Listeria Monocytogenes in Icelandic Horses (28-Jun-2004)

K. Björg Gudmundsdóttir
The Chief Veterinary Officer, Section for Animal Diseases, Keldur, Reykjavik, Iceland.

Listeria monocytogenes can cause severe disease in humans and animals. Listeriosis in animals is commonly associated with silage feeding. There are not many reports of listeriosis in horses. The disease is however well known in horses in Iceland, where large herds of horses are fed grass silage outdoors during the winter. The most common symptoms are those of febrile gastroenteritis or septicaemia.

Twenty-one L. monocytogenes isolates associated with five confirmed and four suspected incidents of listeriosis in horses in Iceland, were characterized by serotyping, pulsed-field gel electrophoresis and ribotyping. The 21 isolates could be divided into six genotypes, three of which have been associated with listeriosis in small ruminants and/or humans in Iceland. Each incident only involved one genotype. One serovar 1/2a genotype was associated with three confirmed incidents of listeriosis in horses, in the years 1991, 1993, and 1997. In one incident, the same genotype was isolated from organs of a horse with listeriosis and from the spoiled grass silage fed to it.

Semiquantification of L. monocytogenes was carried out on faeces from horses with symptoms indicative of listeriosis and on grass silage used for horse feed. High numbers of L. monocytogenes were often found in faeces of horses with severe symptoms of disease. Further studies are needed before conclusions can be drawn about the significance of high numbers of L. monocytogenes in faeces of horses.

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