade 2 Ulcers



Horse 12

9 y.o. TB Gelding

- Thin despite eating high calorie diet
- Ex-racehorse
- No grazing available but has 'in and out' access
- Poor shipper
- Walks in circles in paddock
- Good attitude



No ulcers, but irritated stomach lining...





Conclusion

- 6 out of 12 horses presented today had ulcers.
- All grades of ulcers were represented.
- Both racehorses and one aged pleasure horse had severe (grade 3) ulcers.
- We were all surprised with the results!



Questions? Let's eat!

