

## Abscesses

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Abscesses in the hoof are typically characterized by a sudden-onset and severe lameness. In some cases, the horse may refuse to put any weight at all on the affected hoof (broken leg syndrome). The horse will be sensitive in the area of the abscess and may have an increased digital pulse and swelling in the lower leg. If left untreated, the abscess may erupt on its own through the sole or at the coronary band.

A hoof abscess is a pocket of infection in the lamina or solar corium that allows bacteria to thrive in the warm, dark environment (anaerobic). While the bacteria eat away at the hoof tissue, the horse's immune system attacks. The resulting pocket of bacteria, white blood cells, and dead hoof tissue puts pressure on the sensitive structures of the horse's hoof, causing the pain response.

There is basically two types of abscesses: 1 - Laminar abscesses and 2 - Sub-solar abscesses. Both types need to be treated differently.

Laminar abscesses can be debrided and outer hoof wall opened to relieve pressure and re-infection chances.

Sub-solar abscesses need to be planned out carefully so as not to create prolapsed solar tissue.



Abscesses can extrude several different types of material and colors. 1 - Black/Brown – indicating older infected material, 2 - Grey – older infected material, 3 - Clear – serum, and Reddish – blood mixed serum. White material – usually located in the frog involves merocrine gland infections or release and is not considered an abscess.

#### Treatment

Identify insult causing the abscess if known. Determine how to relieve pressure caused by the abscess.

Trim hoof to help in identifying laminar abscesses along with pulse and heat identification.

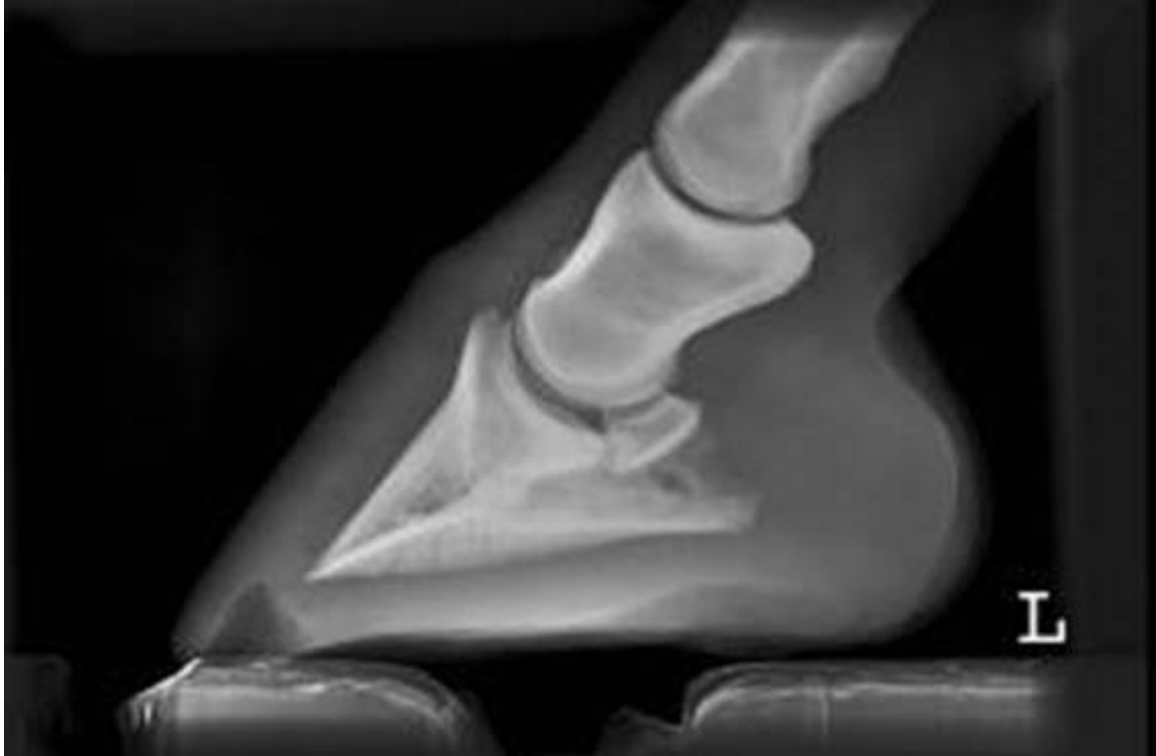
Laminar abscess need hoof wall opening to some extent in order to facilitate continued draining.

Sub-solar abscess identification is aided with hoof testers and radiology. Usually requires veterinary assistance. May need to be relieved via hoof wall rather than the sole.

The key to drawing out abscesses is osmotic pressure. This can be done by warm water and Epsom Salts or Epsom Salt paste (Magnesium Sulfate).

The salts create molecular imbalance which creates osmosis which causes the abscess infection to flow towards the side of greatest concentration of salt. Water molecules pass through the cell membrane from an area of low solute concentration to high solute concentration.

Protect the abscessed area.





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Relieve abscessing by coming up the hoof wall so continued draining occurs and making treatment easier when shod.