



info@tryonequine.com
www.tryonequine.com

P.O. Box 547 / 155B Shuford Road
Columbus, NC 28722

Office (828) 894-6065
Fax (828) 894-6302

What is navicular disease? How is it diagnosed? How do you treat a horse with navicular disease?

The definition and exact cause of navicular disease /syndrome remains controversial. The term is commonly used when radiographic changes to the navicular bone are evident. However, several soft tissue structures closely related to the navicular bone can be injured separately or concurrently with the navicular bone.

Horses with navicular disease/syndrome usually display a lameness of both forelimbs that is resolved after local anesthetic is placed over the nerves that supply sensation to the heels of the foot. Diagnosis of navicular disease is based on history, [lameness evaluation](#), response to diagnostic blocks, and diagnostic imaging. Diagnostic imaging may include [radiography](#) and/or MRI. [Ultrasonographic imaging](#) of the soft tissue structures surrounding the navicular bone can be attempted, but is limited by the presence of the hoof wall.

Medical treatments for navicular disease often include rest and controlled exercise, corrective trimming and shoeing, non-steroidal anti-inflammatory medication (bute/banamine/firocoxib), and intrasynovial medications. [Corrective shoeing](#) is performed to reduce abnormal biomechanical forces on the navicular bone. This is done by correcting imbalance, supporting the heels, and shortening the toe while easing the break over of the foot. Intrasynovial medications (steroids and hyaluronic acid) can be administered into the coffin joint or the navicular bursa in an attempt to reduce the inflammation of the navicular apparatus in horses that have minimal response to controlled exercise in conjunction with corrective shoeing. Other medications that may be discussed include isoxsuprine and tiludronate. Isoxsuprine is an oral medication that may be prescribed in horses with mild radiographic changes, but the drug's effect is variable. The drug is thought to help with increasing blood flow to the navicular bone and one of the theories behind

navicular disease is that there is a lack of blood flow to the navicular bone causing the pathological bony changes, but this theory has fallen somewhat out of favor. Tiludronate (tiludron) is administered to reduce the bone turnover/resorption which occurs in navicular disease. Lastly, horses that have been appropriately treated, but fail to respond to medical treatment may be candidates for palmar digital neurectomy. Palmar digital neurectomy involves removal of the nerves along the back of the pastern that supply sensation to the back of the heel. This procedure is by no means permanent and the nerves are expected to regrow within 2 years. The procedure is not taken lightly and not all horses with navicular syndrome are candidates for the surgery.

Answered By: [Lindsey Boone, DVM, PhD](#)