Fact Sheet Queensland Horse Council Inc.

Tying Up - Azoturia

Tying-up is also known as Azoturia, Monday morning disease, or paralytic myoglobinuria. The term tying-up is commonly used to describe horses that are stiff, sweaty, and reluctant to move due to pain originating from the large muscle groups in the back, pelvis, and hind limbs. In rare cases, the muscle in the forelimbs and shoulders can be affected. Mild cases of tying-up can be challenging to diagnose because the horse might only seem stiff, "off," or lame.

Horses with a moderate or severe tying-up episode show not only the classic signs described above, but can also have elevated heart and respiratory rates and appear anxious or colicky. The urine can be stained dark red or brown from damage to affected muscles. Very infrequently, in severely affected horses, massive muscle damage can occur, which leads to kidney failure and death. Horses can tie up either unexpectedly or sporadically, or it can be a chronic, ongoing, and frustrating problem. Potential reasons for sporadically tying-up include exercising beyond the current level of conditioning; sudden changes in training regimens; exercising in hot, humid conditions; a recent history of a viral respiratory tract infection; gender (high-strung/nervous fillies and mares appear to tie up more frequently than males); and dietary issues

Like any disease, it is always important to distinguish a suspected tying-up episode from other, more serious musculoskeletal conditions such as a fracture, laminitis, or conditions such as neurological diseases. Signs associated with the accidental ingestion of poisonous plants or other toxins can also be mistaken for tying-up.

If you suspect your horse is tying-up, stop exercising the horse immediately and place him/her in a stall and call your veterinarian. Affected horses should not be moved, walked, or exercised. While waiting on your vet, place a blanket on your horse the weather is cool and offer small, frequent amounts of water. You also might offer a salt block or a bucket of water with electrolytes added to it. Offer hay only until directed otherwise by your veterinarian.

Since there are multiple causes of tying up, there is no one single treatment plan. Your veterinarian will treat the horse depending on the severity and underlying cause. Most horses recover within a few days of tying-up, but severe cases can take 10 days or more. Once the horse begins to move painfree, he can have small paddock turnout. Once enzyme levels are at or near normal limits, activity can be slowly reintroduced. Some horses with chronic tying-up are kept active even when their muscle enzyme levels are above normal as total rest seems to exacerbate signs of muscle stiffness.

Your veterinarian will recommend specific preventive strategies based on the cause of your horse's tying-up, but there are some general ways to help prevent episodes. For example, maintain a regular exercise regime and increase training gradually, not abruptly. In young, high-strung fillies, establish a daily routine, minimize stress, and modify her diet to include a balanced vitamin and mineral supplement, feed high-quality hay with minimal grain and sweet feed, and increase the amount of fat fed (in the form of vegetable oil, for example). These dietary changes can be appropriate for other horses suffering from chronic or recurrent tying-up.

