# American Farriers Journal Special Management Report #1...

# Using Sugar To Treat Those Nasty Wounds

Editor's Note: Because of the many telephone calls received about the use of sugardine in treating horses' open wounds, we've reprinted this article from the American Farriers Journal January/February, 1989, issue.

By Burney Chapman

SURGERY'S EARLIEST known document describing the care of wounds, *The Edwin Smith Surgical Papyrus*, is dated about 1700 B.C. It describes the treatment of difficult wounds encountered on the battlefields of Egypt.

The most widely used and most dependable medicine of that time, honey

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and grease, was packed into the wound with muslin.

Substances such as honey, molasses and syrups have been used since ancient

Now deceased, the author was an American Farrier's Association Certified Journeyman Farrier in Lubbock, Texas, who specialized in lame horse problems. He was best known for his pioneering work with the use of the heart bar shoe in laminitis treatment.

time on burns and wounds with a high degree of success. It has only been recently that scientific studies on various sugars used in wound treatment have backed up folklore and ancient medical theories with scientific data (see references).

In the past, extensive research has gone into the use of sugar and providone-iodine, sugardine, in human medicine. These ingredients, granulated sugar and a generic ointment commonly called betadine, are mixed into a thick paste with the consistency of peanut butter and applied to the open wound.

One study was done over a 5-year period in which 605 human patients were treated exclusively with sugardine. In nearly all cases, these patients (whose injuries included ulcers, cat scratches and gunshot wounds) healed more rapidly with sugardine than any alternative method of treatment.

## Sugardine Ideas

While surgical techniques have made giant strides during the last century, treatments of wounds themselves have made much slower progress. Some antibiotics are good bactericides, yet are very

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14-DAY OLD HOOF INJURY. Note the lateral wing of P3 and the severe damage which occurred to the extensor tendon from this serious injury.



BE SURE TO TRANSFER THE WEIGHT. A Glu-Strider bar shoe configuration has been applied in this instance to take all of the weight off the lateral wall and to properly transfer this weight onto the frog of the hoof.

incompatible with infantile tissue.

Antibiotics are generally considered as an injectable medication, while sugardine is commonly used for external treatment. Knutson et al. said in 1987: "Wounds treated with sugardine differ from wounds treated with antibiotics. Sugar is not an antibiotic by definition nor when used in connection with povidone-iodine. Unlike those treated with antibiotics, sugardine-treated wounds clean up rapidly; sugardine reduces edema, nourishes the surface cells and has no fetid odor.

"The use of sugardine treatment seems to accelerate granulation tissue and epithelial tissue production, thereby covering wound, burn or ulcer with skin."

#### **First Case**

My first introduction to sugardine came in July 1984, from Rich Boronow, M.D., and his wife Gretchen, a nurse and horse owner from Mississippi.

Gretchen owned a magnificent Arabian mare, Fadjesty, who had severe founder and decubitus ulcers. When treating the open wounds of the feet, the irritated soles and hooves were spread with sugardine, then bandaged for protection from unhygienic conditions. (Note: All the work described in this article was done under the auspices of or in conjunction with a veterinarian.)

#### **Veterinary Consultation**

Only after conversations with Dr. Boronow and Dr. Clyde Copeland, an orthopedic practitioner and my own research, did we begin using sugardine on a regular basis. Some of my early study cases were on horses with exposed phalanges.

One particular case involved a 14-day old, non weight bearing, serious laceration with exposed second and third phalanges. Prior to my observation, the wound was initially treated with neomycin powder wraps and antibiotics.

Upon examination, we immediately applied sugardine to the exposed bones with follow-up instructions for 12 days of cleaning and rebandaging. I observed significant improvement after this 2-week period. Within 3 to 4 months, the foot no longer required bandaging and was showing excellent recovery. I attribute the amelioration of this case to sugardine.

## **Helps Other Wounds**

Other instances for using sugardine include canker and severe abscesses. Of these, canker was the only one that failed to improve. The severe abcesses, which previously had been treated with 7% iodine or other sometime caustic remedies, showed extraordinary improvement and results with the application of sugardine. We also found it effective on coronary band laceration burns, thrush and decubitus ulcers.

Purulent decubitus ulcers which I saw were not healing until packed with sugardine. Within 72 hours, healthy granulation was observed and most drainage stopped. Former treatment had been ointments or applications of nitrofurazone,

"The routine success of sugardine therapy far surpassed any former treatment..."

gentian violet or other over-the-counter remedies.

When I had analyzed the routine success of sugardine therapy, it far surpassed any former treatment. Therefore, I suggested its usage to many of my farrier and veterinarian colleagues.

Individuals who followed my recommendation called and sent letters of their



JUST 42 DAYS LATER. This photo shows how the injury has been successfully treated 42 days following first application of sugardine.

responses and findings. Other sources in different sectors of the country reported 100 percent recovery in less than 14 days of thrush cases treated with sugardine. These cases were bandaged daily or every other day, depending on the severity of the condition.

However, horses which had a recurrence of the problem did so because of contaminated and unhygenic environments. This research and information only substantiated my initial observations.

#### It Was Too Simple

At first, many people were reluctant to use sugardine because of its simplicity. Some thought any treatment must be complex or costly to be effective. The remarkable use of sugardine is being accepted more frequently by many veterinarians and farriers in their general practices because of successful results and its economic significance.

The ingredients, sugar and betadine in scrub, solution or ointment, can be purchased for a reasonable cost in most local pharmaceutical or veterinary supply stores. Accessibility, acceptability and affordability establish justification for widespread use on minor cuts, burns and open suppurating wounds by the general horse public.

It's impossible to enumerate the total cases in the U.S., England, Australia,

Scotland, South Africa and Canada. Each individual who continually uses sugardine has undisputed success. The value is acclaimed by the world's most progressive farriers and veterinarians who attest to its significance as a major advancement in equine science today.

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