Enteroliths in Horses: Does my Horse have a ‘Rock’?
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Enteroliths are mineral masses that form in the large bowel of horses, often around a nidus or small foreign body that the horse has swallowed such as pieces of plastic, lead rope or even nails (Figure 1). Enteroliths are primarily (approximately 90%) made of a mineral called Struvite with the remaining 10% being made up of a mix other minerals. Affected horses may have one or more enteroliths, which may range from pea sized up to a large orange in size. Enteroliths have been reported in most breeds of horse, but they are more commonly seen in horses of Arabian breed types and horses older than 10 years. They are most commonly seen in certain states in the USA predominately in California and Florida, but they have been reported in certain geographical areas in NSW such as on the Central Coast and in Sydney’s Northern Beaches.

Figure 1: Radiograph of an enterolith showing a nail at the centre of it. (picture courtesy Dr Alex Young UVTHC)

What signs will my horse show if it has an Enterolith?
The signs of enterolithiasis range from severe colic, to mild signs of abdominal pain. The more severe colic episodes are caused when the enteroliths move down the bowel and cause a complete blockage. Horses that have smaller enteroliths or less severe pain show signs including stretching out as if to urinate often, flank watching, mild colic symptoms associated with or immediately after exercise.
How are Enteroliths diagnosed?
Enteroliths are diagnosed based on tests such as abdominal x-rays and palpation per rectum. Not all Veterinary Practices have x-ray machines capable of taking abdominal radiographs of horses, as the exposures required are very large. In geographical areas where enteroliths are very common, horses may have an elective laparotomy (non-emergency colic surgery) to diagnose and remove them.

Figure 2: Abdominal radiograph of a warmblood gelding who was showing non-specific colic signs and straining to urinate when at competitions.

What treatment is available for Enteroliths?
Once they are diagnosed enteroliths should be surgically removed to prevent any damage to the bowel, and to prevent the enterolith moving down to where the colon narrows and where it may lodge and cause an obstruction and severe colic.
How do I prevent Enteroliths?
In geographical areas where enteroliths are common, it has been shown that feeding of lucerne hay increases the risk of these rocks developing. It is recommended that if you keep horses in such an area that the amount of lucerne hay be less than 50% of the roughage fed to your horse.

Supplementing the feed with a cup of apple cider vinegar in an attempt to lower the pH of the large colon is a popular (but unproven) preventative. Encouraging normal gastrointestinal motility is also an important way of preventing this condition, so regular exercise and as much time grazing pasture as possible is another important part of managing horses to help prevent this condition developing.