

Post operative Considerations for Disbudding in calves

Disbudding is a surgical procedure. Calves require observation and aftercare following the surgery. Observe closely for bleeding for 30-60 minutes after dehorning. When bleeding is present, cauterize with a hot iron to stop the bleeding. Wounds usually heal well with no treatment. A fly repellent and a wound dressing are often recommended. For 10-14 days after disbudding, look for signs of infection and treat as needed. Postoperative sinusitis and flystrike (myiasis) are prevented by applying Nitrofurazone (topical antibacterial formulation) for most pathogens that commonly cause surface skin infections, including *Staphylococcus aureus*, *Streptococcus*, *Escherichia coli*, *Clostridium perfringens*, *Enterobacter aerogenes*, and *Proteus* organisms. Spray topical antibiotic formulation of oxytetracycline and Gentian violet for bacteria and spray a larvicide to prevent myiasis. Fly strike is a problem when animals have an open wound but if dehorning is carried out in a hygienic manner, wounds heal up quickly. **Do not** apply the insecticide straight on the wound, but rather around the wound. Wound disinfectants can be applied to the wound to reduce infection risks.



Disinfection of Equipment

Diseases can be spread from animal to animal on disbudding equipment contaminated with blood. Enzootic bovine leucosis virus and the wart virus are two examples. It is essential to disinfect the tube and Barnes-type dehorners after each calf. The heat from electric dehorners effectively disinfects them between each calf. Hot-iron dehorners occasionally require cleaning with a wire brush.

Potential Complications

Hemorrhage

The risk of hemorrhage is greatly increased in older calves. Observe calves closely for one hour following disbudding. Wound powder may be applied to the surface of the bud after disbudding.

Note: avoid powder use if the sinus cavity is exposed

Pain

Animals should be monitored during and after the procedure for signs of unnecessary pain, such as vocalization, reluctance to move, and failure to nurse. Such animals should be treated with a systemic analgesic such as flunixin meglumine.

Flystrike

Disbudding method that leave an open wound should NOT be used during fly season. Paste and hot dehorning are acceptable anytime of year. The use of a fly repellent may be warranted.

Infection / Sinusitis

Animals should be monitored for signs of infection in the days following disbudding, such as redness, swelling, and discharge. Sinusitis is a particular risk in older calves, due to the fact that as the horn grows, the sinus grows into the center of the horn, and thus removal of the horn creates a defect in the skull that extends into the sinus, and thus an opportunity for infection. Avoid the use of elevated feeders immediately after the procedure to prevent entry of debris into the wound. Minimize environment exposure, as dust and rain may increase the risk of sinusitis

Potential decreased weight gain following dehorning of older calves due to pain and stress

Calves should be dehorned as young as possible to minimize stress. Use of local and systemic analgesics is recommended.

Tetanus

The use of tetanus antitoxin should be considered, and calves should be vaccinated for tetanus.

Bovine papilloma virus (warts)

Disbudding instruments can provide a fomite for transmission of the papilloma virus, and should be disinfected between calves. This can be achieved by maintaining a bucket of disinfectant for rinsing between animals.

Post-operative analgesia - a non-steroidal anti-inflammatory, such as ketoprofen, should be administered to control post-operative pain. Ideally, the animal should be given pain control for at least 24 hr after disbudding. Duration of effectiveness will depend on the drug used. When using caustic paste, isolate calves and kids so as to avoid unintentional caustic burns to other animals