Fixing Neck Fractures in Horses? It’s Possible

Maybe your horse careened across his pasture before losing his footing and taking a spill. Or perhaps he fell over a jump during training or competition. However it happened, your horse has fractured a bone in his neck.

Until recently, few attempts have been made to surgically repair these injuries. However, French veterinarians recently tested a surgical procedure on three horses that sustained fractured vertebrae in falls. All three horses exhibited neck stiffness, pain, and some degree of ataxia (incoordination), making them good candidates for the procedure.

Rossignol and colleagues used a locking compression plate to repair fractured cervical vertebrae. Photo: Courtesy Fabrice Rossignol, PhD, DVM, Dipl. ECVS

Essentially, Rossignol and colleagues used a locking compression plate to repair fractured cervical vertebrae and even fuse two fractured vertebrae and an intervertebral disc in one case. Locking compression plates offer stability, which helps improve bone healing, he said. “The locking implants use screws, which lock into the bone, and a plate with a threaded head,” making these implants strong, Rossignol said.

The horses in this study (one of which is seen here after the fracture was repaired) recovered well and returned to work. Photo: Courtesy Fabrice Rossignol, PhD, DVM, Dipl. ECVS

Following surgery, all three horses successfully returned to their respective careers as a show jumper, a low-level dressage horse, and a flat racehorse.

While the results were positive in these cases, Rossignol noted that not all horses with vertebral fractures are good candidates for this procedure.

“Unfortunately, horses lying down (and unable to rise) or those that have sustained major damage to the spinal cord cannot be saved,” he said.

The study, “Internal fixation of cervical fractures in three horses,” was published in Veterinary Surgery.

“A horse that has a vertebral fracture without severe neurologic disorders could be a good candidate for the procedure. Photo: Courtesy Fabrice Rossignol, PhD, DVM, Dipl. ECVS

“A horse that has a fracture of the body of one or two vertebrae without (severe) neurologic disorders may be a good candidate for a locking compression plate (or LCP) procedure,” explained Fabrice Rossignol, DVM, Dipl. ECVS, a surgeon at Clinique Équine de Grosbois, in Boissy-Saint-Léger, France.