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# 행동장애를 가진 Thoroughbred 수망아지에서 반동물복지와 연관된 펜스함정 1례

A Case of Fence Entrapment Associated with Anti-Welfare in a Thoroughbred Colt with Misbehavior at a Paddock

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# 국문요약

말의 복지는 생리적 및 심리적 필요의 만족에 좌우된다. 본 연구의 목적은 말목장에서 펜스의 안 전을 평가하기 위함이다. 행동장애(Cribbing)를 가진 Thoroughbred 수망아지 한 마리가 패독에서 폐사한 채 발견되었다. 패독의 펜스는 4개의 파이프로 만들어졌고, 망아지는 위에서 2번째 파이프 를 무는 행동장애를 하였다. 그러나 그 망아지는 얼굴을 빼지 못하였는데 그 이유는 아래턱이 1번 째 파이프에 걸렸고 앞니가 2번째 파이프에 끼었기 때문이다. 그래서 망아지는 얼굴을 빼기 위해서 사투하는 동안에 당황하였고, 쓰러졌으며 결국 교사하였다. 안전펜스는 말목장에 필수적이고 그 기 능은 말을 보호하는 것이지만 위해를 가하였다. 말의 안전한 관리를 위하여 말 얼굴길이와 파이프 의 간격을 고려하여야한다. 말이 패독에 있을 때 입마개를 씌울 필요가 있는지 더 연구가 필요하 다. 본 연구는 말산업에서 펜스타입과 안전성평가에 중요한 벤치마크를 제공하였다.

주요어 / 동물복지, 말, 파이프펜스, 펜스 함정, 행동장애

### Abstract

The welfare of horses depends on satisfying both the physiological and psychological needs of the animal. The object of this study was to evaluate fence safety at the horse farm. A Thoroughbred colt with cribbing was found dead in a paddock. The fence of paddock is a four-pipe fencing. He cribbed the 2nd pipe from the top. But he couldn't pull his face because his incisors acted as hooks and two ramuses of the mandible was entrapped in a top pipe. So he was embarrassed and went down while he terribly struggled to get out his face. Finally, he was strangulated to death. Safe fencing is essential on a horse farm. The function of these fences are to protect the horses but it was more of a hazard. In order to safe management of horses, facial length of the horse and the pipe interval of the fence should be considered. Further research is needed to put a muzzle on the horses while they are at a paddock. This study provides important benchmarks for the equine industry to consider fence type and evaluate fonce safety.

Key Words / Entrapment, Horse, Misbehavior, Pipe Fence, Welfare

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## I. Introduction

The welfare of horses depends on satisfying both the physiological and psychological needs of the animal. Behaviors involve a need-related drive that develops in an environment with inadequate opportunities for satisfying the need. Cribbing and wind-sucking are perhaps the two most familiar vices (misbehavior) that occurs in the stable. The horse cribs by placing its upper teeth on the edge of a feeder or the fence, arching its neck, inhaling, and often producing a grunt or belching sound (Siegal, 1996), Misbehavior tend to occur more often in horses that are confined for long periods of time. In some cases misbehavior can become so severe that it causes injury to both handler and the horse (Siegal, 1996).

It is vital to fence fields, paddocks and arenas. Any paddock should be properly fenced with secure gates to keep the animals safely within the area (Swift, 2003). Horse farms have some unique fencing situations because of the social and behavioral requirements of horses associated with grazing and watering. Tradition, human values and concepts of horses' needs and value are factors that influence decisions about fencing on horse farms (Powelliz) Jackson, 1992).

Horse that are bred outside in the sun, rain and even mud are much healthier than when they are kept inside. But in order to have horses outside without exposing them to the danger of automobiles, poisonous weeds, and other hazards, safe fences are essential. Fences help separate horses that are not compatible, protect pastures that are not suitable to be grazed, and provide boundaries for other essentials such as exercise paddocks, round pens, riding arenas, and protection from driveways (Parker, 2013).

To the authors' knowledge, there was extremely rare report on fence entrapment in the world. The purpose of this study was to assess anti-welfare case of fence entrapment of young horse at a paddock.

# II. Findings

A Thoroughbred colt (2-year-old) with cribbing was found dead in a paddock. The fence of paddock was constructed with steel pipes (5 cm in diameter). The size of the fence was 135 cm in height and 45 cm in spacing of pipes.

He cribbed the 2nd pipe from the top. But he couldn't pull his face because his lower incisors acted as a hook and two ramuses of a mandible was entrapted in a top pipe [Fig. 1]. So he was embarrassed and went down while he struggled to get out. Finally, he was strangulated to death. According to the groom, it took a very short time from locking to death.

The many different types of fences vary in terms of important criteria for horses and those who keep them (Lewis, 1996). The most important consideration in

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Fig. 1. (A, B). Fence entrapment of a Thoroughbred colt

selecting and building fences for horses is that they must safely contain the animals. Safety of the horses and the owners must be monitored first and always in the surroundings, the building, stall, and the fences (Parker, 2013).

All fences have some measure of danger: the more secure and solid the fence is, the more solid fracture-type injuries occur: with star posts and wire, there are leg injuries from the wire and body injury from the pickets. When panicked by storms, etc., horses may break, or become entangled in any type of fencing (Knottenbelt, 2003).

Fences are a major investment for any horse farm or stable manager (Parker, 2013). The most important considerations are that fences need to be safe and strong enough to contain the horses and that the price and appearance be acceptable to the owner (Parker, 2013).

Fences should be designed and built with safety in mind. The idle fence should have strength, height (150 -180 cm), and tightness (Siegal 1996). However, in this case, the height of fence (135 cm) was shorter than recommended height.

Pipe fence can be economical and sturdy and require relatively low maintenance costs (Parker, 2013). The most effective fencing is good wooden post and rail. It is sturdy, long lasting and looks attractive (Draper, 1999).

A survey of fence-related injuries supported the contention that no fence is horse-proof and free of potential hazard (Knottenbelt, 2003). For a safe management it should be considered that the interval of pipe of fence and length of horses' face. No one solution for cribbing vices has emerged (Siegal 1996).

It is impossible to prevent unless the owner put a muzzle on the horses with cribbing while they are at a paddock. Or it is recommended to change into a safer fence including board fence or electric fence. This study provides important benchmarks for the equine industry to consider fence type and re-evaluate fence safety in order to provide welfare needs in the horse with misbehavior.

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