

REHABILITATING *A Reader's Story*

Constantine

By K Mitchell

The old saying, "No Hoof No Horse" couldn't be more true in the case of this performance horse. Unrideable from a major hoof injury, he was rehabilitated by the dedication of an owner and the patience of a good farrier.



Karen Mitchell was contacted by her good friend and very knowledgeable horsewoman, Jennie Brittain from Twilight Lane Stud, Caniambo (near Shepparton in Victoria), and asked if she would be interested in taking on a horse with a major foot problem. Jennie sent a photo of the horse and informed her that he had a great temperament, was a well bred Holsteiner by Wunder out of Kilwarran Rhythm, was talented, and she believed that the foot injury could be fixed by Karen's level three farrier, who specialises in corrective work in Tasmania. It is a dedication to the focus and skills of those who assisted, that this 16.3hh horse overcame the hoof injury and went on to a pain free career as a showjumper, dressage competitor and all round pleasure horse.

Karen takes up the story of how Constantine's chances of recovery changed that day she heard from her friend, Jennie.

“Having great faith in Jennie's good eye for a horse and the fact she has bred some fantastic performance horses, I asked my farrier if he could speak to Jennie's farrier for his opinion of the horse's foot ... from a technical aspect.

When the response was positive there was nothing left to do but arrange transport to Tasmania for Constantine. Arriving a few days later he quickly established himself as quite a laid-back horse. After the journey from Shepparton to Pateena - 10 minutes out of Launceston, Tasmania - he got off the truck, took a look at all the other horses and promptly started eating grass. Obviously he didn't think the journey or change of property was a big deal!

The farrier came the next day, and upon assessing Constantine came up with a treatment plan for correcting the bad foot.

Looking at the foot, it was obviously affected by seedy toe, with the wall from the toe to the outside quarter gone, and his outside toe coronet band was enlarged and dropped. The outside wall was bulging and there were several splits in it.

Underneath the foot was not much better – the sole had highs and lows on the front half, the rest was very flat and soft to the touch. There was some concern that there may have been either a chunk of bone missing from an inflammation of the pedal bone, an underlying abscess caused by seedy toe, or pressure from a rotated pedal bone causing the corium (the layer of highly vascular tissue responsible for the production of the horn capsule of the hoof) to bleed due to the presence of a soft spot the size of a ten cent piece on the inside sole. There were also numerous small underlying bruises on the front half of the sole, and the wall of the hoof and the laminae had separated for a distance of about two inches. Infection had travelled up the wall, as well.

The heels were noticeably contracted and the bar on the inside was non-existent, which meant that it needed to be redefined to help support the outside bar and realign it. A dip in the wall surface on the inside hoof wall was further pronounced by a slight quarter contraction (the widest part of the hoof wall) - see diagram. There was also a gravel line, similar to a founder line in the hoof wall, which was loose. Although all of this sounded quite daunting, according to the farrier it was not such a big deal.

As far as conformation, Constantine was base narrow by around two inches and standing under himself by four to five inches,

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which although not ideal, is fairly common in heavy horses. Being base narrow can cause pressure to be placed on the attachment of the laminae to the outside hoof wall, which results in the wall tearing apart.

Right from the start we all understood this was going to be a long-term project - it has taken over 12 months of commitment from the farrier, encouragement from long suffering friends, and of course patience and monitoring from myself - to bring Constantine back to a healthy, confident and ultimately sound horse.

FIRST STEPS

First, the foot was trimmed using a farrier's compass and base support methods – once the centre point was worked out, the heels were dropped to correct the angle of the foot. There were several other reasons for dropping the heels, including the possibility there may have been some pedal bone rotation. There was a spur or inflammation on the apex of the pedal bone, and it took the pressure off the toe area of the sole (where there were numerous bruises) allowing the foot to move forward. Then, a fairly large bevel - where the underneath edge of the hoof is rasped at an angle instead of flat - (see diagram) was placed from the inside toe right around the foot including the quarter, leaving about 2cm of heel. This took the load off the hoof wall and placed it on the load bearing narrow area on the inside of the white line of the sole.

Constantine was then fitted with a flat shoe that was very full laterally – having a one inch extension on the outside to support the hoof, to get the weight of the leg into the centre of the hoof and move the load to where the hoof could support it. The sole was then filled with cotton wool and Venice Turpentine (a drawing ointment made from the resin of the European Larch tree) to help relieve inflammation and discomfort caused by stone bruises and infections and secured with a bandage.

A few days after this first treatment, the horse went sore, which was half expected as the soft spot on the inside toe was becoming sorer, possibly due to some sole pressure. The shoe was removed, a poultice applied until he became sound again, however the removal of the shoe did cause the loss of some of the remaining outer hoof wall, which caused a further problem of how to fix a shoe to the foot without any nails on the outside!

It was decided to use a banded shoe that is nailed on one side and a band screwed to the wall of the other side, although a hose clamp can be used in its place.

There are some who would have suggested the use of one of the hoof repair products,



Above left: The hoof prior to treatment - a large portion of the hoof wall from the toe to the outside quarter was gone.

Above right: After removal of the banded shoe, the bruising is evident around the coronet band



Left: Applying the banded shoe for lateral support of the hoof wall.

however my farrier was not prepared to strip the whole of the remaining wall back, only to fill it up again with the product, on such a heavy horse that requires quite extensive outside support, particularly as the horse would be going into a wet Tasmanian winter. Although not averse to such products, my farrier believed it was not the right form of treatment for this horse, at this time.

The exposed laminae was filled with sheets of gelatine, that when softened in boiling water adheres nicely to the hoof, protecting it and drawing out seedy toe.

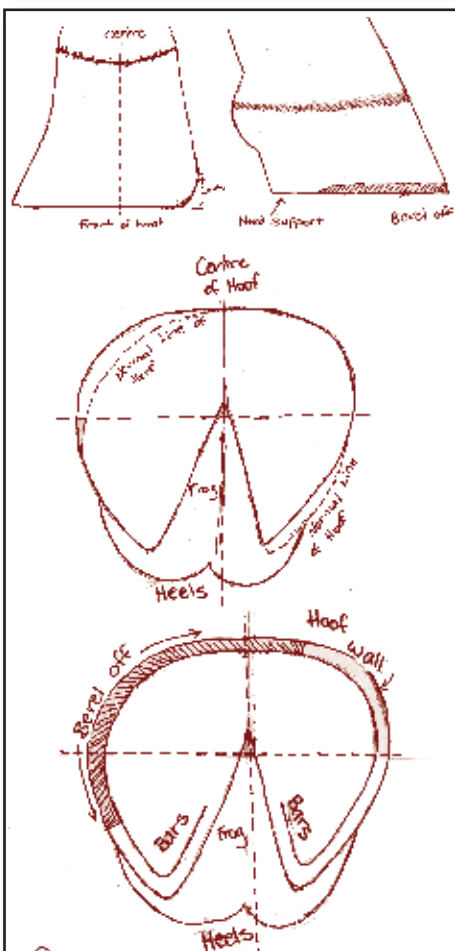
The sole was then brushed with Venice Turpentine and polystyrene was applied to give some back pressure to the sole as it was noted that it was getting a bit on the flat spongy side, rather than becoming firmer and retracting upwards as it should. The polystyrene was also 'balled' up a bit around the centre so the horse could place his foot in a more comfortable position.

And for those wondering, yes, we could have used one of the purpose-made sole packings, but these are about \$80.00 a tube and polystyrene costs about 10 cents a treatment for pretty much the same result, particularly while Constantine was not being worked.

To hold it all together, a fiberglass bandage was put on, then a co-adhesive bandage used to shape the form of the plaster to the foot and help support it whilst the plaster dried. Some cuts were made in the superior (top section) aspect of the bandage to prevent it rubbing and the heel was packed with gauze to protect it from rubbing when the Constantine walked.

The decision was made to use the fiberglass bandage because he was 'killing' normal bandaging in a very short time! The polystyrene packing was changed every week as Constantine would wear it out,

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however using the fiberglass bandage worked well, as you could make a sort of slipper out of it, treat the foot, put it back on and lace it up.

With the banded shoe on and providing good lateral support, a bevelled inside toe to the quarter, gelatine sheets, polystyrene packing and a fiberglass bandage applied, it was now a waiting game for the a few weeks.

The next few shoeings were carefully managed, bringing about slight changes in Constantine – he was standing a lot better and no longer sore, and I was able to bring him into light work.

One of the drawbacks was that the outside wall was growing quicker than it should, resulting in a slightly distorted wall and a sinking of the coronet band. The band and screws in theory should apply pressure (called back pressure) on the wall of the hoof, therefore slowing growth – usually pressure is on the wall of the hoof, not the sole, however in Constantine's case it had been on the sole due to the lack of hoof wall. The farrier was confident that the hoof wall growth would slow up once the shoe could be nailed properly on that side, or at least when the growth reaches the shoe.

By now, the inside wall dip had gone, as had the toe bruising, and the sole was starting to contract up again. It was hoped that in six months, with normal hygiene and hoof care, Constantine would have a new life.

Further on, other problems began to surface. The dry, hard ground of the previous summer caused Constantine to avoid putting his sole on the ground, resulting in some contraction and bruising requiring the farrier to drain some sort of big blood blister in the wall of his heel, and the wearing of a big boot (known as the 'Elephant Boot' at home!) full of water to soften the coronet band and hoof.

And of course, once winter set in, the first few rains resulted in the sole becoming soft and painful for Constantine. This was resolved by creating a shoe with a removable pad to wear when working, as it was the smaller stones such as those you may find on your driveway that caused the pain.

Another problem was the occasional self-removal of the shoe by Constantine, which resulted in bandaging the foot overnight to protect it and the farrier diligently coming the next day to put the shoe back on. The foot, especially in the early days, was extremely vulnerable without the support and protection of the shoe.

Even though 12 months later Constantine is now perfectly sound and without a lateral extension on his shoe, we may from time to time, have to add the extension. This will depend on how he wears his shoes and how



Above: Constantine was a model patient....and always liked to see what was going on!

Top Right: It took 12 months but the hoof is now almost back to normal.



*Above:
The hoof with the polystyrene sole packing - the Venice Turpentine can be seen dribbling out from the edges.*

*Left:
It was worth the time, effort and dedication by Karen, as she is now advancing Constantine's dressage and showjumping career without any indication of lameness.*



the foot grows. When he retires and is no longer correctively shod, nature will take care of him - as he ages his feet will become longer and more oval shaped, resulting in less pressure on the front half of the hoof, and more pressure on the back half, so he should be comfortable in his retirement.

Throughout this whole reconstruction Constantine was a model patient and has been his usual gentle self. It has taken a lot of riding for him to develop the confidence to use his foot correctly, and to get him working in front of the leg, allowing flowing movement. He has started his show-jumping and dressage career and is

so far going well, mostly credited to coach Claire Walker (Level 1 EA/NCAS), who was able to advance us to where we are now, which is no mean feat with a 16.3hh, 750kg Holsteiner and 5ft 2" rider! We still have a way to go, but Constantine has a lot of jump, is showing heaps of potential as his technique improves, and is amazingly tolerant of me learning to stay with him over some of the bigger jumps.

It was only with the help and support of Jennie, my farrier, Claire, Scott (the long suffering husband), and Vanessa, that Constantine is able to be where he is now."