

VETERINARY TECHNICAL DATASHEET

Neonatal Encephalopathy with Seizures, (NEWS)



Mutation Found In :Poodle (Standard)

Disorder Type

- Nervous system

Disease Severity

- Severe

Background

Neonatal encephalopathy with seizures (NEWS) is an inherited disorder encountered in the Standard Poodle that affects the development and structure of the cerebellum. The life expectancy of affected dogs is less than seven weeks.

Key Signs

- Ataxia
- Muscle weakness
- Difficulties nursing
- Generalized seizures
- Death

Clinical Description

Puppies suffering from NEWS are smaller and weaker at birth than their littermates and they often have difficulties nursing. Most of the affected puppies won't make it through the first week of their life. Puppies that survive past the first week suffer from ataxia (uncoordinated movements), whole-body tremor and weakness progressing to severe generalized clonic-tonic seizures by 4 to 6 weeks of age. No affected puppies have survived past 7 weeks of age and they are often euthanized earlier.

Mode of Inheritance

- autosomal recessive

Gene Name

- ATF2

Next Steps

Treatment is supportive care, however, affected puppies usually die or are euthanized on welfare grounds within the first few weeks of life because of the severity of the condition.

References

Chen X, Johnson GS, Schnabel RD, Taylor JF, Johnson GC, Parker HG, Patterson EE, Katz ML, Awano T, Khan S, O'Brien DP. A neonatal encephalopathy with seizures in standard poodle dogs with a missense mutation in the canine ortholog of ATF2. Neurogenetics 9(1):41-49, 2008.