

The Impact of Chariot Breast Collars on Horse Breathing

In this paper, which is submitted for the undergraduate panel, I will examine the physiological impact of ancient breast collars on the athletic performance of horses. When looking at the literature studying the use of horses in Ancient Greece, one glaring issue appears. Mark Griffith, together with several other authors, state that the breast collars used had a severely negative the breathing of the horse. I will show that this is not true. The breast collar depicted in ceramics from this period, and described in the writings of Xenophon, would have very little impact on the breathing of the horse. The strap of leather that encircles the neck has been shown to impact the breathing of equids the least of any breast collar construction (Rodrigues et al. 2021) and cause the least amount of physical damage when pulling loads (Hovell 1998).

I will examine modern veterinary scholarship, as well as modern classical scholarship to demonstrate the impact of the breast collar on athletic performance of modern horses, as well as the ancient concerns surrounding the use of chariots in both cavalry and in competitions such as the Olympics and other Panhellenic Games.

The claim that the harnesses of Ancient Greece were inherently disadvantageous to horses causes issues when looking at the place horses occupied in Greek culture. They were prized animals, and the Greeks would not have continuously used equipment that did not allow them to breathe. Instead, as I will show, they used equipment that allowed for maximum shoulder freedom and agility, allowing the horse to perform as best it could.

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