



WELFARE GUIDELINES FOR VETERINARIANS PRESENTED WITH A SEVERELY LAME COW WITH DEEP DIGITAL SEPSIS

Nigel B. Cook, Sarel Van Amstel, David Anderson, Edgar Garrett, Charles Guard, Douglas Hostetler, Glenn Kirksey, Jason Osterstock, Dick Wallace, Matthew Jones, Christine Navarre, LaVerne Shugel, Kent Hoblet, Jorge Vanegas, Ondrej Becvar and Gerard Cramer

AABP Lameness Committee

Introduction

The management of a severely lame cow in a beef or dairy herd presents specific challenges for the owner, the caregiver(s) and the veterinarian responsible for the treatment of the individual. It is essential that each case is handled with compassion, and that humane and appropriate treatment and animal care is provided.

A document has been prepared by the AABP Bovine Lameness Committee to provide a framework for the veterinarian presented with a severely lame cow, so that the case can be managed from the outset with the best outcome for the patient, the producer and the industry.

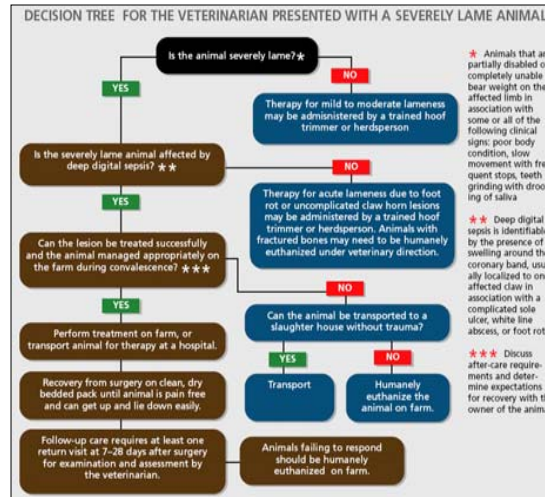
How do we recognize the severely lame cow with deep digital sepsis?

The following signs are typical:

1. Often one limb is affected and is almost non-weight bearing, and there is obvious swelling associated with the foot.
2. Some cows will be recumbent.
3. The swelling must be differentiated from the diffuse symmetrical swelling typically associated with an uncomplicated foot rot infection.
4. Commonly, the outer-claw of the hind limb is affected with swelling around the coronary band, and cellulitis extending proximally above the fetlock. This swelling is typically asymmetric, associated with the affected claw, rather than the interdigital space.
5. Some cows may have a fever, and some may have a swollen hock – caused by altered lying behavior and difficulties rising.

It is essential that the hoof-trimmer is aware of these clinical signs and the veterinarian should be responsible for this training. The presentation of a cow with deep digital sepsis in the trimming chute should trigger automatic veterinary involvement. The cow should be diverted from the chute to a comfortable bedded area, where she can await veterinary attention.

AABP Lameness Committee guidelines and fact-sheets are available at www.aabp.org



How do we decide whether to treat the cow?

The decision to treat the animal must be based on an assessment of the causative lesion. The animal must be restrained, preferably in a trimming chute, and the limb lifted and examined in an appropriate manner. Animals which are unable to stand must be humanely euthanized on farm.

Following assessment of the lesion, treatment options will depend on:

- The site and extent of the lesion
- The life history of the cow with regard to parity, stage of lactation, milk production and pregnancy status
- The expectations of the farmer for recovery in terms of subsequent herd-life and production, and length of convalescence
- Ability to provide adequate pain control and after care

In many situations, removal from the herd is the best option for the owner and the patient. At present, it is permissible to travel these animals to a slaughter house in the US, but provision must be made to reduce the risk of trauma to the animal during transport. Segregation of the animal on the truck or trailer should occur if the lame animal is transported with a group.

Surgical procedures typically involve amputation of the infected digit or an alternative procedure which promotes ankylosis of the distal interphalangeal joint.

Provided that the patient is ambulatory it is permissible for the animal to be shipped in an appropriate manner to a place of treatment such as a Veterinary Hospital. The relative merits of each surgical procedure should be discussed with the owner, so that there is a clear understanding of the requirement for intensive aftercare and special housing considerations, and it is essential that everyone involved understands that there will be a prolonged period of convalescence whatever the treatment.

The treatment and recovery plan

Control of pain and sepsis are the key problems we are confronted with when managing a case. Pain control begins BEFORE surgery. Non-steroidal anti-inflammatory agents are essential prior to, and for several days after surgery. Appropriate milk and meat withdrawals need to be observed.

Sepsis should be controlled by removal of the source of infection and broad spectrum cover using parenteral antibiotic. Antibiotics with short or nil meat withdrawals are desirable should recovery not go according to plan.

Dairy cows should not be kept in stanchions or tie stalls, and preferably not in a free stall barn without deep loose bedding. Distance to and from the milking parlor, feed and water should be minimized.

The most appropriate place for after-care would be a well-managed bedded pack area or an area of sheltered pasture immediately adjacent to the parlor. The time spent in the special housing area will vary with severity of the condition, but the farm should expect a period of at least 7 days or until the animal is free of pain and able to rise and lie down without hindrance.

During the convalescent period, affected animals should be frequently monitored to allow assessment of pain and discomfort and to detect complications related to the disease or specific treatment. At least one follow up visit by the veterinarian should be made within the period 7 to 28 days after initial therapy. Timing and frequency of follow up visits will vary. It should be understood that some cases may require multiple visits for after-care. Hoof blocks, if applied, should be checked after 4 weeks and replaced or removed as needed. If the animal is showing little improvement in lameness and is still suffering pain and stress, euthanasia should be recommended.