History: A 19 year old stallion presented with a 12 year old history of founder. He was being managed by a farrier but was not making a good response.

Physical Exam: The stallion was acutely lame in the right fore foot. The lameness was a grade 2/5 with 0/5 being sound and 5/5 being non-weight bearing. The increase in the digital pulse and coronary band temperature indicated a lamanitic or founder episode was occurring. Radiographs or x-rays were taken to evaluate the amount of coffin bone in the hoof capsule.

Radiographic Findings: The coffin bone was rotated eleven degrees in each fore foot. The sole depth on the right fore was 6 mm (normal: 15-18 mm), and a palmer angle of 23 degrees (normal: 5-8 degrees), sole depth on the left fore was 8 mm, and palmer angle of 21 degrees. A long diseased toe was also revealed.

Treatment: A shoeing prescription was developed and the hoof was trimmed and shod with an 18 degree wedge pad to de-rotate the coffin bone and relieve the pressure on the thin sole. The hoof wall was dremelled to remove the diseased hoof. The stallion was more comfortable after shoeing. He was maintained on a decreasing bute dosage and stall rest.

Shoeing resets were performed at monthly intervals. At the next shoeing the sole depth had improved to 12 mm in the right and 16 mm in the left. But the rotation and palmer angle had not improved. The 18 degree wedge pads were reset.

On the second reset, the sole depth was the same but the coffin bone had completely de-rotated compared with the hoof growth. Although the palmer angle was still 22 degrees in the right fore and 20 degrees in the left the 18 degree wedge pads were reset.

On the third reset, 104 days after the initial presentation, the rotation was still 0 degrees, with a sole depth in the right for of 15 mm and the left fore of 20 mm. The palmer angle was not improving and a deep digital tenotomy was considered. By surgically cutting the deep digital flexor tendon, the procedure releases the coffin bone and allows the tip of the coffin bone to move forward and up. Since the hoof wall had deteriorated and the sole was prolapsing due to the palmer angle, a special designed shoe was applied.

On the fourth reset, 155 days after the initial presentation, the stallion was a little painful. The coffin bone was de-rotated as compared to the new hoof growth and the sole depth was good but the palmer angle was 27 degrees in the right, and 28 degrees in the left. So a deep digital tenotomy was performed and a rail shoe with advance cushion support was applied to the hoof. This shoe allows the heels to drop and the advanced cushion support protects the sole.

On the fifth reset, 184 days after the initial presentation, the coffin bone rotation was 0, sole depth on the right was 25 mm, left was 20 mm, and the palmer angle on the right was 13 degrees and the left was 12 degrees. The stallion had responded well and was on a limited amount of pain killers.

On the sixth reset, 219 days after the initial presentation, the coffin bone was still de-rotated, the sole depth was 26 mm, and the palmer angles were 10 degrees. The stallion was doing great and was pain-free. He was reset with 2 degree wedge shoes.

On the seventh reset, 247 days after the initial presentation, the coffin bone was de-rotated, the sole depth was 18 mm, and the palmer angle was 5 degrees on the right and 6 degrees on the left. Theses parameters are within the normal range for a health hoof. A final recheck 9.5 months after the initial presentation confirmed continual stabilization of the hoof capsule. The stallion was released to routine shoeing, light riding, and 6 month rechecks. Two and one half years after the initial presentation the stallion is being ridden, turned out to pasture and breeding an occasional mare. Founder can be resolved and a horse returned to normal function.