The only recognized effective treatment is to subject the horse to cooler conditions. These horses will have patchy or inadequate sweating. The degree of anhidrosis is variable, some horses will retain the ability to sweat under stressful conditions, while others will become dry, scaly and itchy. There is no cure for the condition, however a number of nutritional supplements have been advocated for anhidrosis. It is common for horses exercising in hot humid conditions to suffer from some degree of anhidrosis and some horses may never regain the ability to sweat properly again. It is also believed that if horses regain the ability to sweat freely after being moved to a cooler climate that anhidrosis will recur when they return to a hot humid climate.

Can I prevent it occurring?
As the cause is unclear it is difficult to predict if anhidrosis will occur when they are kept in hot and humid climates. The condition may be prevented if the horse is relocated to a cooler climate. It is important however that if an anhidrotic horse is kept in a hot environment, that exercise and environmental management procedures are followed (as outlined above) to minimize the risk of heat stress.

Emergency treatment for the heat stressed horse.
Horses with anhidrosis are at risk of overheating when competing in three-day events in high heat and humidity, particularly after the cross-country phase. Normally a fatigued horse will recover in 10-30 minutes with simple bathing and voluntary water intake.

Horses with heat stress however are in shock and do not recover with normal management. They are depressed, unwilling to drink, unwilling to walk, show signs of dehydration and may be staggering or collapsed. These horses require aggressive active cooling as described above and intensive care therapy with large volumes of intravenous fluids and other shock therapy. They should not be forced to move and transported back to a stall when stabilized. Further competition is not permitted.

References

What is it?
Like the horse pictured here, horses rely on sweating for regulating body temperature and avoiding overheating.

Anhidrosis, or “drycoat” is defined as a decrease or loss of ability to sweat in response to appropriate stimuli such as heat or exercise. If horses cannot regulate their temperature, they do not perform well and in severe cases this can result in collapse, convulsions and death.

This condition is almost exclusively noted in horses that live in hot or humid climates and it is thought that approximately 5-10% of horses exercising in hot humid conditions suffer from some degree of anhidrosis.

The mechanisms underlying anhidrosis are not known; various factors have been suggested including: electrolyte imbalances, hypothryroidism, sweat gland exhaustion, blocking of the sweat gland ducts, failure of secretory function and downregulation of sweat gland receptor function.

The most likely cause is however a problem with sweat gland receptor function. It is thought that overstimulation of sweat gland B2-receptors have been suggested including: electrolyte imbalances, hypothryroidism, sweat gland exhaustion, blocking of the sweat gland ducts, failure of secretory function and downregulation of sweat gland receptor function.

How do I recognize if my horse may have anhidrosis?
Most owners note a change in exercise tolerance in affected horses and repeated evidence of a lack of sweating. There are however intra-dermal tests that can be performed by your vet.

How to manage a horse with anhidrosis.

The only recognized effective treatment is to subject the horse to cooler environments. This may include removal to a cooler climate or providing assisted cooling; such as air-conditioned stables. These horses will also benefit from the use of fans, cold boxing, body clipping, and ensuring access to shade and plenty of water when turned out.

A change in exercise regime is required. Heavy training or competition during summer is discouraged. These horses will compete better in the cooler winter months. If the horse is maintained in exercise during summer, they should be exercised in the cooler parts of the day, such as early morning, and aggressively cooled after exercise. This is best achieved by liberal and repeated application and removal of cool iced water over the entire body.

There is no cure for the condition, however a number of nutritional supplements have been advocated for anhidrosis. It is common for these horses to be supplemented with electrolytes both prior to and during the summer months. Supplementation with the amino acid Tyrosine has also been recommended, as has supplementation with Vitamin E, alternative therapies (eg acupuncture) and more. Instituting a change in feed should also be considered and discussed with your vet or nutritionist.

Will it go away?
If the horse is moved to a cooler environment there is anecdotal evidence that suggests most horses will respond favorably within a few weeks and regain the ability to sweat. Some horses may take longer, assisted cooling; such as air-conditioned stables. These horses will also benefit from the use of fans, cold boxing, body clipping, and ensuring access to shade and plenty of water when turned out.

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