

A Review of Cerebrospinal Nematodiasis in Goats Caused by *Setaria digitata*

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Among filarial worms, the *Setaria* is a heteroxenic parasite that lives in the peritoneal cavity of bovines as definitive host and the invertebrate mosquito act as the intermediate host. These microfilariae, in turn taken up by mosquito species such as *Aedes*, *Anopheles*, *Culex* during blood feeding, and grow them to the infective stages. However, when the erratic larvae enter in to an intermediate host, such as goats, the larvae may migrate along the nerves, and cause substantial damage the central nervous system (CNS). Cerebrospinal nematodiasis is results from aberrant migration of nematode larvae within the spinal cord of many ruminant species. Laval migration in CNS in neurological system and host immune response elevate the intensity of clinical disease indirectly by toxins or unknown methods. Symptoms includes complete or incomplete posterior paralysis, reduced cutaneous sensation, proprioceptive deficits as well as cranial nerve reflexes deficits. Diagnosis is based on the detection of microfilariae in blood which can be confirmed by stained blood smears. Many ordinary anthelmintics are not effective against adults or larvae of *Setaria*. Some reports indicates that some macrocyclic lactone are partially effective against microfilariae of certain *Setaria* species. Biological control of *Setaria* worms is currently not practicable. Although antifilarial drugs are effective for circulatory larval stage they are not effective in CNS because drugs cannot cross blood brain barrier. Although it may be feasible against mosquitoes control in some areas. A key preventative measure to prevent or at least to reduce cattle infestation with *Setaria* worms by controlling the mosquito bites.

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