



CAPTURE MYOPATHY

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The key feature of Capture Myopathy is HYPERTHERMIA - in other words an increase in body temperature.

Essentially "Capture Myopathy" is a disease complex associated with capture or handling of any wild species of mammals or birds.

It will occur when an animal is unable to cool itself and may result from a variety of factors including overexertion, drugs, a heavy coat, reduced blood flow or high environmental temperatures.

In human medicine the nearest equivalent is "muscle melt-down" of stressed athletes.

Drugs

Drugs used for restraint - particularly xylazine, cause an increase in body temperature. This is one reason why these drugs **MUST** be reversed after use.

Muscle Pump

Muscles exert a pumping action as an animal moves and this aids blood flow. When normal movement is taking place 15% of the total blood volume is in the muscles. In a drugged animal 25% will pool in the muscles causing a drop in blood pressure.

Not only does fresh oxygen arrive, but lactic acid builds up and cooling is reduced.

Fear

Fear is the single most important role in capture myopathy. Weaning is the best time to condition deer to prevent fear ever being a problem. Any animal with a bad temperament should be culled.

Environmental Temperature

Restraint and transport should be avoided on hot days. Temperatures above 27°C should be avoided. Shade must be supplied.

Clinical Manifestations

There are four categories of capture myopathy according to the way the condition presents itself. These are PERACUTE, ACUTE, SUBACUTE and CHRONIC.

Peracute Capture Myopathy

Death may occur in a matter of minutes due to low blood pH, acidosis, potassium release from damaged muscles and heart failure. There are few post-mortem signs.

Acute Capture Myopathy

This is a less severe form of the above with the animal lingering before death. Muscle rupture may occur and the animal, if able to stand, will be ataxic. The condition could be confused with Enzootic Ataxia. Death occurs in 24 - 48 hrs.

Sub-Acute Capture Myopathy

Again a less severe form of the above with the acidosis causing muscle and kidney damage. The urine may be a dark brown colour. Recumbent animals often have their necks twisted back - known as "Wryneck" in New Zealand. Death takes a few days.

Chronic Capture Myopathy

These animal survive several days or months but will often die suddenly from a heart attack.

Treatment

Prevention is the only treatment for this condition. Once the condition starts it is always fatal.