

# Ask A Vet: Quarter Cracks

*Sunday, August 24, 2014*

Dear Dr. Weldy's,

Our riding horse has developed a quarter crack that just will not go away. Our farrier is working on it, but it is slow going. How can we prevent these in the first place?

Dear Reader,

Cracks in the hoof are a fairly common occurrence for our equine friends. Usually known as "quarter cracks" or "heel cracks", depending on their location anatomically, they can lead to lameness if left untreated. Trauma to the hoof wall is the number one reason for quarter cracks. Horses stomp when they are impatient or to get rid of flies. On hard surfaces, stomping can chip the edge of the hoof, leading to an ascending crack. Likewise fast movement over hard or rocky ground can chip the hoof wall. To cut down on the fly population, clean stalls daily and spread the manure and bedding frequently. Manure piles that aren't removed right away can be treated with insecticides and larvicides. "Fly Predators", a type of fly larvae killing wasp, can replace the chemicals if you prefer. Either way, frequent application is needed.

Sometimes an injury to the coronary band at the top of the hoof can eventually weaken the hoof in that area. The coronary band is the germinal tissue that gives rise to the horn material. The hoof grows down from the coronary band much like your fingernail grows from the nail root located under the cuticle. If there is a break or scarring of the coronary band, that will translate into abnormal horn growth leading to a hoof wall defect which may be prone to splitting.

Nutritional deficiencies and/or genetics can produce weak horn that fractures easily. We usually recommend a comprehensive mineral supplement designed for hoof growth. The hoof is a very complex organ, requiring many macro and micro nutrients. Beware of the hoof supplement that only supplies one or two ingredients. Speak to your veterinarian about specific supplements and ingredients. However, a lot of cracks are due to hoof imbalances. These tend to be persistent and require constant farrier care. Long toes combined with underrun heels are a common problem that can lead to a quarter or heel crack. Frequent trimming and possibly shoeing is critical to success. Since each horse is an individual, talk to your farrier about whether shoes are best for your horse. Some do very well without shoes depending on their feet and activity level.

-Dr. Wade Hammond