



Transit recumbency of ruminants

*Transport recumbency (tetany) occurs after prolonged transport, usually in cows and ewes in late pregnancy.

*It is also recorded in lambs transported to feedlots and in cows and sheep delivered to abattoirs.

*It is characterized by recumbency, alimentary tract stasis, and coma, and it is highly fatal.

*It occurs in most countries. Large losses can be encountered when cows and ewes in late pregnancy are moved long distances by rail, by truck, or on foot.

*Although cows of any age in late pregnancy are most commonly affected, the disease has also been recorded in cows and lambs.

Etiology and Risk factors include the following:

• The cause is unknown, although physical stress is an obvious factor Predisposing factors

• Heavy feeding before shipment

• Deprivation of feed and water for more than 24 hours during transit

• Unrestricted access to water

• Exercise immediately after unloading

*There is an increased incidence of the disease during hot weather.

*The cause is unknown, although physical stress is an obvious factor.

Clinical signs:

► Lambs show the following characteristics:

• Restlessness

• Staggering

• Partial paralysis of hind legs

• Early assumption of lateral recumbency

• Death may occur quickly, or after 2 to 3 days of recumbency. There is mild hypocalcemia (7 to 7.5 mg/dL; 1.75 to 1.87 mmol/L). The recovery rate even with treatment is only fair.

► Clinical signs may occur while the cattle are still on the transportation vehicle or up to 48 h after unloading.

* In the early stages, animals may exhibit excitement and restlessness, trismus, and grinding of the teeth.

*A staggering gait with paddling of the hind legs and recumbency occur, and are accompanied by stasis of the alimentary tract and complete anorexia. Animals that do not recover gradually become comatose and die in 3-4 days.

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Clinical pathology

There may be moderate hypocalcemia and hypophosphatemia in cattle. In sheep of various ages, some are hypocalcemic and hypomagnesemic, some are hypoglycemic, and some have no detectable biochemical abnormality.

Necropsy Finding



There are no lesions at necropsy other than those related to prolonged recumbency. Ischemic muscle necrosis is the most obvious of these lesions. The relationship of the disease to transport or forced exercise is diagnostic.

Treatment:

- ▶ Some cases respond to treatment with combined calcium, magnesium, and glucose injections.
- ▶ Repeated parenteral injections of large volumes of electrolyte solutions are recommended.
- ▶ In lambs, the SC injection of a solution of calcium and magnesium salts is recommended, but the response is usually only 50%, due probably because of an intercurrent myonecrosis.
- ▶ If prolonged transport of cows or ewes in advanced pregnancy is unavoidable, they should be provided with adequate food, water, and rest periods during the trip.
- ▶ The incidence of this condition after transportation appears to have been markedly reduced with increased monitoring and awareness of transportation-related morbidity and mortality.

Lactation tetany of mares (eclampsia, transit tetany)

- ▶ It caused by hypocalcemia and characterized by abnormal behavior such as incoordination and tetany. The exact cause of the hypocalcemia has not been determined. High-producing mares engaged with physical hard work and grazing on lush pasture are more susceptible. however the disease can also occur in transporting and race horses.
- ▶ The effect of feeding diets high in calcium, during late pregnancy, and a sudden changes in diet after parturition may predispose to the disease.
- ▶ Most cases occur in lactating mares, with in 10th day after foaling or 1-2 days after weaning with high mortality rate.

Clinical sings :

- 1-affected animals sweat profusely and have difficulty in moving because of tetany of the limbs and incoordination. The gait is stiff and the tail is slightly raised. Rapid, labored respirations and wide dilatation of the nostrils are often accompanied by diaphragmatic flutter ارتجاج ('thumps') or thumping sound
- 2- Muscular fibrillation, particularly of the masseter and shoulder region ,and trismus are evident but there is no prolapse of the 3rd eye lid.
- 3- Within about 24 h the untreated mare becomes recumbent, tetanic convulsions develop and die with io about 48 h after the onset of illness..

D.D:

- 1-Tetanus
- 2-Laminitis

Treatment:

300-500 mL of a 25% solution of calcium borogluconate or gluconate administered slowly IV(over 15-30 min) is recommended .

