Navicular Disease — Navicular Syndrome ALTERNATIVE VETERINARY MEDICINE CENTRE Article WS133/07 Christopher Day - Veterinary Surgeon

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NAVICULAR DISEASE - NAVICULAR SYNDROME

Navicular Disease is a disease name which understandably strikes horror into any person who is involved with a horse, about whom such a diagnosis is made. I say *understandably* because the traditional view of navicular is as an incurable, progressive, crippling disease, generally eventually resulting in a horse being laid off or, ultimately, put down. The current conventionally-accepted prognosis is pretty grim.

However, there is hope. Ever since the first case of navicular which I was asked to treat, and with which I took up the challenge with some trepidation, I have witnessed a great many horses, properly diagnosed by nerve-blocks, X-ray and clinical signs, returning to full work long-term. All this is without the use of any anti-inflammatory drugs. Results have, however, been less satisfactory, if a case has been taken on following surgery such as desmotomy or neurotomy.

The nature of the disease

What, then, is Navicular Disease? It is, strictly speaking, any degenerative change in the navicular bone, which is seated behind the coffin joint in the foot. This small bone acts as a type of pulley, over which runs the deep digital flexor tendon, on its way to insert on the 'coffin bone' or pedal bone. Pathology in the navicular bone varies widely in different cases. There can be damage to the flexor (posterior) surface of the bone and overlying tendon. Some show rarefaction of the substance of the bone. Others may suffer erosion of mineralisation in the distal (lower) border of the bone or osteophyte (new bone) formation on the lateral or proximal (upper) borders of the bone. Some may have bursitis in that area. Other names for the syndrome are Podotrochleosis or Podotrochleitis. The disease is usually seen only in one or both fore feet and is not usually seen in ponies or donkeys. Since the late 90's, a slightly more enlightened terminology has crept in, by which a number of these cases are labelled as 'distal limb degenerative disease' or similar nomenclature. This is a

more general, descriptive, meaningful and enlightening term, since it embraces the possibility of concomitant pathology in other distal limb structures.

Diagnosis

The disease is usually diagnosed by a combination of clinical findings, nerveblock techniques and X-Radiography. However, very often, diagnosis can be more or less conclusively made from clinical symptoms and conformation changes. The horse tends to stand with either fore foot held slightly ahead of the other and makes 'easing' movements, by lifting the heel slightly off the ground. In motion the horse is reported, in the early stages, to be apt to stumble and to be 'short' on that limb, often sporadically at first. There are usually intermittent lameness symptoms, progressing to consistent lameness in more advanced cases. A particular difficulty for the sufferer is to turn tightly, especially with the worse-affected foot on the inside of the turn.

The foot itself undergoes visible and palpable changes: the heel contracts, the frog becomes smaller, the foot appears narrower and often taller and the pliability and resilience of the soft and elastic structures of the foot are usually severely reduced. There is a built-in vicious spiral able to operate here, in that the inherent flexibility of the normal foot allows for a pumping action as the foot expands and contracts with the alternate weight-bearing and lifting action of a normal stride. This makes for good circulation. As the foot contracts in navicular disease and pliability is lost, so the circulation of the foot suffers. The poorer circulation leads to more contracture and more degeneration and so on. This is the 'disease spiral'.

Aetiology

It is not certain what factors are involved with the onset of navicular in any given horse but, certainly, any agent which serves to reduce natural foot flexibility must be considered. Shoeing must be an important factor and correct shoeing to allow full movement of frog and heel is essential in prevention. We see badly balanced feet as a prominent factor in many cases. A T-bar is essential for proper checking of the foot balance of both fore feet. Another potent factor is the <u>saddling</u>. Leaving shoes off, sorting the saddle and attending to foot development is one way to start a 'cure'.

A saddle which is too tight at the wither or which causes 'dipping' of the spine will cause a tightness in the shoulders and a stabbing action with the forelimbs. This increases concussion and makes for incorrect use of the fore feet. The result of incorrect action is impaired function, leading to poor structure. The sad truth is that the majority of horses I see have ill-fitting saddles. Another factor

common in the cases I have seen, is a <u>misaligned pelvis</u>, usually on the diagonal to the worse-affected fore limb.

Chances of cure

With all the severe changes which we have listed above, which occur in Navicular Disease, what hope of cure is there? Two factors, which are commonly overlooked, give us the opportunity for real and lasting cure. These are, firstly, the seemingly miraculous power and will of the body to heal itself and, secondly, the lability and mutability of bone and other structures, which are usually and incorrectly thought of as 'solid', 'fixed' and permanent. Bone is 'turned over' in the body on a roughly 200-day cycle, giving it its capacity for change for the worse and, of course, ipso facto, providing boundless potential for re-organisation for the better. What is needed is the appropriate stimulus and guidance to healing, provided by homeopathy and/or herbs (possibly aided by acupuncture and chiropractic manipulation), along with sympathetic farriery and regular tailored exercise schedules. The farriery may include egg-bar shoeing or grooving of the lateral walls of the heels or even no shoeing at all, with regular trimming. Raising the heel and rolling the toe can make the horse more comfortable in the short term but the former leads to shortening of the tendons and possible further contracture of the heel, so it is not a measure I advise. Exercise routines are worked out carefully in consultation with the rider/handler, in order to provide the body with the necessary signals for healing. Great attention is paid, also, to other very important factors such as teeth, back, pelvis, saddle, diet*, etc. These are examined rigorously, for possible contributory factors or for factors able to obstruct healing.

Therapy

As far as therapy is concerned, **homeopathy** is the mainstay. Since Navicular Syndrome is a chronic disease, the 'constitution' of the horse is a major factor to consider in selecting treatment. We need to know build, demeanour, behaviour, full medical history including other, seemingly-unrelated problems, appetite, thirst, body functions, likes, dislikes, modalities (factors affecting symptoms), particular characteristics of this patient's navicular symptoms, vaccination history etc. A homeopathic remedy is selected, taking into account all these factors, as they relate to a particular horse and this we call the 'constitutional remedy'. This strengthens the constitution and *stimulates* and *enables* healing. More specific 'local' help may be sought (i.e. medication to help at the site of trouble but still usually given systemically), via a more locally-active medication such as a suitable *Calcarea* remedy and/or compatible herbs.

If the extra help of **acupuncture** should be deemed necessary, a full meridian assessment is required. I usually do this assessment in all cases, anyway, to see

if acupuncture is likely to be helpful. If there is severe imbalance in the meridians, then appropriate needling is necessary and is applied forthwith. This is sometimes repeated or, depending upon the severity, we may be able to leave continuation treatment to internal medication.

If herbs are employed, and here I make a plea that they should be part of an integrated programme and not just an 'off-the-shelf' commercial product, then it is wise to seek qualified veterinary advice on their use. Not all herbs are compatible with each other nor with other therapies, and no single prescription suits all horses. The fashionable herbal supplements, which have proliferated so extensively in the last few years, thanks to very vigorous marketing, provide a bewildering array and choice. Most, however, are thrown together by companies, which have little or no knowledge and understanding of the subject and with no motivation other than commercial interest. Some have other, less attractive, undeclared additives. You are wise, at least, never to buy supplements or feeds which do not have a comprehensive list of ingredients upon the label. You are wise to ignore the pseudo-legal medical claims and implied claims, which you can find on so many products. In the summer months at least, appropriate herbs are available, free-of-charge, in the fields and hedgerows around your home or yard. Herbs such as comfrey, nettles, willow, meadowsweet, dandelion, burdock or goosegrass may be able to play a part in cure, if advised as part of an integrated therapeutic programme, properly designed around your particular horse. If you are collecting herbs, be warned to avoid those by the side of busy roads, because of the fall-out of exhaust fumes, containing the by-products of the internal-combustion engine. These should not now contain lead, but there are arguably worse toxins in modern fuels. There is also the real risk of brake dust (possibly with asbestos), heavy metals and combustion products of motor lubricant oils.

Chiropractic manipulation is an essential part of therapy, in most cases. Incorrect spinal alignment will inevitably hinder healing.

Results

As a result of this type of therapy, well over 90% of navicular cases, so treated, show very positive improvements, usually within a month. Bad cases should be rideable again, with a steady improvement, over the next few months. We tend to plan for a possible six month programme, prior to putting them back into work but often find them pre-empting this by a variable margin. Some cases (few), sadly, never regain full work but can be comfortable and symptom-free for hacking work. A very few fail to respond at all. One of the major consistent findings, in the history of non-responders, is a heavy loading with *Phenylbutazone* (Bute) or other anti-inflammatory drugs, prior to natural therapies being employed. Low doses of such drugs for short periods, prior to

the use of natural therapy, appear to be well-tolerated and do not seem to affect significantly the final outcome. Large doses or long-term dosage régimes do seem to have a very negative influence.

What appears to happen, in response to a correctly-applied natural therapy stimulus, is a reversal of that vicious spiral to which we referred above. The foot becomes more flexible. A 'spring' can be felt to return to the soft-tissue structures. The heel and frog expand and pain is successively diminished and lost. It would seem that this truly wonderful capacity of the body, to heal and to regenerate, may actually be directly inhibited by conventional anti-inflammatory drugs, in addition to their desired effects of pain reduction and undesired but inevitable side-effects on internal organs and biochemical mechanisms. This inhibitory effect can be permanent, if their powerful suppression is continued for too long. The drugs, which are used nowadays to thin the blood, thereby to affect blood circulation in the foot, happily do not seem to have the same potential for such a bad long-term effect on ultimate healing but they should not be necessary in holistically-treated cases.

Summary

In summary, it is fair to say that a disease, which may traditionally have been considered to be incurable and progressive, need not carry such a gloomy outlook under the influence of correctly-applied natural medicine. The other 'foot' problems often encountered in horses, such as ringbone, sidebone and pedal ostitis, which also come under the umbrella term of 'distal limb degenerative disease', can show similar very favourable responses to régimes, devised on a similar basis.

From an article written in November 1993

See also: http://www.alternativevet.org/Navicular%20WS055-07.pdf

See also: http://www.equineacupuncturevet.co.uk

*Diet and healthy feeding is the subject of a separate article by the same author

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