



Ingested Wires Cause Colic, Adhesions

by: Christa Lesté-Lasserre

April 04 2009 Article # 13899

When ingested, small wires can wreak havoc in the equine digestive system. They might even cause different segments of the tract to fuse together, leading to painful and usually fatal consequences, according to South African and American researchers who recently published a study on the subject.

The four cases discussed in the medical review, which appeared in *The Veterinary Record* in January, ranged in age from 11 months to 16 years. All of the horses died or were euthanized following the development of adhesions caused by wires that had pierced the walls of the intestines, according to the study.



A 5cm metallic wire that perforated the small intestine of an 11-month-old Arabian filly.

"As the wire penetrates an intestinal wall, there is a minute amount of intestinal content which 'leaks' and contaminates the area outside that intestinal loop," said Montague N. Saulez, BVSc, MS, Dipl. ACVIM, PhD, MRCVS, associate professor of Equine Medicine at the University of Pretoria's Faculty of Veterinary Science and primary author of the study. "The body reacts by setting up an inflammatory reaction to 'wall off' the inflammation. This formation of adhesions is a natural defense mechanism of the body to localize inflammation, but it also has its consequences, including recurrent bouts of colic due to pain when the adhesion pulls on the affected intestine."

Although three of the horses clearly suffered from acute abdominal pain, one horse, a 2-year-old Morgan filly, presented with a two-month history of diarrhea, fever, weight loss, and abdominal bloating.

Distinguishing wire perforation-related colic and other kinds of colic might be difficult, as the clinical signs are much the same, Saulez said. "However, with horses that chronically colic, this is a differential diagnosis to consider," he said. As abdominal ultrasounds might not be able to detect wires that are located in deeper tissues, radiographs should be used as a diagnostic tool to locate the number and location of metallic foreign objects, such as wires.

Although previous research has shown that horses are far more selective in their grazing than ruminants, they do occasionally pick up wires accidentally. Two primary sources of these wires have been found: poor hay baling techniques and recycled tires used for feed bins. "People should always purchase their hay from reputable dealers," he said. "And never feed from old tractor tires or anything that might include small ingestible objects."

Readers are cautioned to seek the advice of a qualified veterinarian



before proceeding with any diagnosis, treatment, or therapy.

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