Case Study: C107

Horse – vasculitis

A 19 year old stallion (Oregon) suddenly suffered from four thick swollen legs in July 2010. Eventually, the vet diagnosed the horse with advanced vasculitis; a condition where one’s own body attacks the blood vessels, causing death of the skin and injuries. In this case, the horse had wounds, directly above the hoofs, on both behind legs and the left front leg. The wounds were present in a full circle around the legs.

The first 4 weeks the infection was treated with antibiotics, corticosteroids and pentoxifylline (Torental, a human drug for the improvement of blood flow). Furthermore, the wounds were treated with disinfectant spray and an antibiotic spray. Thereafter, the wounds were treated with silver sulphadiazine ointment, but this treatment did not contribute to the wound healing and caused exuberant granulation formation (‘proud flesh’). The vet wanted to remove the proud flesh surgically, but the owner was looking for a less invasive method because of the risk of complications, since the horse was kept outside days and nights. The owner chose the honey-based treatment in order to combat and prevent infections from occurring and to promote granulation.

**Product:** L-Mesitran ointment  
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**Method**

The honey ointment treatment was started on August 24, 2010 (fig. 1, 3, 5). The honey ointment was applied daily on the wounds, directly on the necrotic tissue after the wounds were rinsed with water. No occlusive dressings were used. Loose necrotic crusts, when present, were removed manually twice a week.

**Results**

On 2 September (after 9 days of treatment) the wounds were already reduced in size and in addition to granulation tissue, epithelialization was also noticeable.

Eight days later, the vet noticed that the ball of the left behind leg was swollen and warm. Besides the honey ointment, sulfadiazine-trimethoprim (Emdotrim) was administered, but this was not very effective. Then ampicillin (Cobactin) was administered intra-muscular. The other legs showed good progress.

On 19/09/2010 (after 3 weeks of treatment) the wounds were well improved and on October 15 (fig. 2, 4, 6) all wounds were closed clinically. Treatment with the honey ointment was stopped. From that moment on proud flesh formation was observed and treated with a silver nitrate stick, unfortunately without positive results.

**Discussion**

The most common treatment modalities for equine vasculitis are trimethoprim-sulfa antibiotics, corticosteroids, and/or resolution or control of the underlying disease process (White, 2009). The vasculitis caused the wounds that showed delayed healing, which resulted in exuberant granulation tissue. This is a common equine phenomenon, especially in leg wounds that heal slow anyway (Wilmink, 2007).

In this case the leg wounds did not respond to silver-sulphadiazine treatment, the honey treatment however speeded up the healing significantly. The wound size was reduced quick and further infection was prevented, caused by the honey through osmosis and hydrogen peroxide production. The honey also stimulated angiogenesis, (Rossiter, 2010) resulting in a fast wound healing (± 12 weeks). In this case it is clear the honey treatment was crucial in the wound healing of the 19 year old stud.

**References**