

MID-HUDSON VETERINARY PRACTICE

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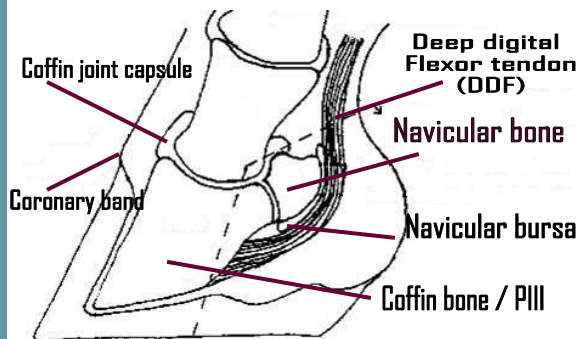
Navicular Syndrome

Navicular syndrome is a soundness problem in horses and is not a disease.

Navicular syndrome is one of the most common causes of forelimb lameness in the horse. Typically, both front feet are involved although one foot can be more severely affected than the other.

LOCATION & FUNCTION

The navicular bone lies behind the coffin bone and is held in place by tendons and ligaments. The bone provides a wide smooth bearing surface for the deep digital flexor (DDF) tendon—the tendon that flexes the joints of the foot—to glide over. The navicular bursa (a fluid filled sac)



provides a cushion between the tendon and the bone. The navicular bone absorbs

concussive forces from the back of the hoof and dispels them into the spongy cushion in heel. In addition, the navicular bone acts as a blood flow valve to the coffin bone and corium inside the hoof.

CAUSES OF NAVICULAR SYNDROME

Inflammation or degeneration of the navicular bone and/or surrounding connective tissues results in pain and awkward gait.

Factors that may contribute to navicular syndrome

- ♦ *Conformation defects: small feet, upright pasterns, long toes and low heels*

- ♦ *Intense concussive activity*
- ♦ *Long periods of standing or confinement (decreased blood flow)*
- ♦ *Obesity*
- ♦ *Improper shoeing or trimming*

SYMPTOMS

- ♦ Short “choppy” stride resembling shoulder lameness or injury
- ♦ Tripping, stumbling gait
- ♦ Continuous weight shifting when resting
- ♦ “Tiptoe” walking
- ♦ Heel pain with hoof testers

DIAGNOSIS

The diagnosis of navicular syndrome includes a full lameness evaluation using hoof testers, diagnostic nerve blocks and radiographs. Occasionally, other imaging methods such as MRI and nuclear bone scans are needed to reveal further information.

TREATMENT

Degenerative changes that have already occurred are not reversible. The condition can be managed by relieving pain and slowing the degenerative process in a few ways. Treatment includes therapeutic trimming and shoeing as well as a number of medications to improve blood flow to the foot. Tildren, an osteoporosis treatment, is being used to treat navicular damage with the goal of strengthening the bone. Its use has been met with good results. Dietary changes for weight management and an exercise program can help these horses feel better and enjoy a normal active life.

Characteristics that are most likely to contribute to navicular syndrome:

- ♦ *Small diameter, disproportionate, feet*
- ♦ *Obesity*
- ♦ *Improper shoeing*
- ♦ *Low heels*
- ♦ *Long toes*
- ♦ *Upright pasterns*
- ♦ *Excessive confinement*



Emergency Kits are available for purchase from our office.

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