

Facts about Cerebellar Hypoplasia

What is cerebellar hypoplasia (CH?)

Cerebellar hypoplasia is a developmental condition in which the cerebellum of the brain fails to develop properly. The cerebellum is the portion of the brain that controls fine motor skills, balance and coordination. The condition is not painful or contagious.

What are the signs and symptoms of CH?

Since the cerebellum is responsible for purposeful movement and coordination, the symptoms of this condition may not become apparent until the kitten starts to try and stand or walk on its own. The severity of the symptoms depends on how much of the cerebellum was affected and at what stage in its development the infection occurred. Common signs may include:

- Jerky, uncoordinated walking
- Head tremors
- Intention tremors
- Clumsy, uncoordinated movements

What causes CH?

- Cerebellar hypoplasia most commonly occurs when a pregnant cat becomes infected with feline panleukopenia virus and passes the infection to her unborn kittens. During the last weeks of pregnancy and the first weeks after birth the cerebellum is undergoing rapid growth and development, making it vulnerable to attack by the virus. The condition may only affect one kitten in a litter, or may involve all littermates.
- It is possible that a kitten could develop cerebellar hypoplasia if its mother is severely malnourished during her pregnancy or if the kitten suffers a physical trauma to its brain during the period of time when the cerebellum is developing.
- Other inflammatory diseases of the brain such as toxoplasmosis infection may cause similar symptoms.

Diagnosis

While imaging such as CT scanning or MRI can be used to confirm the underdeveloped cerebellum, the diagnosis of this condition is usually obvious because of the following features:



- The condition is non-progressive (it doesn't get worse).
- The cat is not weak, he's just not coordinated.
- Intention tremors are evident when the cat is focused but the cat looks largely normal if still.

Treatment and Management

- No treatment can resolve the damage in a kitten with cerebellar hypoplasia. Some
 kittens are more severely affected than others. Most cats have good life quality and
 make up in personality what they lack in motor skills.
- Kittens with cerebellar hypoplasia are not infectious to other kittens or cats, are not in any pain, and will learn to adapt to their disability over time.
- A cat with CH must be kept indoors as they are prone to losing their balance and could easily be injured or attacked if they go outdoors.
- If their symptoms are pronounced, they may require special modifications in their home environment, including dishes that are raised off the floor for easier access.
- Although some kittens may be more prone to minor injuries associated with falls, all of them are able to have a normal life expectancy provided they are given some extra tender loving care.

Adapted by Rebecca L. Holloway Dayle, Vet Assistant from website publications from Veterinary Partner and VCA