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NBC Case Study: Tiny Two - A Case Study in Laminitis

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Tiny Two:  
A Case Study in Laminitis

**Patient:**
Tiny Two
- **Age:** Eight years
- **Breed:** Percheron
- **Gender:** Gelding

**Staff:**
James A. Orsini, DVM, DACVS  
Associate Professor of Surgery  
Director, Laminitis Institute  

Patrick Reilly  
Chief of Farrier Services

**History:**
- Two-week history of founder in the left front foot;
- No inciting cause identified;
- Symptomatic treatment initiated with progressive rotation of P3 in the left front foot.
- At time of admission, the right front was radiographically normal.

**Presentation:**
Admitted to the George D. Widener Hospital for Large Animals, New Bolton Center, on November 13, 2007.

**Treatment:**
Tiny Two (TT) is a fox hunter that developed severe laminitis in the left front foot. On admission to New Bolton Center, the coffin bone was severely displaced, causing the sole to bulge and nearly penetrate the foot.

A deep flexor tenotomy was performed on TT, per Dr. Orsini, and his shoes and support material were adjusted or changed frequently during the first month of hospitalization. TT was a New Bolton Center patient for more than a month.

The trauma and bruising associated with laminitis can lead to secondary complications. Included in these were abscesses that TT developed under the hoofwall of his left front foot. A hoofwall resection was performed to relieve the pressure, encourage drainage and surgically debride (clean) the focus of infection. Larval therapy, biotherapy or sterile maggots were used to remove the diseased tissue in the foot as well. Following this treatment, the hoof was stabilized using a hoofwall reconstruction procedure. This technique was developed at New Bolton Center by former farrier Rob Sigafoos and utilizes a composite of a PMMA/epoxy hybrid adhesive with carbon fiber and Kevlar added as structural materials to support the remaining hoof.

As with any laminitis case, the hoof cannot be “fixed.” The goal is to maintain the integrity of the hoof while encouraging new, healthy hoof to grow. The extent of TT’s laminitis has required more than a year of monthly visits for special shoeing and follow-up care. TT’s level of comfort continues to improve; he is off all pain medicines and is reported to be sound by TT’s owner and primary care veterinarian. TT is starting to return to low levels of work on a regular basis. The horse’s owner has been diligent in his care and a model client. Dr. Orsini and Pat Reilly remain cautiously optimistic that TT will return to his previous level of athletic performance.

Tiny Two laminitis radiograph before (left) and after (right) treatment.