

## *Ulcertive lymphangitis*

### *Etiology*

*Corynebacterium pseudotuberculosis* biotype 2, is a gram-positive bacteria with worldwide distribution,

### ***PATHOGENESIS***

Infection of skin wounds is followed by invasion of lymphatic vessels and the development of abscesses along their course. The organism possesses a cytotoxic surface lipid coat that appears to facilitate intracellular survival and abscess formation and produces a phospholipase exotoxin that increases vascular permeability and has an inhibitory effect on phagocytes.

### ***Transmission***

- 1- The portal of entry of this soil-dwelling organism is thought to be through abrasions or wounds in the skin or mucous membranes.
- 2- Many insects have been incriminated as vectors for the transmission of the disease to horses.
- 3- Disease incidence is seasonal, with highest number of cases occurring during the dry months of the year

### ***CLINICAL FINDINGS***

#### ***Horses***

- 1- the initial wound infection is followed by swelling and pain of the pastern, often sufficient to cause severe lameness.
- 2- Nodules develop in the subcutaneous tissue, particularly around the fetlock.

- 3- This is followed by infection of lymphatic vessels and the development of abscesses along their course. These may enlarge to 5-7 cm in diameter and rupture to discharge a creamy green pus.
- 4- The resulting ulcer has ragged edges and a necrotic base.
- 5- Lesions heal in 1-2 weeks.

### ***Cattle***

Ulcerative lymphangitis: The lesions in cattle are similar to those in horses except that there may be draining lymph node enlargement and the ulcers discharge a gelatinous clear exudate.

Abscesses ulcerate and develop draining tracts. Ruptured abscesses discharge serosanguinous exudates or bloodstained yellowish pus. The regional draining lymph nodes are enlarged but generalized lymphangitis does not occur.

Necrotic and ulcerative dermatitis on the heel of the foot. Lameness is apparent and there is edematous swelling on the distal part of the legs associated with a necrotic-ulcerative dermatitis on the heel of the foot.

### ***Diagnosis***

- 1- Radiography and ultrasonography are often used to rule out the differential diagnoses of a fracture or tendinitis.
- 2- Ultrasonography can also help to define boundaries of abscess pockets.
- 3- Aspiration of a fluid sample for [microbial culture](#) is worth trying, but is often unrewarding.

### ***Treatment***

- 1- Administration of broad-spectrum antibiotics (typically potentiated sulfonamides or penicillin and streptomycin, These horses are typically treated with rifampin.

- 2- anti-inflammatories are important, to reduce the swelling and pain of the inflammatory response. NSAIDs are commonly used (flunixin is the drug of choice, but phenylbutazone may also be used)
- 3- Corticosteroids are sometimes used in severe cases, but should be used with caution due to their potential to weaken the immune response to infection, and the possibility of inducing laminitis.
- 4- intravenous iodine salts may also be used; and abscesses should be poulticed or lanced.
- 5- Physiotherapy is also important, particularly maintaining movement by walking out and massage to improve lymphatic drainage and reduce the oedema. Bandages may also be useful, as may cold hosing in the initial phase