

# EQUINE LAMINITIS



*Practical Advice for Healing Your Horse*



## **Equine Laminitis Ebook**

Copyright © 2013. All rights reserved worldwide.

No part of this ebook may be reproduced or given away without the written permission of the publisher and/or authors.

The information contained within these pages is intended for educational purposes only, and not for diagnosing or medicinally prescribing in any way. Readers are cautioned to seek expert advice from a qualified health professional before pursuing any form of treatment for their animals.

All Natural Horse Care accepts no liability of any kind for any losses or damages caused or alleged to be caused, directly or indirectly, from using the information contained in this book.

# TABLE OF CONTENTS

Disclaimer .....	ii
Foreword .....	iii
Immediate Action.....	ix
Chapter One - What is Laminitis? .....	1
Chapter Two - Anatomy of the Hoof.....	4
Chapter Three - Signs & Symptoms .....	9
Chapter Four - Laminitis Triggers .....	12
Chapter Five - Pain Relief .....	13
Chapter Six - Diagnosis .....	14
Chapter Seven - Radiographs .....	17
Chapter Eight - Diet.....	20
Chapter Nine - Weight Management.....	24
Chapter Ten - Hoof Care .....	27
Chapter Eleven - Hoof Boots .....	32
Chapter Twelve - Exercise.....	36
Chapter Thirteen - Further Information .....	37
Chapter Fourteen - About the Author .....	38

## **DISCLAIMER**

Although this book has attempted to draw from the expertise and knowledge of some of the most experienced professionals in the world, this book does not intend to diagnose or treat without the support and advice of your vet.

Every effort has been made in the research of this book to present quality information based on the best available and most reliable sources. The author assumes no responsibility for, nor makes any warranty with respect to results that may be obtained from the procedures described. The author shall not be liable to anyone for damages resulting from reliance on any information contained within this book, whether with respect to procedures, feeding, care, treatment or remedies suggested or by reason of any mis-statement or inadvertent error contained within the pages of this book.

Readers are encouraged to always follow the guidance of professionals in their respective fields of veterinary care, farrier expertise and dietary care, seeking the relevant professional intervention as required.

# FOREWORD

The aim of this book is to provide a comprehensive overview of equine laminitis in an easy to understand format. It is written for horse owners and care givers to provide them with enough knowledge to enable them to be proactive in their horse's welfare when they are suffering from laminitis.

It is only when you experience laminitis first hand that you realize just how bad it is and it is my goal to help educate so as to prevent the often devastating long-term results.

Whilst it is more work to set up a system whereby you manage your horse in a way that lowers the risk of laminitis – it is substantially less work and heartache in relation to what you would have to do to rehabilitate a laminitic animal. That old saying is definitely true: an ounce of prevention is worth a pound of cure.

# **IMMEDIATE ACTION:**

## **What to do if your horse is currently suffering from a laminitis attack**

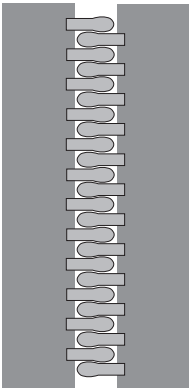
The majority of laminitis episodes are caused by metabolic issues. If the laminitis is in both front feet, the equine is generally an easy-keeper and there is no other obvious cause such as retained placenta in a mare or a break into the feed room, then ensure that you implement the following emergency protocol as soon as possible.

- Ice the hooves or stand in a cold running stream - especially if within 8 hours of the laminitis trigger
- Remove the horse from pasture and feed only hay that has been soaked in cold water for an hour (see page 22).
  - If the horse is overweight, feed 1.5% of ideal body weight in hay per day (for a 1000 lb horse you will feed 15 lbs of hay) - NEVER go below this amount as this can lead to death from hyperlipaemia.
  - If the horse is thin, feed 2% of ideal body weight (so if horse weighs 800 lbs but should weigh 1000 lbs, feed 20 lbs of hay per day)
- Stop feeding all commercial feeds and supplements (see page 20).
- Get your vet to perform blood work for Insulin Resistance and/or Cushing's Disease and take xrays (see pages 14 and 17).
- Get your farrier to trim the hooves and use hoof boots for comfort (see page 27).

## Chapter One

# WHAT IS LAMINITIS?

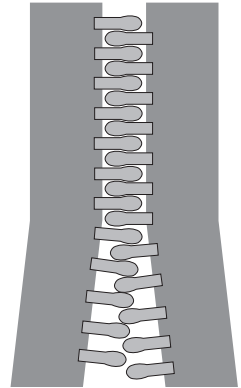
Laminitis is an extremely painful hoof condition. The actual meaning of the word “laminitis” is “inflammation of the laminae”.



### WHAT ARE LAMINAE?

In a healthy hoof the hoof wall is tightly attached to the bone inside. The bone and hoof wall both have structures call laminae attached to them and these laminae interlock with each other to form a very tight bond - imagine the bond as a closed zipper.

When your horse has laminitis there is inflammation between the two sets of laminae. This is extremely painful as unlike inflammation in soft tissue where the tissue can swell, the hoof capsule and bone are both very rigid which means that the swelling results in a huge amount of pressure that has no where to go. If you've ever hit your fingernail hard enough to bruise the tissue underneath you will have a small appreciation for the pain involved. Add to that the fact that the hooves have to support the entire weight of the horse all day long and you will see why laminitis can be so painful.



Laminitis is referred to as acute when it is in the early stages and chronic when it has been present for a long time.

## **FOUNDER**

Many people mistakenly interchange the two words laminitis and founder but founder is more severe and occurs if the laminitis is not addressed. Founder is when the laminae detach and the connection between the bone and hoof capsule is destroyed. The hoof capsule rotates away from the bone, and in the worst cases the bone can penetrate through the bottom of the hoof.

In some horses the capsule is forced up and the bone presses down on the sole. This is known as a sinker (or distal descent) as the position of bone appears to have sunk down within the hoof capsule.

Founder is much more severe and much harder to rehabilitate than laminitis but with correct care it is fixable.

## **CAN IT BE PREVENTED?**

YES! Despite being a common condition - according to research it ranks as the second biggest killer of horses, with colic being number one - by being vigilant you can prevent it.

Sadly there still persists a lack of education about how to treat laminitis, even amongst vets and farriers, which is why the statistics are so high. That is why horse owners need to educate themselves because they are the first line of defense against this condition.

## **WHICH EQUINES ARE SUSCEPTIBLE TO LAMINITIS?**

Whilst ponies and some breeds such as Morgans and Arabs are more prone to it, unfortunately all horses, ponies and donkeys can get laminitis.

However it is preventable so being aware of the causes and being proactive in your approach to your general horse keeping will go a long way towards avoiding this painful and damaging condition.



## **IS MY HORSE AT RISK?**

Your horse is at risk if any of the following apply:

- he's overweight
- his feet are not trimmed correctly on a regular basis
- he's turned out on lush pasture
- she's pregnant
- he's injured one leg which is forcing him to put more weight on the other three
- you feed high sugar (sweet) feed
- he's underweight but has a cresty neck
- you use shavings that may contain black walnut, as bedding
- there are black walnut trees in your horses pasture
- your horse is receiving steroid treatment
- his appetite is insatiable

## **PROGNOSIS**

If you catch it early, before any internal damage occurs, then recovery can be expected within a month.

However, the longer it progresses, the longer the recovery. When rotation or sinking occurs you need to re-grow the hoof wall/bone connection and this can take up to nine months.

If it is chronic and internal damage is severe then there may be limitations as to how much recovery can be realistically achieved.

However, every horse is an individual and ponies especially are very hardy.

## Chapter Two

# ANATOMY OF THE HOOF

The horse's hoof (foot) contains a bone inside it called the coffin bone (also referred to as P3 or the pedal bone). The coffin bone is not like your typical bone. It is semi-circular in shape when looking at it from above and triangular when looking from the front or side.

### COFFIN BONE (PEDAL BONE/P3)



*Side view*



© Paige Poss

*Bottom view*



© Paige Poss

*Front view*



*Rear view*



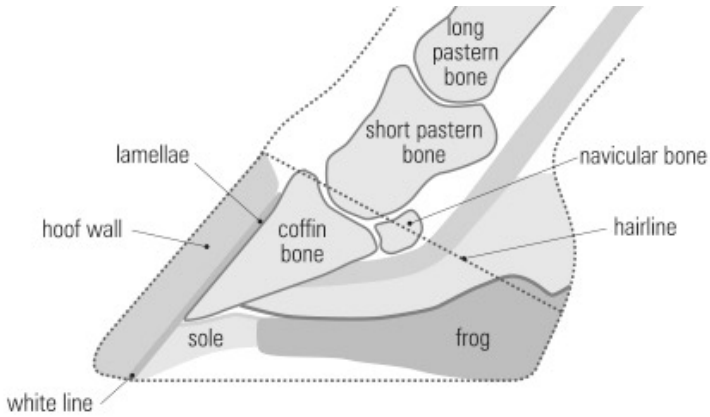
*Coffin bone and laminae*

This bone forms the foundation of the hoof. Attached to the coffin bone is one set of laminae which is similar in looks to the underside of a mushroom.

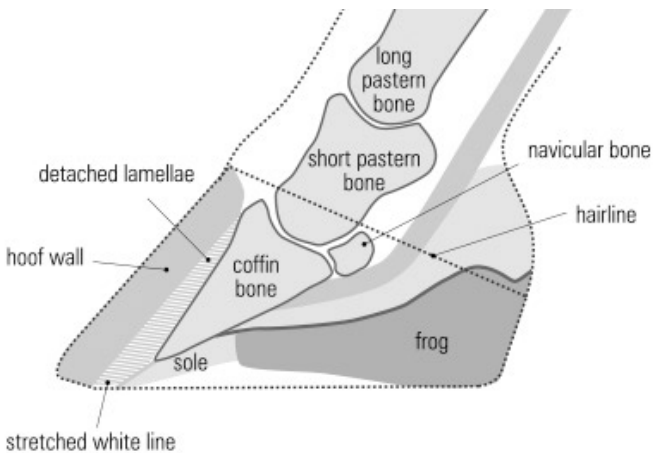


*Hoof capsule and laminae*

The hoof capsule, which is made up of the hoof wall, sole and frog, is the external part of the hoof that we see. It also has a set of laminae on its inside.



In a healthy hoof (diagram above) the coffin bone sits high in the hoof capsule (relative to the hairline) and the front edge of the coffin bone is parallel to the hoof wall at the toe. In a horse that has foundered, the bone and hoof wall are no longer parallel - see diagram below.



## Chapter Fourteen

# ABOUT THE AUTHOR



Jenny Edwards has over 30 years' experience in the horse industry, including 13 years as a barefoot trimmer. She witnessed first-hand the devastating effects of laminitis when her heart-horse Tuff N Class Two suffered from it in 2000. Since that time she has been dedicated to learning how to help horses live healthier, happier lives.

She created the website [www.all-natural-horse-care.com](http://www.all-natural-horse-care.com) in 2006 in an effort to share her knowledge and in doing so, help horses all around the world.

**You've reached the end of this sample of the  
Equine Laminitis eBook.**

**You can purchase the  
complete eBook by [clicking here](#)**