A syndrome of exercise intolerance and collapse (EIC) has been observed with increasing frequency in young adult Labrador Retrievers.

It was first recognized about 10 years ago. Most, but not all, affected dogs have been from field-trial breeding. Black, yellow and chocolate Labradors of both sexes can be affected.

Clinical signs become apparent in young dogs as they encounter heavy training or perform strenuous activity, but usually between seven months and two years of age. Affected dogs are described as being extremely fit, muscular, and prime athletic specimens of their breed with an excitable temperament and lots of drive.

Affected dogs can tolerate mild to moderate exercise, but following 5-20 minutes of strenuous exercise they develop profound stumbling (ataxia) followed by collapse. Several dogs have died during exercise, or while resting immediately after an episode of EIC, hence exercise should always be stopped at the first sign of ataxia.

Many dogs will have a high rectal temperature if taken after the episode but many normal Labradors will have a similar temperature measurement so the elevated body temperature is not specific to this syndrome. Unfortunately for the owner who wants a field trial dog, these affected dogs are rarely able to continue training or competition. However, if they are removed from training and not exercised excessively, the condition will not progress and they will be fine as pets.

Until now, a presumptive diagnosis of EIC could only be made by ruling out other muscle disorders and by observation of characteristic clinical features with a typical history.

There are several other disorders that could cause similar signs, so if you believe your Labrador has EIC, you should see your veterinarian so that tests can be performed to rule out other disorders that could be confused with EIC. While a specific therapy currently does not exist, the avoidance of strenuous activity should result in a relatively normal lifespan.

An exciting new development is on the horizon, though. A DNA based test for this interesting syndrome is very close to being perfected. The chromosomal locus for an EIC gene has been identified with DNA markers and an associated DNA mutation has been found. Therefore, a genetic test for confirmation of affected dogs and for identification of carriers should soon be available. This valuable test will hopefully help veterinarians and breeders eradicate this disabling disease from breeding populations.

This column is provided by the faculty of the OSU Boren Veterinary Medical Teaching Hospital.

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