

# Proper care important when dealing with traumatic wounds

by BIRGIT STUTZ  
Contributor

About a dozen horse people from around the Robson Valley attended an informative presentation on traumatic wound care given by Dunster veterinarian Dr. Tom Vogel on May 3. The event was held at Falling Star Ranch in Dunster and hosted by the Back Country Horsemen of BC Robson Valley Chapter.

"It takes a certain amount of time for a wound to heal," said Dr. Vogel.

Whether a wound should be sutured (stitched) immediately (primary), later (delayed) or not at all depends on various factors, such as location of the animal, systematic status of the horse (age, temperament), use of the horse (cosmetic), economics, wound factors (location, size, accessibility of the wound, missing skin tissue, vascularity of the area) as well as bacterial activity (quality and quantity of contamination). Time elapse since the injury happened is also of importance due to wound retraction.

"The greatest wound retraction is on the lower limbs," explained Dr. Vogel.

"The golden time to suture a wound is during the first six hours. After six hours the bacteria penetrate deeper so are more difficult to flush out."

Proper preparation of the wound is of utmost importance.

"Prepare the tissue by putting gauze or KY Jelly into the wound, then clip the hair around the wound," he said.

"Scrub the wound with a surgical scrub such as Betadine, then cleanse the wound with a saline solution or clean, warm water. Warm water stimulates circulation. A bulb syringe or a large syringe with a 19-gauge needle works great. You don't want to use too much pressure though and drive the bacteria deeper into the wound. Debridement of the wound (medical removal of dead, damaged

or infected tissue to improve the healing potential of the remaining healthy tissue) is important, as it is a wonderful environment for bacteria to grow. Also check for foreign materials in the wound."

Dr. Vogel said there are four stages of wound healing. Immediate to one hour (plasma is leaking into the wound); early/one to 24 hours (bacteria and cell debris are removed from the wound by white blood cells); intermediate/one to seven days (growth of new blood vessels, wound starts contracting back, beginning of granulating process); late stage/after seven days (skin is starting to heal over).

There are several factors that can affect wound healing, such as the condition of the horse (nutrition, parasites), hypoproteinemia (lowered protein levels in the blood), poor amount of oxygen exchange caused by heart failure or shock, hypervolemia (poor blood pressure), as well as the temperature of the environment (ideal conditions are not too cold and not too hot). Zinc and vitamin supplements may also be helpful in the healing process.

Bacterial infection of the wound needs to be controlled, said Dr. Vogel.

"Cleaning the wound properly, using appropriate antibiotics (by doing cultures), motion - some movement is good, too much is destructive -, and oxygen are of importance. It is okay to wrap the wound initially, but then it should be exposed to the air for better oxygen exposure for better healing."

He said doing less is often better. "Instead of throwing a lot of stuff on the wound, try to complement nature rather than compete with it. In general, topical ointments are not beneficial. It's best to inject antibiotics. If there is no infection, don't use topical ointments."

Dr. Vogel also pointed out that non-steroidal anti-inflammatory drugs such as Phenylbutazone (Bute), while helping with pain control and inflammation, may reduce

the strength of wound healing.

Scar formation and excessive granulation need to be controlled as well.

"Granulation tissue is a necessary component of wound healing, but we don't want excessive granulation tissue," said Dr. Vogel.

"It shouldn't exceed the height of the skin, otherwise it can cause problems. Excessive granulation tissue can be prevented through stitching, good wound care, and good oxygen exposure."

Surgical removal of granulation tissue

may be required.

"I don't promote chemical treatments of excessive granulation tissue as it can cause side effects such as damage to healthy tissues," he said.

This was the third veterinary presentation by Dr. Vogel, and the Back Country Horseman of British Columbia (BCHBC) Robson Valley Chapter would like to say a huge thank-you to Dr. Vogel for his willingness to give these interesting annual presentations on various topics and sharing his knowledge with local horse people.

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- Dr. Tom Vogel, Dunster veterinarian



Dr. Tom Vogel talking about proper wound care

BIRGIT STUTZ PHOTO

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"The Valemount Crime Stoppers Society would like to thank Mike and Fern Simms and the staff at the Valemount IGA Store for sponsoring our barbeque on April 26, 2014.

We would Also like to thank Lakes District Maintenance for the use of their Community Barbeque.

And last, but not least, we would like to thank all those who came out to support us."