Silver Honey™ Equine Field Trial

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WF Young Inc. Authored by: Lucas Pantaleon DVM



Background

Phase two for the evaluation of the new over the counter (OTC) Silver Honey[™] Rapid Wound Repair spray and ointment, consisted of a field trial evaluation. The product and company names will be kept confidential until the product is released to market.

Two farms in Central Kentucky were contacted and the farm managers agreed to test Silver Honey[™] on horses suffering from a skin lesions.

No monetary compensation was given to the participating farms. In exchanged for their participation in the trial, WF Young Inc. agreed to provide product samples once Silver Honey[™] is on the market, as well as an assortment of Absorbine[®] horse care products.

Protocol

Seven horses from 2 different farms in Central Kentucky were selected for the trail. Superficial wounds with no overt signs of infection were chosen for the trial. Dr. Pantaleon examined the wounds and established that the horses met the criteria for enrolment.

Horses would be only treated with Silver Honey[™] topically. The horses enlisted in the trial should not be on a systemic or topical therapy targeting the wound.

The farm manager was instructed follow the protocol as outlined below:

- Clean wound with warm water and soap. Allow it to air dry
- Apply product beyond wound edges. Apply the ointment with clean hands or wear gloves to minimize wound contamination
- Repeat once a day (Shamrock Glen Farm 1) and twice a day (Sunday Morning Farm 2)
- Apply for 3 weeks or until wound is healed

Dr. Pantaleon would obtained pictures of the wounds at the time of enrollment (day 0) and at approximately weekly intervals for a total of 4 examinations.

Results

Farm 1 (Shamrock Glen)

Mare 1

Right hind limb (white hair areas) superficial scratches on lower lateral cannon bone and pastern areas. Wounds looked dry and crusty. Lesions present since spring time. Not being treated currently.

Pictures July 11th – Day 0 – Before Silver Honey[™] application:





Pictures July 20th – Day 8 – after Silver Honey[™] application:

There was no significant changes on the lesions. Scabs remained. Recommend to bandage with Silver Honey™ cream to see if scabs would soften.





Pictures August 1st – Day 21 – after Silver Honey[™] application:

There was no significant changes regarding the size of the lesions on the pastern. However, the margins of the lesions looked healthier, pink and the scabs seemed to be shrinking. The linear lesion on the canon bone is healing well, no scab was seen and pink healthy skin. This mare will go back to her original farm on August 15th and they are hoping to carry on with the treatment.







Pictures August 7th – Day 27 – after Silver Honey[™] application:

The lesions have not changed significantly from the last examination. The scabs remains tightly attached, margins are healthy and there was no pain to the touch. The linear lesion on the canon bone continues to heal, the skin is pink and healthy with hair growth.





Mare 2

Pictures July 11^{th} – Day 0 – Before Silver Honey^m application:

Left hind limb dry superficial crusty wounds on back of cannon bone area, white hair area.



Pictures July 20th – Day 8 – After Silver Honey[™] application:

Left hind limb dry superficial crusty wounds showed no significant improvement. Scabs remain present and tightly attached. The areas appeared to be less inflamed. The manager will work on removing scabs and continue with the application of the gel.





Pictures August 1st – Day 21 – After Silver Honey[™] application:

Manager stated that the small spots that were there initially healed. She said that there is a new spot (lesion) on the outside part of the left hind limb. However, looking at the pictures it appears that the 2 spots that were there last week have coalesced into one larger. Scabs on this area were tightly attached. I removed some of the scabs and the skin appeared inflamed and bleeding. The mare was mildly painful when scabs were pulled. The manager was applying the ointment on this lesion.







Pictures August 7th – Day 27 – after Silver Honey[™] application:

The lesion on the left hind limb appeared to have not changed from the last examination. There are scabs covering the area and the skin under the scab remains inflamed and there was bleeding when scabs were removed. The mare was mildly painful when I attempted to remove the scabs.









Mare 3

Pictures July 11th – Day 0 – Before Silver Honey[™] application:

Right hind pastern area crusty superficial wounds on white hair region. Large superficial wound on the pectoral area secondary to itching.











Pictures July 20th – Day 8 – After Silver Honey[™] application:

Right hind - wound on the front of the fetlock that is healing well, no scab. The area on the back of the pastern appeared to be improving, no picture taken. There were some scabs on the front of the fetlock on the left hind leg, no significant changes seen thus far. For the area on the chest the Silver Honey[™] was discontinued since their vet prescribed Ivermectin for the itching and the mare improved.





Pictures August 1st – Day 21 – After Silver Honey[™] application:

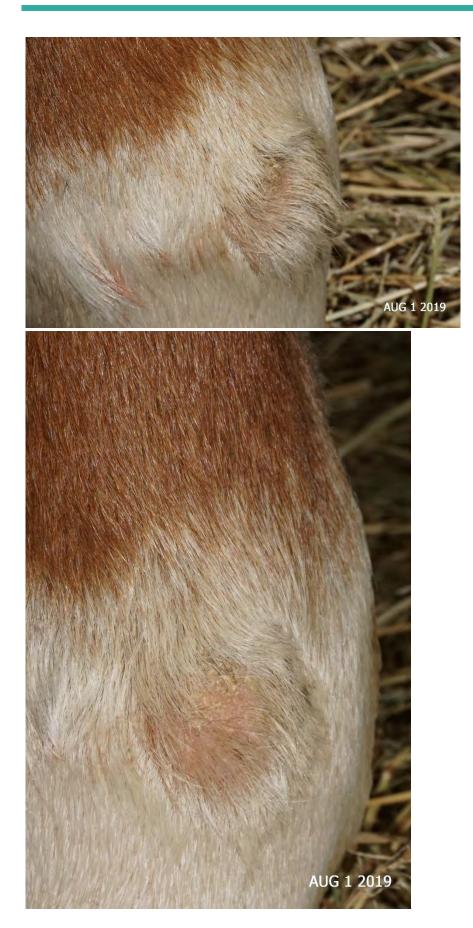
There was a marked improvement on the lesions on the pasterns and there were no scabs seen. The skin on the affected areas is healthy, pink and there are hairs growing. The area on the back of the pastern is improving as well and there was one small scab present.













Pictures August 7th – Day 27 – after Silver Honey[™] application:

There was a continuous improvement of the lesions. The affected areas were almost completely covered with hairs and the skin underneath looked healthy and normal. The small scab on the back of the pastern remains with a small scab and healthy skin around it. The response to the therapy was very good on this mare.











Mare 4

Pictures July 11th – Day 0 – Before Silver Honey[™] application:

Left hind white hair area lateral cannon bone. Lesion dry and crusty.





Pictures July 20th – Day 8 – After Silver Honey[™] application:

No significant changes. Scabs remain. Recommended to bandage with the Silver Honey[™] cream to see if aid with scab softening and removal.







Pictures August 1st – Day 21 – After Silver Honey[™] application:

Very good improvement on the lesions. Small scabs, there is no pain and the skin appeared healthy.







Pictures August 7th – Day 27 – after Silver Honey[™] application:

Small scabs present. No evidence of inflammation on the area around the scabs. The linear scabby lesion on the left cannon bone seen on the first day has resolved.







Mare 5

Pictures July 11th – Day 0 – Before Silver Honey[™] application:

Superficial scratches on both sides of the rump area.



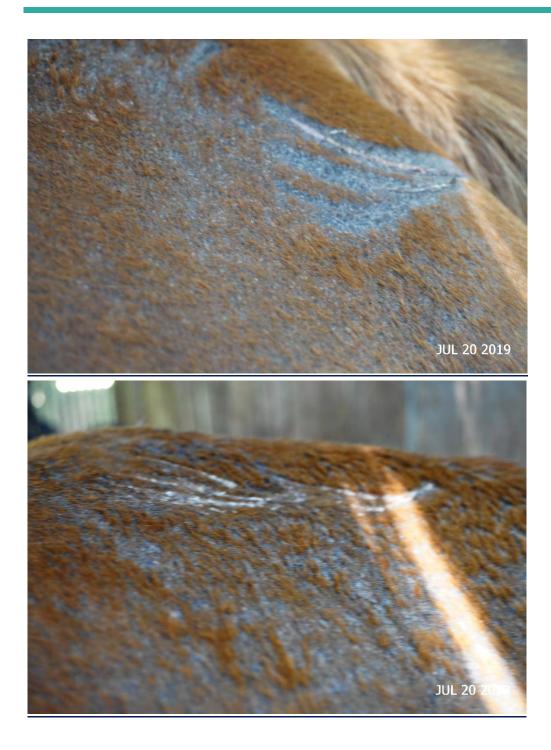




Pictures July 20th – Day 8 – After Silver Honey[™] application:

There was no significant changes to the scratches. However, overall the area appeared healthy and less scabby.







Pictures August 1^{st} – Day 21 – After Silver Honey^m application:

The owner reported that there is improvement. The mare was turned out in the field and not available for pictures. Mare was removed from the study and no further pictures were taken.

Farm 2 (Sunday Morning)

Mare 6

Pictures July 12th – Day 0 – Before Silver Honey[™] application:

Left hind pastern area crusty superficial wounds on white hair region. Scabs were pulled off and exposed red inflamed skin lesions with small amount of bleeding. This mare develops these lesions every year in the summer and it is very difficult to treat, only improves during the winter. She was not on any current treatment.







Pictures July 20th – Day 7 – After Silver Honey[™] application:

Scabs were removed before application. Significant improvement on the wounds. This mare was treated with the spray gel. Owner very happy on the way wounds are healing.







Pictures July 26th – Day 14 – After Silver Honey[™] application:

The wounds continue to heal very well. The skin looks pink and healthy, no evidence of inflammation or swelling. Hairs are growing within the lesions. There is no pain to the touch. Owners is very happy with the progress of the mare.





Pictures August 2^{nd} – Day 21 – After Silver Honey^m application:

The owners has been very happy with the way the Silver Honey[™] spray worked. The lesions were considered healed. As it can be appreciated on the pictures - the skin appears pink and hairs continue to grow. She will continue to apply the spray once a day.





Gelding 1

Pictures July 12th – Day 0 – Before Silver Honey[™] application:

Right hind lateral fetlock area crusty circular lesion. Left hind pastern area of a linear crusty superficial extending from lower cannon bone to fetlock area. The wounds were on white hair region. Since the scabs were tightly attached it was recommended to soften them with warm water and soap and then apply Silver Honey[™].









Pictures July 20th – Day 7 – After Silver Honey[™] application:

Right hind fetlock area circular area seems to have healthier skin in the center. Still has scabs mainly on the margins. Left hind linear lesion, there was an area where no scab were present. Here the skin looked pink and healing. There was no much change on areas where scabs remain present. This gelding has been treated with the Silver Honey[™] cream. We were more aggressive with removing the scabs and the owner will apply Silver Honey[™] gel on areas where scabs are difficult to remove and the cream on areas where scabs were removed.







Pictures July 26th – Day 14 – After Silver Honey[™] application:

Right hind limb large circular lesion continues to improve. The skin looks healthy there is no pain to the touch and there are hairs that continue to grow within the area.

Left hind limb the area without scabs had healthy pink skin with hairs growing in some areas. The scab on the circular lesion was removed and the skin under it was pink without evidence of inflammation and hairs starting to grow. The treatments aimed at softening the scab was effective. Also, the honey likely was able to penetrate the scab as evidenced by the healthy skin.









The picture shows the circular lesion with the scab. When touched the scab was soft and loosely attached to the skin. The scab was easily removed, see picture below.



After the scab was removed on the circular lesion. The skin underneath is healthy with some hairs growing within it.

Pictures August 2^{nd} – Day 21 – After Silver Honey^m application:

Right hind limb large circular lesion continues to improve. The skin on the center of the lesion looks healthy there is no pain to the touch and there are hairs that continue to grow within the area. See the last picture for a comments and close up for the lesion's margins. The lesions on the Left hind limb continue to improve. There are scabs present on the margins of some of the lesions. However, the center of the lesions continues to improved, evidenced by healthy skin and hair growth.











Picture above is a close up view of the lower margin of the right hind limb. There is still evidence of inflamed skin under the scabs with small amount of bleeding as the scabs were removed. The center of the lesions has healthy pink skin with no evidence of inflammation and hairs growing.

Conclusions

The Silver Honey[™] spray gel and ointment were very well tolerated by the horses, there were no adverse effects seen.

There were some horses that showed a remarkable improvement and others were slower in responding. A key learning was that scabs are likely a barrier for the product to penetrate. The ointment seemed to work at softening some of the scabs. In some horses despite the presence of scabs, product appeared to be able to penetrate, as evidenced by healthy skin under the scab. However, removing the scab would likely help with product penetration and quicker healing. Based on this finding, on week one it was recommended to wrap affected area with Silver Honey[™] cream over night to soften scabs.

Owners reported that the Silver Honey[™] spray is easy to apply and it stays on the horses. However, when turned out in a pasture there was no evidence of product the next morning.

Owners liked the product sprayer, how it sprays and the ease of application with a spray bottle. The ointment appeared to be a little more difficult to apply at it stuck to fingers and gloves. A comment from one of the owners about the bottle design for the spray gel, "make sure the straw goes down to the bottom of the bottle".

Owner of Sunday Morning farm was very happy with the results on Mare 6.