



The basics of using poultices

By Dr. Nora Chavarria, MedVet, MVetSc

What are poultices and what are they used for?

Poultices are a moist pad of osmotic material applied under a bandage. They are used to draw infections and abscesses out of the horse's body. Poultices may be commercially supplied or homemade.

What types of wounds are treated with a poultice?

Poultices are primarily used for hoof abscesses. Abscesses are usually caused by a bacterial infection which is localized at a certain point in the body. Dead white blood cells and bacterial matter create a buildup of pus, which creates pressure. Abscesses in the hoof are especially painful, because the hoof capsule is a restricted environment – there's little room for expansion, especially between the hoof wall and the coffin bone. To heal, abscesses need to break out to the surface of the body and drain, and they'll follow the path of least resistance to get out. If an abscess isn't able to break open and drain, the infection can become more widespread.

A hot poultice applied to the bottom of the foot will soften the sole and encourage the abscess to break. After the abscess has broken, we want to keep the wound open. If the wound closes over at the surface, but infection is still present inside, these are perfect conditions for an abscess to occur or re-occur. Poultices keep the opening moist and encourage drainage.

How is a poultice applied?

We use a commercially-available product, which contains a poulticing agent on a ready-to-use pad. You soak the pad in warm water, apply the poultice directly to the bottom of the foot, and bandage it in place. You can also use a homemade poultice such as a paste made from sugar and iodine. Sugar is osmotic, and will therefore draw things out. Iodine is added as a disinfectant. We suggest changing bandages daily, as they can dry the foot out if the abscess hasn't broken. Soaking the hoof in warm water and Epsom salts (two cups to a gallon) between bandage changes is also a good practice.

When the abscess bursts, the pus will come out, but the open wound then needs to fill with granulation tissue, which takes about three to four days. Once the granulation tissue is in place you don't need to bandage anymore.

Are poultices used on other areas of the body?

A hot pack may be used for abscesses in other areas of the body. Causes of abscesses in other areas of the body include strangles and muscle injections or puncture wounds that have become infected and healed over at the surface. A hot pack application opens up the blood vessels in the area, increasing blood flow and leading to an increase in local inflammation which helps encourage the abscess to open and drain. But we don't use the same osmotic material directly on the surface of the skin, the way we do with the hoof sole, because skin is more tender and it could cause irritation.

For a hotpack, you can put bran or mashed potatoes in a resealable plastic bag and warm it up in the microwave (not too long). Wrap the bag in a towel and bandage it against the area of the abscess. You don't want to use anything hot directly against the skin. You can also purchase a hot/cold gel pack, the same as for humans.

Is there an advantage to treating abscess with a poultice versus antibiotics?

With foot abscesses and strangles, a poultice is preferred over the use of antibiotics for several reasons. First, because we always want to be cautious to not over-use antibiotics – it's always best to let the horse's immune system do its job when it's capable of doing so. Second, the use of antibiotics is contra-indicated in many instances of abscess, unless it's accompanied by a life-threatening condition such as pneumonia. Antibiotics can cause a capsule to form around the abscess, creating a pocket of bacteria which may promote antibiotic resistance. In the case of strangles especially, the bacterium *Streptococcus equi* subspecies *equi* (*Strep. equi*) can travel to other places in the body and create new abscesses (called bastard strangles).

We want an abscess to drain – that's the primary goal for treatment. A poultice is the most effective means to do so.

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