

AUBURN UNIVERSITY STUDY:

(Photos may be found at the bottom of this case study)

December 2, 1996

Dear HYMED Group Corporation,

The following report is of an interesting equine clinic case that had a severe leg laceration in which hyCure's™ collagen powder was responsible for a successful outcome.

"Ryan", a 14-year-old, 1500# Thoroughbred gelding (Figure 1) was presented to Auburn University's Large Animal Clinic after receiving a severe laceration of right hind leg (Figure 2a, 2b, and 2c). On initial examination, a 10 x 30 cm wound was present along the dorsum of the hock and metatarsus that extended to the bone and completely severed the long digital extensor tendon. The wound was cleansed, debrided, and an attempt was made to suture healthy tissue (Figure 3). During the following one year, the horse underwent multiple debridement surgeries, sequestrum removal procedures, and pinch and punch grafting sessions. The wound continued to be extremely large (15 x 7.5 cm) even after a one year period of time (Figure 4).

The hyCure's™ collagen powder was subsequently tried by applying a small amount topically to the wound site at each bandage change (approximately every 1-3 days). At times, a steroid ointment was applied in addition to the hyCure™ collagen powder in order to prevent excessive granulation tissue from developing. In a one month period, noticeable epithelialization had occurred from the wound edges and the wound diameter had decreased in size (12.5 x 5 cm) (Figure 5). At two months, the wound was noticeably smaller (9 x 4.5 cm) (Figure 6). And at three months, further epithelialization had occurred and the wound diameter had decreased (8 x 4 cm) (Figure 7).

Six months later, and unfortunately after a second moderate traumatic event and laceration of the same region one month earlier (Figure 8), the wound continues to epithelialize (Figure 9).

Sincerely,

Suzann A. Carson-Dunkerley, DVM, Large Animal Surgery Resident

R. Reid Hanson, DVM, Diplomate, ACVS, Assistant Professor

Large Animal Clinic, College of Veterinary Medicine

Auburn University, AL 36849



Figure 1
"Ryan," a 14-year-old
Thoroughbred gelding
received a large,
deep wound to the right
hind leg.

Figure 2 (a, b & c)
A severe laceration of the
right hind leg of a 14-year-
old Thoroughbred gelding.



Figure 2a



Figure 2b



Figure 2c



Figure 3 Attempt at suturing a large, deep wound to the right hind leg of a 14-year-old Thoroughbred.



Figure 4 A wound to the right hind leg of a 16-year-old Thoroughbred that remained extremely large (15 x 7.5cm) after a one year period of time.



Figure 5
Noticeable
epithelialization
of right hind leg
wound after 1
month of topical
treatment with
hyCure™
collagen powder.



Figure 6 Continued noticeable
epithelialization of right hind leg wound
after 2 months of topical treatment with
hyCure™ collagen powder.



Figure 7 Further noticeable epithelialization of
a right hind leg wound of a 15-year-old
Thoroughbred after 3 months of topical
treatment with hyCure™ collagen powder.



Figure 8
Noticeable epithelialization, despite second traumatic event to the right hind leg of a 15-year-old Thoroughbred.



Figure 9
Continued epithelialization of right hind leg of 15-year-old Thoroughbred after 6 months of topical treatment with hyCure™ collagen powder.