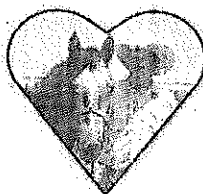




Hey Neighbor



For The Love Of Horses

By Frank J. Buchman

Splints Usually Only Cosmetic Flaw

While being fairly common, splints, appearing as bumps or growths on the insides of horses' lower front legs, do not typically cause performance problems on mature working horses.

"On each side of the cannon bone on the lower front leg is a long narrow bone known as the splint bone," said Wayne Loch, University of Missouri horse specialist. "The small splint bones are thin and taper to become a small knob about two-thirds of the way down the cannon bone.

"A ligament, located between the cannon bone and splint bones, is quite elastic in young horses," Loch continued. "As the horse ages, the ligament ossifies, and the ligament is replaced by bone so the three bones are fused."

There are two main conditions that affect the splint bones. The term "splints" commonly refers to an in-

flammatory condition and a calcium lump on the bone. "Broken splint bone" is a fracture of the splint bone and a calcium lump where it is trying to heal.

Most often, the inside splint bones of forelimbs are affected. Rarely do splint problems occur in the hind limbs.

"When lameness in the splint bone area occurs, the two problem conditions may be confused and need to be differentiated," Loch emphasized.

There are two main causes of splints. "When the cannon bone is not centered under the knee, this conformation fault can cause excessive pressure on the splint bone, moving it up and down and irritating the cartilage. Blood is drawn to the area forming a calcium lump on the inside of the leg," Loch explained.

Second cause of splints, and the one talked about

most, is from injury or pressure of training.

"Lameness from splints is most common in two-year-old horses in training," Loch said. "The lameness is most obvious while the horse is trotting or working or soon thereafter. Lameness may come and go or be present continuously for as long as a year."

When the cannon bone is

rubbed up and down, the horse will often flinch while the portion of the ligament is undergoing ossification.

"A large swelling or a number of smaller swellings due to ossification may occur along the length of the splint bones," Loch detailed. "After the ligament has ossified, the swelling and soreness disappears, but the calcium lumps will remain for the rest of the horse's life."

There would typically be no lameness after the bone has matured. "An exception to this could be when the calcification from the injury was high and interfered with the knee joint movement," Loch noted. "Surgery may be helpful in these difficult conditions."

Prevention is not always possible, but it's better than

treatment. "Always use splint boots on young horses, especially reining, cutting and race horses, to help prevent the injuries," the specialist recommended.

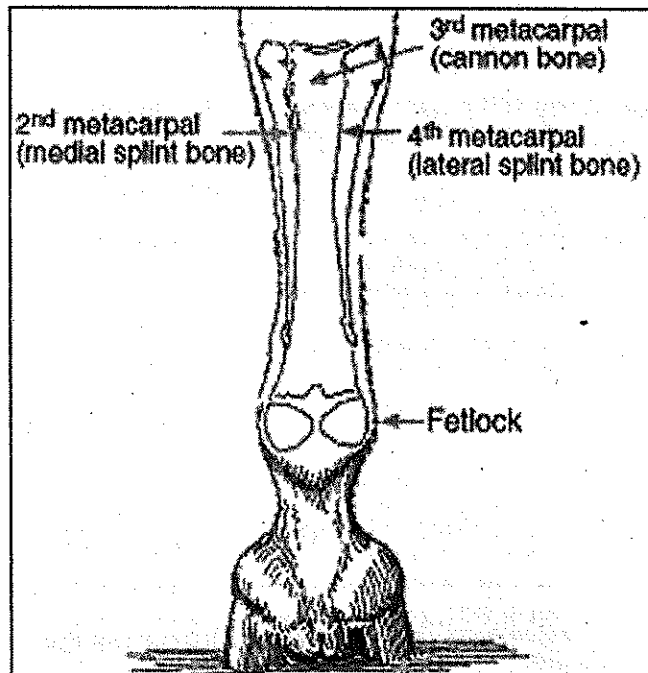
Exercising a young horse in a circle puts excessive pressure on the splint bones. "Although working horses in round pens and circling are popular training methods, it's better to pony colts on another horse and work them in a straight line," Loch pointed out.

There are different opinions on treatment for splints, but everyone agrees that the horse should be rested for at least 30 days or as long as lameness persists. The horse should also be placed on soft ground.

"Veterinarians may use medications to reduce inflammation and prevent excessive bone growth, but splints can also heal without medication and treatment," Loch declared.

"Firing," with hot needles, has been a common treatment for splints, in previous years, specifically for race horses. The procedure is not used much any more, usually because of the scars that are created, according to the Loch.

"Firing irritates the area, causing blood to flow and form calcium deposits, stabilizing the bone and speeding splint bone attachment to the cannon bone," he commented. Horses that have had splints "fired" will have dark broken line scars



On each side of a horse's cannon bone is a small bone known as the splint bone. The small splint bones are thin and taper to become a small knob about two-thirds of the way down the cannon bone. Ligament between the three bones is elastic in young horses and ossifies as the horse matures, fusing the bones.

along the splint bone.

"Rest does more good than anything for splints," Loch said.

Fractures of the splint bones can occur as a result of external trauma, such as a kick from another horse or from the horse interfering with itself, the horse specialist said.

These breaks are usually in the lower third of the bone and are accompanied by heat, pain and swelling. "Mature working horses can have broken splint bones," Loch indicated.

Radiographs are necessary for positive diagnosis of a fracture. "A veterinarian is needed and surgery may be necessary to remove the distal fragment of the fractured splint," Loch said. "This may be unnecessary in cases in which healing is progressing and minimal callus formation and lameness are present."

With proper treatment, horses with broken splints

typically return to complete soundness and usefulness.

While it might not prevent splints, horse's feed rations are key for strong bones and growth. "A good calcium-phosphorous ratio in the diet will help insure normal bone development," Loch clarified.

Grains are low in calcium, so calcium might need to be added to a horse ration with only grain and grass hay. Legume hay will balance calcium needs with grain.

Splints are more of a cosmetic flaw than performance problem in mature working horses.

Splints Usually Only Cosmetic Flaw On Mature Horses

While being fairly common, splints, appearing as bumps or growths on the insides of horses' lower front legs, do not typically cause performance problems on mature working horses.

"On each side of the cannon bone on the lower front leg is a long narrow bone known as the splint bone," described Wayne Loch, University of Missouri horse specialist. "The small splint bones are thin and taper to become a small knob about two-thirds of the way down the cannon bone.

"A ligament, located between the cannon bone and splint bones, is quite elastic in young horses," Loch continued. "As the horse ages, the ligament ossifies, and the ligament is replaced by bone so the three bones are fused."

There are two main conditions that affect the splint bones. The term "splints" commonly refers to an inflammatory condition and a calcium lump on the bone. "Broken splint bone" is a fracture of the splint bone and a calcium lump where it is trying to heal.

Most often, the inside splint bones of forelimbs are affected. Rarely do splint problems occur in the hind limbs.

"When lameness in the splint bone area occurs, the two problem conditions may be confused and need to be differentiated," Loch emphasized.

There are two main causes of splints. "When the cannon bone is not centered under the knee, this conformation fault can cause excessive pressure on the splint bone, moving it up and down and irritating the cartilage. Blood is drawn to the area forming a calcium lump on the inside of the leg," Loch explained.

Second cause of splints, and the one talked about most, is from injury or pressure of training.

"Lameness from splints is most common in two-year-old horses in training," Loch related. "The lameness is most obvious while the horse is trotting or working or soon thereafter. Lameness may come and go or be present continuously for as long as a year."

When the cannon bone is rubbed up and down, the horse will often flinch while the portion of the ligament is undergoing ossification.

"A large swelling or a number of smaller swellings due to ossification may occur along the length of the splint bones," Loch detailed. "After the ligament has ossified, the swelling and soreness disappears, but the calcium lumps will remain for the rest of the horse's life."

There would typically be no lameness after the bone has matured. "An exception to this could be when the calcification from the injury was high and interfered with the knee joint movement," Loch noted. "Surgery may be helpful in these difficult conditions."

Prevention is not always possible, but it's better than treatment. "Always use splint boots on young horses, especially reining, cutting and race horses, to help prevent the injuries," the specialist recommended.

Exercising a young horse in a circle puts excessive pressure on the splint bones. "Although working horses in round pens and circling are popular training methods, it's better to pony colts on another horse and work them in a straight line," Loch pointed out.

There are different opinions on treatment for splints, but everyone agrees that the horse should be rested for at least 30 days or as long as lameness persists. The horse should also be placed on soft ground.

"Veterinarians may use medications to reduce inflammation and prevent excessive bone growth, but splints can also heal without medication and treatment," Loch declared.

"Firing," with hot needles, has been a common treatment for splints, in previous years, specifically for race horses. The procedure is not used much any more, usually because of the scars that are created, according to the Loch.

"Firing irritates the area, causing blood to flow and form calcium deposits, stabilizing the bone and speeding splint bone attachment to the cannon bone," he commented. Horses that have had splints "fired" will have dark broken line scars along the splint bone.

"Rest does more good than anything for splints," Loch added.

Fractures of the splint bones can occur as a result of external trauma, such as a kick from another horse or from the horse interfering with itself, the horse specialist said.

These breaks are usually in the lower third of the bone and are accompanied by heat, pain and swelling. "Mature working horses can have broken splint bones," Loch indicated.

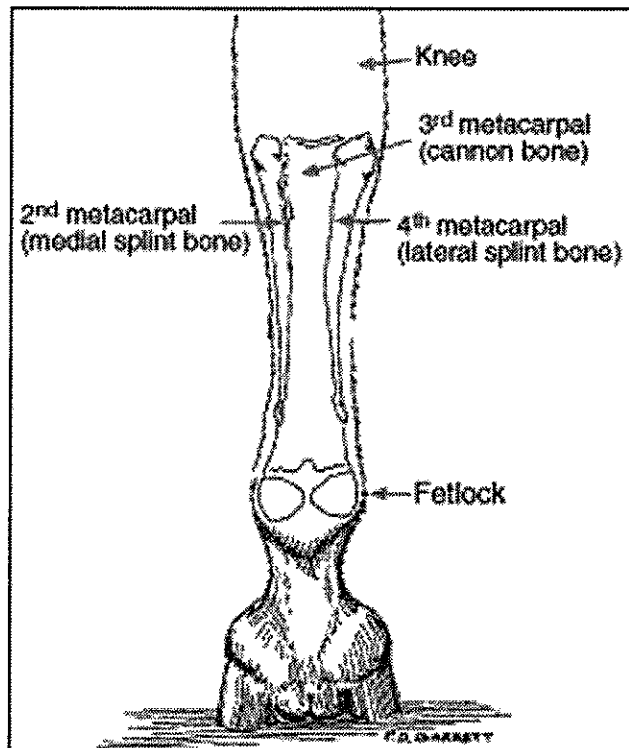
Radiographs are necessary for positive diagnosis of a fracture. "A veterinarian is needed and surgery may be necessary to remove the distal fragment of the fractured splint," Loch verified. "This may be unnecessary in cases in which healing is progressing and minimal callous formation and lameness are present."

With proper treatment, horses with broken splints typically return to complete soundness and usefulness.

While it might not prevent splints, horse's feed rations are key for strong bones and growth. "A good calcium-phosphorous ratio in the diet will help insure normal bone development," Loch clarified.

Grains are low in calcium, so calcium might need to be added to a horse ration with only grain and grass hay. Legume hay will balance calcium needs with grain.

Splints are more of a cosmetic flaw than performance problem in mature working horses.



On each side of a horse's cannon bone is a small bone known as the splint bone. The small splint bones are thin and taper to become a small knob about two-thirds of the way down the cannon bone. Ligament between the three bones is elastic in young horses and ossifies as the horse matures, fusing the bones.