# PIGEON FEVER

# WHAT IS IT?

A bacterial infection caused by *Corynebacterium pseudotuberculosis*. Sometimes known as "Dryland Distemper" or "Dryland Strangles" (even though it is not strangles). The bacteria causes two specific diseases:

- 1.) Abscesses (most commonly external and less commonly internal), and
- 2.) Very rarely ulcerative lymphangititis (swelling of lower limbs).

There are other biotypes that are present in other species, goats, sheep, etc but these do not cross contaminate between species. In extremely rare incidents humans have been infected as well, however, there are no known cases of people infected from horses.

### WHERE AND WHEN?

This bacteria is localized to warmer climates, specifically in California and Texas areas, where the bacteria can survive in the ground soil indefinitely. California has an exceptional high incidence especially during late summer and early fall. The more arid parts of the state have more prevalence, and some years have a higher incidence than others. The organism is capable of living in the soil for many years and likely provides an ongoing sources of infection and therefore complete eradication is unlikely.

### TRANSMISSION

The mode of infection is through skin wounds and abrasions, or in moist body parts, like around eyes and around the sheath area. Flies carry the bacteria on their bodies and when it comes in contact with the horse's blood or fluids, the bacteria enters the horse and may stay in the body for a few months before the horse shows signs. About 8% of horses with external abscesses develop internal abscess which spread to the lungs liver and sometimes the kidney or spleen. And even fewer horses will show no external signs and have only internal abscesses.

### EXTERNAL PIGEON FEVER:

<u>Signs</u>: Most commonly swelling of the pectoral muscles (around the chest). Swelling is also found anywhere on the belly or near the sheath or udder. Edema is evident on the bottom of the belly; appearing as a sponge like swelling. <u>Diagnosis</u>: General clinical signs are the most common way to diagnose the disease. Or culture of the abscess fluid. <u>Treatment</u>: Take the temperature twice daily (normal temperature is between 99 to 101 degrees). If it is elevated, anti-inflammatories may be indicated by your veterinarian. There are a few treatments to help the abscess develop such as: placing heat packs over the swollen area, or using poultices, or applying drawing ointments, as well as hydrotherapy (hosing off the area). Once the abscess is soft and there is an area of skin without hair, the abscess is now mature. Your veterinarian can sedate the horse and make a clean lance incision to minimize tissue scaring during the healing process. Following rupture/lancing of the abscess, the discharge should be discarded and the wound irrigated with dilute antiseptics. Antibiotics are contraindicated.

<u>Prognosis</u>: Very good, patients return to function rapidly depending on the size of abscess and duration of disease. **INTERNAL PIGEON FEVER**:

Signs: Generalized fever, no appetite, weight loss, lethargy, and colic signs.

<u>Diagnosis</u>: There is a blood test, sent to the University of California Davis, to measure the titer levels a horse has to the bacteria. The test can be difficult to evaluate, unless the values are very elevated.

<u>Treatment</u>: It is recommended to take initial blood work values then start long-term antibiotic therapy, one or more months. Then before discontinued use, blood work must be re-evaluated.

Prognosis: Can be good if treated early and appropriately.

# **PREVENTION:**

Strict fly control is the best measure during the hot months. However if an affected farm has had cases of pigeon fever the bacteria is in the soil and good fly control will help manage the existing potential treat. For a horse that already is draining an abscess it is good to minimize the drainage of the abscess the first day the

abscess is draining. The initial dense abscess fluid has the most bacteria and should be removed as best as possible. There is no current vaccine or toxoid available.



Please call if you have any questions! Drs. Kelly Torrisi and Anne Williams, AMC/Large/Auburn Equine 530-823-0162